Drafting Note – Department of Planning, Industry and Environment

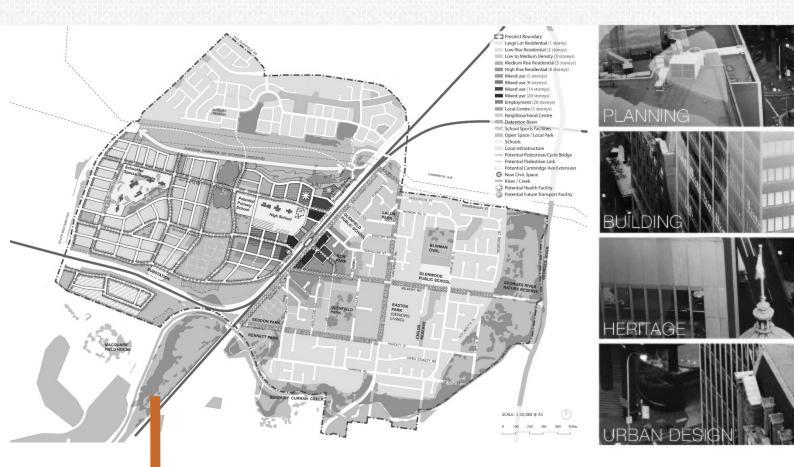
The Heritage Impact Statement prepared by City Plan, is one of many supporting studies that form part of this exhibition package.

The principles, recommendations and findings the Heritage Impact Stated have informed the preparation of the draft Glenfield Place Strategy.

Please note, the Heritage Impact Statement pre-dates the draft Glenfield Place Strategy and contains an earlier version.

The Heritage Impact Statement has been made available for public exhibition to assist the communities understanding of how the draft Glenfield Place Strategy has been shaped over time, and how the draft Glenfield Place Strategy addresses the heritage significance of the precinct.





Heritage Impact Statement Glenfield Urban Design Rezoning

On Behalf of the Department of Planning

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November 2018 | 17-148

Report Revision History

Revision	Date Issued	Prepared by	Reviewed by	Verified by
01	21/12/17	Brittany Freelander	Kerime Danis	Kerime Danis
		Senior Heritage Consultant	Director - Heritage	Director - Heritage
02	03/04/18	Brittany Freelander	Kerime Danis	Ato
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03	27/04/18	Brittany Freelander	Kerime Danis	
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04	14/11/18	Brittany Freelander	Kerime Danis	
		Senior Heritage Consultant	Director - Heritage	

CERTIFICATION

This report has been authorised by City Plan Heritage P/L, with input from a number of other expert consultants, on behalf of the Client. The accuracy of the information contained herein is to the best of our knowledge not false or misleading. The comments have been based upon information and facts that were correct at the time of writing this report.

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1. Introduction

1.1 Executive Summary

Overall, the proposed rezoning of the Glenfield Precinct is considered a positive outcome that will assist in rejuvenating the area, while also providing additional residential housing and job opportunities.

Additional studies would be of significant benefit as they would serve to better inform the urban design employed in the area. It should be noted that no changes are required to the master plan and any changes required as a result of the findings of the additional studies can be undertaken prior to subdivision or could be addressed in the DCP guidelines. The findings would not require amendments to an approved rezoning (including approved FSR and heights).

Additional documentation and analysis recommended includes the following:

- A CMP should be prepared for the Hurlstone Agricultural School site in order to provide a detailed analysis of its significance and appropriate management (to be completed prior to subdivision stage). The CMP will also assist in providing a greater understanding of how the proposed rezoning will impact on the heritage values of the site while also considering the following:
 - Detailed investigation into the Director's Residence should be undertaken, potentially as part of the CMP. A comparative analysis would assist in establishing the rarity and significance of the building, thereby advising if demolition is appropriate;
 - The CMP should also consider the facebrick barn structure located on the former Veterinary Research Station site. It is not considered of sufficient significance to warrant retention; however, further consideration of this structure is required in order to better understand its values and association with the former Veterinary Research Station.
- A detailed heritage landscape assessment of the Glenfield Precinct should be undertaken generally, with specific consideration to the Hurlstone Agricultural School and OSL sites. The assessment should be prepared by a heritage landscape specialist and provide information regarding landscape elements that require retention (to be completed prior to subdivision stage);
- A social significance assessment of the Hurlstone Agricultural School, former Veterinary Research Station and Ajuga School should also be undertaken to ensure the social significance of the site is acknowledged and appreciated in any future redevelopment of the school site. This could be undertaken as part of a Conservation Management Plan (CMP) for the Hurlstone Agricultural School site (to be completed prior to subdivision stage);
- Further archaeological investigation is required, as noted in the advice letter prepared by Extent Heritage Pty Ltd, to ratify the additional historical and anecdotal information provided regarding the historical and aboriginal archaeological potential of the site (to be completed prior to subdivision stage);
- Consultation with the Aboriginal community is also recommended, in tandem with the social significance assessment, to create a better understanding of the significance of the area to the Aboriginal community. This may also assist in resolving the anecdotal information regarding potential aboriginal archaeology (to be completed prior to subdivision stage);
- A heritage assessment of the former Glenfield Special School site should be undertaken to create a better understanding of its significance, which is noted as being at a state level in the Urbis report (to be completed prior to subdivision stage).
- Any future works to the Glenfield train station should consider retaining and improving the view gained from the raised platform area of the station. Heritage

interpretation could also be added to the railings where these views can be gained, in order to inform passengers about the site.

It is recommended that consultation be undertaken to ensure the Hurlstone Agricultural School, when relocating, leaves appropriate documentation and moveable heritage items relating to the site for interpretation. Consultation may also need to be undertaken with officials associated with the new school to ensure the movable heritage left is appropriately stored and displayed.

1.2 Background

City Plan Heritage (CPH) has been engaged by the Department of Planning to prepare the following Heritage Impact Statement (HIS) regarding the proposed rezoning and draft masterplan for urban renewal in the suburb of Glenfield. The proposal is part of the Glenfield to Macarthur Urban Renewal Corridor project, that was released for consultation in July 2015. The plan identified new growth precincts around seven rail stations from Glenfield to Macarthur in south west Sydney. The plan proposed an increase in infrastructure in Glenfield, for the creation of additional homes and jobs centred around the Glenfield train station. Following release of the corridor strategy the then Minister for Education announced the proposed relocation of the Hurlstone Agricultural School and sale of land surplus to education needs. This provided the opportunity to review the draft precinct plan for Glenfield. The final precinct plans for the precincts between Macquarie Fields and Macarthur were released in December 2017.

The subject precinct encompasses a heritage item of local significance, the 'Hurlstone Agricultural High School—original school building', Roy Watts Road, listed under Part 1 of Schedule 5 of the Campbelltown Local Environment Plan (LEP) 2015 (item no. I65), and is located directly north of the 'Macquarie Field House Homestead Group, ruins and rural landscape setting', a heritage item (item no. I004240).

'Macquarie Field House' is also listed on the State Heritage Register (SHR), under the *Heritage Act, 1977* (SHR no.00424).

Due to the heritage constraints associated with the site, two site inspections were undertaken by CPH on 27 October 2017 and 27 November 2017, to assess the heritage opportunities and constraints presented by the Glenfield precinct. In addition, the assessment included a review of the following:

- Existing heritage analyses for the redevelopment of the Hurlstone Agricultural School site and the adjacent Office of Strategic Lands;
- The Conservation Management Plan (CMP) prepared for Macquarie Fields House (currently under review by the Heritage Division);
- Review of the heritage planning controls affecting the site.

The masterplan was subsequently updated, to reflect advice provided by CPH, in order to improve the heritage outcome of the project. Some recommendations were unable to be accommodated, due to other site constraints such as ecology, flood zones etc. As such, the resultant draft masterplan is considered to adequately consider the heritage constraints of the Glenfield Precinct and mitigate these along with the various other site constraints. A detailed assessment of the likely heritage impacts of the proposed draft masterplan and rezoning is included in Section 6.

1.3 Methodology

This Heritage Impact Statement has been prepared in accordance with the NSW Heritage Manual 'Statements of Heritage Impacts' and 'Assessing Heritage Significance' guidelines. The philosophy and process adopted is that guided by *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013* (The Burra Charter). The subject proposal has been assessed in relation to the relevant controls and provisions contained within the Campbelltown Local Environmental Plan (LEP) 2015, and the Campbelltown Development Control Plan (DCP) 2015.

1.4 Site Location

The Glenfield Precinct is located within the suburb of Glenfield, approximately 30km south west of the Sydney Central Business District (CBD) and 25km south west of the Parramatta CBD. For further information, reference should be made to Section 2 - Site Context and Description.

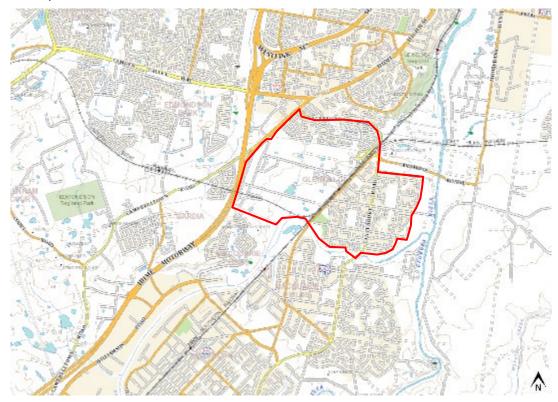


Figure 1: Map showing the location of the Glenfield Precinct, outlined in red. (Source: SIX Maps captured 15 January 2017)

1.5 Documentation

The following documentation was reviewed prior to production of this report:

- Urbis, Macquarie Field House Conservation Management Plan (CMP), July 2017;
- Urbis, Hurlstone Development Project Heritage Impact Statement and Archaeological Assessment, June 2017;
- Urbis, Macquarie Field House, NSW DoP Presentation, 28 August 2017; and
- Extent Heritage Advisors, Glenfield Planned Precinct Aboriginal Heritage Advice, March 2018.

This report has been informed by the historical analysis and significance assessment noted in the Urbis report from June 2017 and supplemented by additional research where necessary.

1.6 Limitations

This report includes a Due Diligence Aboriginal Assessment, which is based on preliminary studies undertaken by Urbis. Subsequent to this report, Extent Heritage provided Aboriginal Heritage Advice based on the findings of this report. The findings from this advice has been included in Section 8 while our initial findings have been referenced in the earlier sections. The findings of Extent Heritage are consistent with our initial findings and should be taken as the final recommendations in the management of Aboriginal cultural heritage associated with the site as a whole;;

- A landscape heritage assessment has not been undertaken during production of this report but rather includes a summary of changes that have occurred to the landscape as indicated in historical documentation and evident during the inspections conducted by CPH;
- In addition, this report does not include a comprehensive moveable heritage assessment. It provides and overview of the types of moveable heritage that can be found onsite;
- During the site inspection, access could not be gained to the former Glenfield Special School site or individual residences located within the study area. The survey undertaken is considered sufficient for the purposes of this report and has not restricted the following assessment. Where access was not possible, photography and information has been sourced from previous studies.

1.7 Author Identification

The following report has been prepared by Brittany Freelander (Senior Heritage Consultant) with the Aboriginal Due Diligence Assessment prepared by Alexandra Ribeny (Heritage Consultant and Archaeologist). Kerime Danis (Director - Heritage) has provided input, reviewed and endorsed its content.

2. Site Context and Description

2.1 Site Context

The study area, known as the Glenfield Precinct, is one of seven precincts included in the Glenfield to Macarthur Urban renewal corridor which forms part of the proposed Greater Macarthur Growth Area. The draft Glenfield to Macarthur Urban Renewal Corridor identified new growth precincts around seven rail stations from Glenfield to Macarthur, including Macquarie Fields, Ingleburn, Minto, Leumeah, Campbelltown and Macarthur. The final plans for all precincts except Glenfield, were released in December 2017.

The Glenfield Precinct is the northernmost precinct within the Glenfield to Macarthur Urban Corridor. It is located approximately 30km south west of the Sydney Central Business District (CBD) and 25km south west of the Parramatta CBD. It is bounded to the north by Glenfield Road, the Georges River to the east, Bunbury Curran Creek to the south, and the Hume Highway and Campbelltown Road to the west.

The Glenfield Precinct comprises a variety of residential development located either side of the railway line and the Glenfield train station. The train line runs through all seven of the precincts and is the centre for the rezoning project.

The character of the surrounding area is a mixture of rural allotments and low to medium scale residential developments. South of the study area and the Macquarie Field House site is the Macquarie Links development comprising of a locked gate community constructed from the mid-1990s onwards. Construction is still underway with the area consisting of low and medium density housing and a golf course.⁷

As detailed in Section 1.1, the subject site includes the 'Hurlstone Agricultural High School original school building', Roy Watts Road (item no. 165) and is in close proximity to 'Macquarie Field House Homestead Group, ruins and rural landscape setting' (item no. 1004240) listed under Part 1 of Schedule 5 of the Campbelltown Local Environment Plan (LEP) 2015.

Macquarie Field House is also listed on the State Heritage Register, under the *Heritage Act,* 1977, as 'Macquarie Field House' (SHR no.00424).

The following maps provide an overview of the location and extent of the Glenfield Precinct.

¹ Ibid



Figure 2: The Glenfield to Macarthur Urban Corridor showing the seven individual precincts with Glenfield Precinct coloured in blue. (Source: Glenfield Precinct Land Use and Infrastructure Analysis, August 2017, p.4)



Figure 3: Map showing the extend of the Glenfield Precinct. The heritage items are indicated in red. (Source: Glenfield Precinct Land Use and Infrastructure Analysis, August 2017, p.18)



Figure 4: Campbelltown LEP heritage map showing the heritage items and the Glenfield Precinct, outlined in purple. (Source: Campbelltown LEP 2015 heritage map 011)

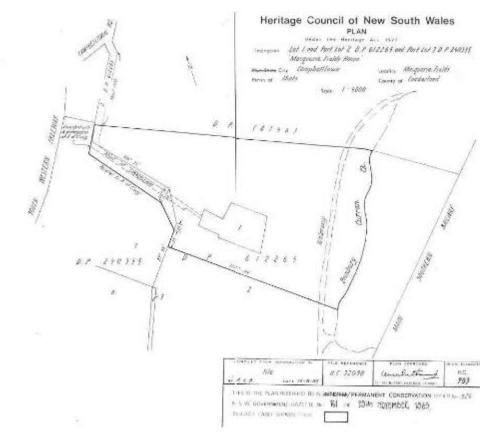


 Figure 5: SHR curtilage map for Macquarie Fields House. (Source: State Heritage Register form for

 'Macquarie
 Fields
 House',
 database
 no.5044970,
 retrieved
 from

 http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5044970)
 retrieved
 from



Figure 6: The state listed Macquarie Field House property including homestead, located on the top of the knoll to the south of the Glenfield Precinct.



Figure 7: The Macquarie Links residential development and gated community, located south of the Macquarie Field House site.

2.2 Site Description

The Glenfield Precinct has been divided into a number of character areas, as indicated in the plan below (Figure 8). These areas are individually described in the following sections.

Note: These areas are alternatively assigned Lot numbers (not related to real property descriptions) in the Urbis *HIS and Archaeological Assessment* report. For ease of reference, the below map (Figure 9) and table (Table 1) indicate how these correspond.



Figure 8: Aerial view showing the Glenfield Precinct, outlined in red, and various character areas. (Source: SIX Maps captured 21 December 2017)

Table 1: CPH Area names and their corresponding Lot numbers, as contained in the Urbis report

CPH Area	Urbis Lot No.
Open Landscape Area	1, 5
Former Veterinary Research Station	2
Former Glenfield Special School	3
Hurlstone Agricultural School	4
OSL Site	6, 7



Figure 9: Lot boundaries, as defined in the Urbis report (Source: Urbis HIS & Archaeological Assessment (2017), p.2)

2.2.1 OSL Site

This portion of the study area is owned by the Office of Strategic Lands. It is an irregular shaped allotment towards the south eastern extend of The Glenfield Precinct. The allotment is divided in two by the South West Rail Link corridor and has the following real property descriptions:

- Lot 11 DP 1201109 (consisting of 22 hectares)
- Lot 12 DP 1201109 (consisting of 19.5 hectares)

The general character of the southern portion of the allotment consists of rural landscaping with a high escarpment to the western end with the rest occupied by lower lying land with limited vegetation.

The northern portion is similar in character, with the western escarpment continuing within this area. Towards the east are raised filled in mounds, thought to have been created as a result of construction works associated with the South West Rail Link.²

Archaeology

This area is comprised of vacant, unused land, which has been highly disturbed in the northern portion as a result of the South West Rail Link construction works. Historical research (Section 4) did not indicate the presence of any former structures. Three Aboriginal sites are registered for this area (see Section 7.5.1), however, the degree of disturbance meant that these were not relocated during the Urbis site survey and the determination that the status of site 45-5-4253, located in the western portion, should be revised to 'destroyed'.

² Urbis, Hurlstone Development Project Heritage Impact Statement and Archaeological Assessment, June 2017, p.46



Figure 10: Aerial view of the OSL site. (Source: SIX Maps captured 11 January 2018)

2.2.2 Former Glenfield Special School Site

The former Glenfield Special School is a rectangular shaped site consisting of approximately 43 hectares. It comprises three separate schools including the Campbell House School, Glenfield Park School and Ajuga School, all of which provide education for children with learning difficulties. The real property description for the allotment is Lot 1 of DP 175963.

The north-western section of the site is where the majority of school buildings are located while the south-eastern portion is used as grazing land by the Hurlstone Agricultural School (divided into paddocks with two dams and a school kitchen garden area). Throughout the site are a number of internal roads that provide internal access to the site.

The majority of buildings located onsite were constructed for the former Glenfield Special School and have since been converted into the three specialised schools. The buildings are arranged in an arc, with five principal buildings the focus, facing Campbelltown Road. The landscaping of the north-western corner also dates from the formation of the former Glenfield Special School, with plantings including an avenue of palm trees and a circular entrance rose garden. The school buildings are also located on an escarpment, which elevates them allowing views to surrounding areas.

There are some newer structures located within the site including a swimming pool, demountable classrooms and an extension to a dormitory, constructed in 2010.

The following table provides a brief description and estimated date of construction of the buildings located within the site. Number allocations have been extracted from the 2017 Urbis report, for ease of reference (note: description and dates have been ascribed by Urbis and require further analysis in the CMP prepared for the school).³

³ Urbis, Hurlstone Development Project Heritage Impact Statement and Archaeological Assessment, June 2017, p.p.19-23

No.	Building	Date Constructed	Photo
1	Caretaker / staff cottage	1927	
2	Pool and ancillary structures	1975	
3	Original Superintendent's brick and tile dwelling	1926	
3	Brick and tile original dormitory building / current classroom building for Ajuga School	1926	

No.	Building	Date Constructed	Photo
4	Brick and tile original dormitory building / current classroom building for Ajuga School	1926 (extended 2010)	
5	Demountable classroom building	2011	
6	Brick and tile former school / classroom / administration building / current administration and classroom building for Glenfield Park School	1926	
7	Brick and tile original dormitory building / current classroom building for Campbell House School	1926	

No.	Building	Date Constructed	Photo
8	Brick and tile original dormitory building / current classroom building for Campbell House School	1926	
9	Lightweight shade structure	1998-2005	
10	Metal shed	1991-1998	
11	Metal clad classroom building	2010	

No.	Building	Date Constructed	Photo
12	Brick toilet block	2005-2009	
13	Demountable classroom building	1990	
14	Brick and tile, original dining hall and kitchen block with 1927 extension providing Matrons Quarters	1926 extended 1927	
15	Brick and tile sick bay building	c.1956	

No.	Building	Date Constructed	Photo
16	Metal shed	1991-1998	
17	Brick and tile laundry / workshop building	1935	
18	Brick and tile laundry / workshop building	1935	
19	Potential former water tower, now structure for telecommunicati on devices, and ancillary telecommunicati on hub equipment	By 1956 (water tower) Telecommunicatio n equipment more recent	



Figure 11: Aerial view showing the various number allocations for each building located within the former Glenfield Special School site. (Source: Urbis, HIS and Archaeological Assessment, p.24)

Archaeology

The majority of this area is comprised of extensively worked agricultural land. Buildings associated with the development of the former Glenfield Special School are located in the north-western corner. Most of these buildings have undergone conversion and reuse within the context of the new schools and so remain extant.

2.2.3 Hurlstone Agricultural School

The Hurlstone Agricultural School site is trapezoidal in shape (approximately 40 hectares) with most buildings located within the north-eastern end of the site, towards Roy Watts Road. While the school utilises other allotments within the study area, particularly the site of the former Veterinary Research Station, the main school facilities are located on this site. The real property description Lot 21 of DP 1035516.



Figure 12: Aerial view of the Hurlstone Agricultural School site, outlined in red. (Source: SIX Maps captured 15 January 2018)

The following table provides a brief description and estimated date of construction of the buildings located within the site and has been extracted from the Urbis report, for ease of reference. (note: descriptions and dates have been ascribed by Urbis and require further analysis in the CMP prepared for the school).⁴

No.	Building	Date Constructed	Photo
25	Brick and tiled caretaker's dwelling	1965-70	-

⁴ Urbis, Hurlstone Development Project Heritage Impact Statement and Archaeological Assessment, June 2017, p.p.27-37

No.	Building	Date Constructed	Photo
26	Brick and tiled caretaker/staff residence	1975-82	
27	Timber and metal dwelling for staff / visitors	1982-91	
28	Brick and tiled caretaker/staff residence	By 1956 (likely 20s / 30s)	
29	Metal framed and clad garage / shed	1982-91	
30	Metal framed carport	1982-91	

No.	Building	Date Constructed	Photo
31	Metal framed and clad dairy building	1982-91	
32	Two-storey brick classroom building with metal roof	1982-91	
33	Brick and metal amenities block for pool – Hindmarsh Dressing Pavilion	1957	
34	Inground pool (not functional) – Longmuir Swimming Pool	1954/55	-
35	Original dormitory block (with extension to north west and southern toilet blocks in 1970-75)	1926	

No.	Building	Date Constructed	Photo
36	Two-storey brick dormitory building with metal roof (not used)	1963	
37	Two-storey brick dormitory building with metal roof (not used)	1963	
38	One-storey brick dormitory building with metal roof	c.2005	
39	Metal shed	1982-91	-
40	Original principal's residence, dormitory block and dining hall, known as Clarke House	1926 (with 1956-65 extension)	

No.	Building	Date Constructed	Photo
41	Current dining hall and kitchen building, brick walls with pitched metal roof	1963	
42	One-storey brick sick-bay building with metal roof	1982-91	
43	Metal carport structure	1991-98	
44	Metal storage shed	1998-2005	
45	Metal storage shed	1970-75	-

No.	Building	Date Constructed	Photo
46	Timber framed, timber clad and metal roofed building. Suggested to pre-date HAHS use of the land. Possible former cottage / classroom.	c.1911 (?) Moved to its current location 1975-1982 from unknown location	
47	Brick and metal roof building.	1963	
48	The English Cottage, formerly the school isolation hospital cottage. Timber cottage with metal roof.	1941	
49	Brick and metal roofed front administration and classroom building.	1988/89	
50	Brick and metal roofed classroom building perpendicular to front administration building	1963	

No.	Building	Date Constructed	Photo
51	Demountable classroom building	1998-2005	
52	Demountable classroom building	1998-2005	
53	Single level brick amenities / bathrooms building with flat metal roof	1963 extended later in 1975-82	
54	Single level brick and metal roofed classroom / workshop building	1963	
55	Canopy structure over basketball courts	2010	

No.	Building	Date Constructed	Photo
56	Original brick classroom block	1926	
57	Two-storey brick and metal roofed library and classroom building	1970-75	
58	Two-storey brick and metal roofed science classroom building	1967	
59	Original / early brick classroom block	1926	
60	Single-storey brick classroom building for dance	1963	

No.	Building	Date Constructed	Photo
61	Brick and metal roofed hall / gymnasium known as Edmondson Hall	1981	
62	Brick and tiled dwelling	By 1956	
63	Metal shed	1982-91	
64	Single-storey brick and metal roofed classroom building	1982-91	
65	Brick and tile dwelling	1982-91	

No.	Building	Date Constructed	Photo
66	Metal shed	Early 2000s	
67	Brick pavilion	c.1956	
68	Metal shed	Early 2000s	

Archaeology

This area consists of buildings associated with the development of the Hurlstone Agricultural School, located in the north-eastern portion, which has remained in continuous use since 1927. As such, most of these buildings have been retained or reused and thus remain extant. No Aboriginal sites are recorded for this area; however, anecdotal evidence indicated the cultural significance of a grove of trees (indicated in blue - Figure 12) and potential location of a scarred tree (indicated in yellow - Figure 12). These are discussed further in *Section* 7.5.1.



Figure 13: Aerial view showing the various number allocations for each building located within the Hurlstone Agricultural School site. The allocated building numbers are noted in the table above. (Source: Urbis, HIS and Archaeological Assessment, p.37)

Landscape

Due to the size of the school site, a large portion comprises rural landscaping divided into various paddocks by fencing. Some of these paddocks are used for cattle and sheep grazing and to the south west is a small dam. There are a number of significant plantings within the site, some of which include the following:

- Grove of trees around Hindmarsh Pavilion;
- Horne Park filled with original farm machinery and trees dedicated to various people and environment groups;
- Norfolk Island pines two lots planted, relating to the Norfolk Island students who study at the school;
- Rose Garden in front of Clarke House;
- Wollemi pine tree;
- Fig of Torbruk;
- Adam Bellerby and Don Cross trees;
- 90th anniversary tree;
- Syncarpia trees along Service Road;
- Michael Kidd tree;
- Railway Garden;
- Copeman tree;
- Remembrance grove;
- Memorial forest;
- Cumberland Plain forest;
- Park next to agriculture plots near eastern end of Roy Watts Road;
- The sick bay tree apparently one of the biggest Jacaranda trees in the Campbelltown Area;⁵ and
- Sir William Keys tree.

⁵ Pollock, Alan, 'Chapter 3: The War Years', Bedbugs, Daygos and Stabs: A Century of Memories, Hurlstone Agricultural School 1997-2007, 2007, p.38



Figure 14: The Rose Garden located directly north of Clarke House.



Figure 15: Memorial plantings (as indicated by the school's archivist, Johanna Leglise, during the site inspection undertaken by CPH) lining either side of a path that lead through the centre of the school site to the southern portion of land.



Figure 16: Memorial Forest, located within the north western corner of the school site.



Figure 17: Memorial Norfolk Island Pines located within the school site.



Figure 18: Grove of Phoenix Palms located outside the main administration building along Roy Watts Road.

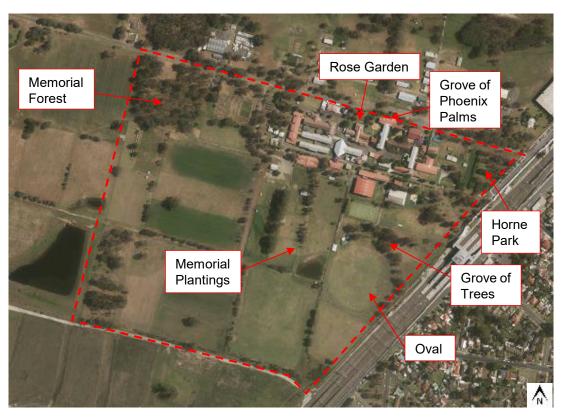


Figure 19: Aerial view of the Hurlstone Agricultural School site showing key landscape elements identified (exact location of all memorial and significant trees is unknown and requires a landscape assessment). (Source: SIX Maps captured 15 January 2018)

Moveable Heritage

Within the site are a number of memorial plaques, walks and moveable heritage dotted around the site including the following:

- Centenary Walk landscaped courtyard near Clarke House, established in 2007, paving has engraved names of ex-principals and ex-students, continuously updated;
- Mouldboard plough located near Centennial Walk, early plough used at the school and donated in 2007 by the Lawrence family;
- School bell accompanied by a plaque and located near Centennial Walk;
- Various pieces of disused farm machinery and equipment;
- Old furniture;
- Photographs;
- Memorial plaques;
- Trophies, shields, awards and ribbons;
- Foundation stones;
- School sites;
- Honour rolls and plaques;
- Artwork and sculptured produced by students or donated to the school;
- Documents, files and ephemera.

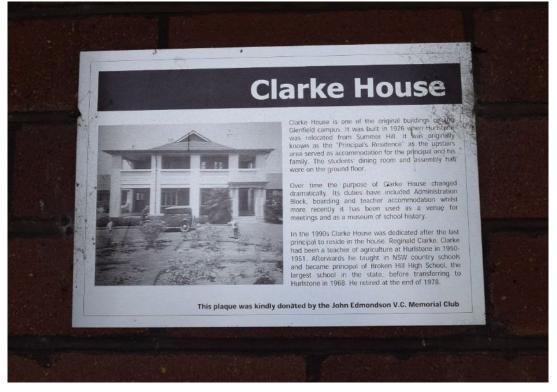


Figure 20: Heritage interpretation plaque to the exterior of Clarke House providing information about the history of the building.



Figure 21: A room within the ground floor of Clarke House where various pieces of moveable heritage and stored and displayed.



Figure 22: An archive and storage room located within the original dormitory block.



Figure 23: Memorial plaque adhered to the exterior of a building near the avenue of Turpentine Trees.

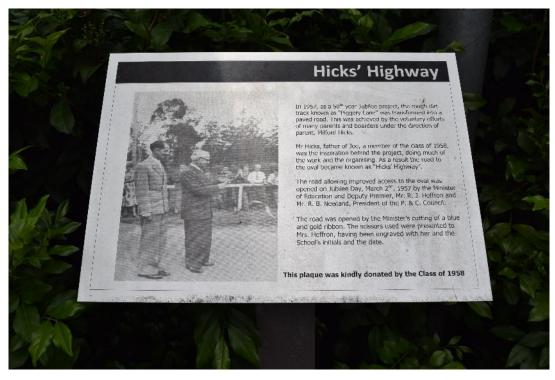


Figure 24: Heritage interpretation plaque for Hicks' Highway.



Figure 25: A rock within the grounds of the school with a memorial plaque adhered to it.

2.2.4 Former Veterinary Research Station

The former Veterinary Research Station site is located directly north of the Hurlstone Agricultural School and consists of approximately 40 hectares. This area of the Glenfield Precinct is irregular shaped and comprises a mixture of pastoral land with various low scale buildings and structures associated with the former Veterinary Research Station and agricultural school activities. The majority of buildings are located towards the southern section of the allotment, towards Roy Watts Road which provides main access to the area. The real property description for the allotment is Lot 22 of DP 1035516.

There are various buildings located on the site dating from the 1920s to 1990s. Many of these are associated with the agricultural functions of the site and consist of metal farm or storage sheds, brick administration buildings and a former Director's Residence. Overall there are approximately 24 larger structures located on the site. These are summarised in the following table, which provides a brief description and estimated date of construction of the buildings located within the site and has been extracted from the Urbis report, for ease of reference. (note: description and dates have been ascribed by Urbis and require further analysis in the CMP prepared for the school).⁶

No.	Building	Date Constructed	Photo
2	Metal storage / farm shed	1970-75	-
3	Metal storage / farm shed	1970-75	-
4	Brick and tiled caretaker's dwelling	1970-75	-

⁶ Urbis, Hurlstone Development Project Heritage Impact Statement and Archaeological Assessment, June 2017, p.p.27-37

No.	Building	Date Constructed	Photo
5	Metal hay shed	1982-91	
6	Metal farm shed	1965-70	-
7	Farm shed	1965-70	-
8	Farm shed	1975-82	-
9	Metal framed and clad farm shed / pig stalls	1975-82	
10	Metal farm shed	1970-75	
11	Metal framed and clad farm shed and silos	1991-98	

No.	Building	Date Constructed	Photo
12	Metal framed and clad farm shed	1970-75	
13	Brick and metal sheet roof farm building / shed	1956-67	
14	Brick and metal sheet roof farm building / shed	1967-70	
15	Brick and metal sheet roof piglet pens (former goat pens)	By 1956	
16	Green metal clad and roofed farm shed	By 1956	

No.	Building	Date Constructed	Photo
17	Metal framed and roofed storage canopy	1956-67	
18	Metal storage farm shed	1956-65	
19	Metal framed and clad shed	1991-98	
20	Brick walled and metal roofed research / administration building	In stages 1975-91	
21	Brick walled and metal roofed research / administration building	1970-75	
22	Brick walled and metal roofed research / administration building	Central part by 1956, northern extension 1967-70, southern extension 1970-75	-

No.	Building	Date Constructed	Photo
23	Brick and metal sheet roofed residence / former Director's Residence from Veterinary Research Station phase of development	c.1923	
24	Brick and tiled caretaker's dwelling	1970-75	-



Figure 26: The Director's Residence, located on the corner of Roy Watts Road.

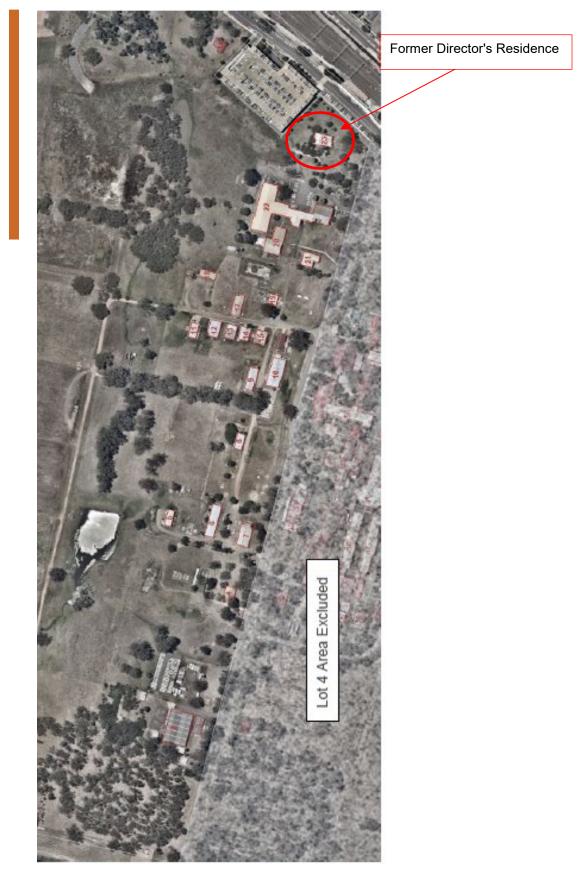


Figure 27: Aerial view showing the various number allocations for each building located within the former Veterinary Research Station. (Source: Urbis, HIS and Archaeological Assessment, p.16)

Archaeology

This area contains a mixture of extensively worked agricultural land and built improvements in the southern component. The majority of the former Glenfield Veterinary Station, which was established in the southern portion of the site in 1923, was demolished in the late 20th century. The only extant structure which remains is the former Director's Residence in the south-eastern corner.

Landscape

The landscape surrounding the buildings is used for grazing cattle and is divided into various paddocks, has one dam and various water courses. There are also a number of shale plain woodland trees that can be found towards the south-western corner of the allotment.



Figure 28: The former Veterinary Research Station is accessed via a central road that divides the site in two. This image is looking east from the central road towards pastural land and various buildings.



Figure 29: Looking north from the central road with various farm sheds visible to the left and right.

2.2.5 Northern Development

The north-western allotment located within the Glenfield Precinct is the Mirvac residential redevelopment, accessed via Glenfield Road. Development in this area dates from c.2000 onwards, with construction still underway. The area is characterised by a mixture of low and medium density housing, with some free standing and attached residences.⁷

Archaeology

This area has been subject to extensive residential development and is thus highly disturbed.



Figure 30: Aerial view of the north-western area of the Glenfield Precinct where the Mirvac residential development is located. (Source: SIX Maps captured 16 January 2017)



Figure 31: Example of housing located within the Mirvac residential development along Glenfield Road. Note the mixture of single and two storey residences.

⁷ Urbis, Hurlstone Development Project Heritage Impact Statement and Archaeological Assessment, June 2017, p.5



Figure 32: Typical street within the Mirvac development area. Note the combination of single and two storey residences present and the suburban character of the area.

2.2.6 Open Landscape Area

North and west of the former Glenfield Special School site are two sections of open landscape that can be access from Campbelltown Road and Roy Watts Road. The northern section is divided into nine paddocks while the irregular western section is predominately open cleared land with electricity wire easements towards the northern end. The northern section has electrical easements along the northern boundary and there is a small caretaker's cottage to the south-eastern corner. Both areas are currently used for grazing purposes for cattle by the Hurlstone Agricultural School.

The real property descriptions for the open landscape areas are:

- Lot 1 DP 177010 (24 hectares);
- Lot 5 DP 1035516 (40 hectares).

Archaeology

This area consists of extensively worked agricultural land. Extant structures are limited to the caretaker's residence in the south-eastern corner. Historical research (*Section 4*) did not reveal the presence of any former structures.



Figure 33: Aerial view showing the extent of the open landscape area to the north-western extent of the Glenfield Precinct. (Source: SIX Map captured 16 January 2017)

2.2.7 Eastern Development

The eastern extent of the Glenfield Precinct is irregular in shape and populated with existing privately owned residential developments dating from the mid-20th century onwards and commercial allotments. The area also encompasses the Glenfield community hall, various reserves and parks, the Glenwood Public School and Whiddon Homes.

Archaeology

This area has been subject to extensive residential development and is thus highly disturbed.



Figure 34: The eastern area within the Glenfield Precinct, predominately consisting of residential developments. (Source: SIX Maps captured 15 January 2018)



Figure 35: Examples of the typical housing seen in the eastern section of the Glenfield Precinct.



Figure 36: Examples of the typical housing seen in the eastern section of the Glenfield Precinct.



Figure 37: Railway Parade, the main commercial strip within the eastern section of the Glenfield Precinct. This area is predominately occupied by single and two storey commercial terraces.



Figure 38: Railway Parade and the Glenfield Train Station.

3. View Analysis

In addition to the view analysis undertaken by GMU, CPH has undertaken additional analysis of the views associated with the Macquarie Field House site and the Hurlstone Agricultural School site. A number of additional views beyond the GMU assessment were found and explored separately below.

The analysis below should be read in conjunction with GMU's view analysis document.

3.1 Significant Views

View 1:

In addition to the views explored by GMU, two other significant views were identified. Firstly, a strong visual connection can be gained from the southern section of the Hurlstone Agricultural School towards Macquarie Field House, across the OSL site (view 1). While access to the OSL site was not possible at the time of the inspection, nor to the low-lying areas of the Macquarie Field House site, it is understood that this view is reciprocated.

It should also be noted that some aspects of these views are obscured by existing vegetation and would be improved should the vegetation die or removed.

This view is considered significant due the strong visual connection that can be gained and historic associations between the school and Macquarie Field House (noted during the site inspection by the school archivist).



Figure 39: Aerial view of the western section of the study area showing additional key views to and from Macquarie Field House and the Hurlstone Agricultural School. Views can be gained from various areas to the southern end of the school site. (Source: SIX Maps captured 29 November 2017)



Figure 40: View 1: the Macquarie Field House site looking south west from the boundary of the Hurlstone Agricultural School site.

View 2:

The second view explored and considered of significance can be gained from the raised entrance to the Glenfield train station, which is surrounded on various sides by glass. This view is considered expansive and provides a clear indication of the relationship between the Macquarie Field House site and the surrounding context.



Figure 41: View from the raised entrance/ viewing area of the Glenfield train station showing a clear view towards the Macquarie Field House site.



Figure 42: Aerial view of the western section of the study area showing additional key views from the Railway Station towards Macquarie Field House. (Source: SIX Maps captured 29 November 2017)

View 3:

The views from Roy Watts Road, although explored by GMU, were reviewed again in order to gain an understanding of the views afforded towards Macquarie Field House. As such, CPH concurs with the significance assessment undertaken by GMU. The proposed landscape link identified in the draft rezoning plan is therefore considered a positive outcome, serving to not only preserve but also enhance this view.



Figure 43: Aerial view of the western section of the study area showing additional key views from Roy Watts Road. (Source: SIX Maps captured 29 November 2017)



Figure 44: View from Roy Watts Road looking south towards the Macquarie Field House site.

View 4:

Views to significant buildings located within the Hurlstone Agricultural School site are generally limited due to the topography of the site, vegetation and other later structures surrounding these buildings. However, significant views can be gained from Roy Watts Road towards Clarke House, one of the earliest buildings on the site. This view will be retained under the proposed rezoning and will still be possible from within Roy Watts Road.



Figure 45: Views towards Clarke House can be gained from various areas along Roy Watts Road. (Source: SIX Maps captured 29 November 2017)



Figure 46: View from Roy Wall Road looking south towards Clarke House, which is prominently visible from the street. (Source: Google street view)

3.2 Non-Significant Views

A number of non-significant views were also noted during the site inspection. These are marked up on the following map.



Figure 47: Aerial view of the western section and part of the eastern section of the study area showing where non-significant views were explored. (Source: SIX Maps captured 29 November 2017)

View 1:

Views towards the Hurlstone Agricultural School site from the raised area of the train station were also possible, although obscured by vegetation and metal supports to the glass panelling of the raised entrance (obstructing photography opportunities). This view is therefore not considered of significance although could be improved should changes to the raised entrance be undertaken in the future.

View 2:

Views from the unnamed road that lines the western side of the railway were also explored. Visual access to the Macquarie Field House site was limited at the southern extent of the street, owing to the presence of station structures, fences and medium density landscaping. Views towards Macquarie Field House from further north within the street were again restricted for similar reasons (Figure 48 and Figure 49).



Figure 48: View looking south along the unnamed street to the west of the railway line. Visual access to Macquarie Field House is restricted.



Figure 49: View looking south west towards Macquarie Field House from the intersection with Roy Watts Road. No views are possible from this location.

View 3:

Limited views of the top of the pine tree next to Macquarie Field House could also be gained from Railway Parade, although this view is mostly obscured by the railway's fencing and other structures. Views from the eastern side of the Glenfield Precinct, other than those explored by GMU, are restricted.



Figure 50: View from Railway Parade looking south west towards Macquarie Field House. The tree adjacent to the house can be seen in the distance. This view is mostly obscured.

View 4:

Views from the new residential development to north of the Glenfield Precinct were also restricted, particularly towards the southern extent. It is understood views may be possible from the vacant land adjoining the development to the south, however, access to this area was not possible. Views from the backyard of properties located towards the southern extent of the development may also be possible.



Figure 51: View looking south from the northern residential development. No views to the Hurlstone Agricultural School or Macquarie Field House sites were possible.



Figure 52: View looking south from the northern residential development. No views to the Hurlstone Agricultural School or Macquarie Field House sites were possible.

View 5:

From Roy Watts Road visual access is possible to the main administration building, which is of later fabric. These views will be retained under the proposed rezoning and will still be possible from within Roy Watts Road.



Figure 53: View of the main administration building from Roy Watts Road.

4. History

The following timeline histories of the study area have been summarised from the 2017 HIS prepared by Urbis. For further information, reference should be made to the report in Appendix 9. It should also be noted that some historical information included in this report will require clarification during production of the Hurlstone Agricultural School CMP.

4.1 Brief History of Glenfield Suburb

Year	Event	
1 January 1810	First estate granted to Charles Throsby (included a portion of the study area) consisting of 950 acres. Throsby was a surgeon and explore from Glenfield, England.	
8 October 1816	Second estate granted to James Meehan consisting of 2,020 acres (included a portion of the study area). Meehan was a former convict who worked as both convict and later emancipist with the Acting Surveyor General. He was later Deputy-Surveyor of Lands, appointed by Governor Macquarie.	
10 June 1823	Meehan mortgages his land parcel including part of the study area, to businessman Samuel Terry (aka The Botany Bay Rothschild).	
21 April 1926	Meehan dies, and his estate is inherited by his son Thomas although managed by trustees.	
2 April 1828	Charles Throsby dies, and his property is inherited by his nephew, Charles Throsby junior.	
25 January 1831	Meehan estate is in debt by the time Thomas turns 21 and he sells to Samuel Terry for 5,000 pounds. The estate is earmarked as the inheritance of Samuel's daughter Martha Foxlowe. She married former elected Mayor of Sydney John Hosking Jr. He was also partner in merchant company Hughes and Hosking.	
1838	Samuel terry dies, and the Macquarie Fields Estate is administered to Martha by trustees.	
1840s	The firm of Hoskings and Hugh collapses as a result of the economic depression but Martha retains her inheritance while John Hoskings other estates are sold. Macquarie Field House is constructed on the ridgeline, north-west of Meehan's Castle.	
1875	Martha Hosking dies and the estate is administered by the executors of her will, Richard Rouse Terry and George Rattray. The began subdividing the estate.	
24 August 1877	1,800 acres is conveyed to grazier James Ashcroft (from Nyngan) on the 'north side of Bunbury Creek and known as Macquarie Fields'. The lot included Macquarie Field House and the western part of the original estate.	
1893 and 1902	James and Amelia Ashcroft live at Macquarie Field House before their deaths. In 1902 after Amelia's death her nephew, Thaddeus Bourke Rea held a claim to 1,700 of the estate.	
1904	Thaddeus Bourke Rea dies, and executors sell 1,660 acres of the estate to Alexander, John, James, William and Robert Ross. The brothers owned extensive landholdings and Alexander Ross used the house as his base in Sydney during his term in the Legislative Council.	
1914	Alexander Ross dies, and the property is transferred from the surviving brothers to Robert Ross.	
11 July 1917	The northern half of the Macquarie Field House site, which includes the south western portion of the study area, was sold to 'His Majesty King George V' in stages represented by the Minister of Education.	

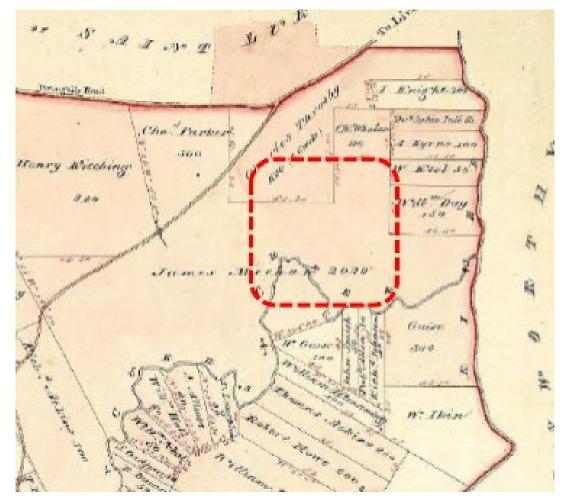


Figure 54: Extract from an early undated map showing original land grants in the Parish of Minto. The approximate location of the study area is indicated in red. Note the southern was part of James Meehan's estate while the north-eastern corner was part of Charles Throsby's estate. (Source: Land and Property Information, Historical Land Records Viewer via Urbis, 2017, p.58)

4.2 Former Veterinary Research Station (Glenfield Experimental Farm)

Year	Event	
11 July 1917	Northern section of Robert Ross's estate sold to His Majesty King George V	
April 1920	North-western section of the Macquarie Fields Estate was conveyed to Mayor Frederick Moore of Campbelltown, comprising 112 acres, 2 roods and 33 perches (approx. 45.33 acres)	
1919-1921	Plans prepared for the first purpose-building Government Veterinary Station (in Glenfield). The plans are prepared by the Government Architects Branch of the Department of Public Works. Donations were provided by the non-government McGarvie Smith Institute.	
1920s	The land is purchased, partially cleared, and construction starts. The land and construction costs totalled £16,800. Initially, a lab, farm buildings, residences for staff, fencing and a railway crossing were constructed (all except the Director's residence have been demolished).	
1923	The Research Station (Glenfield Experimental Farm) opens in November.	
June 1924	The farm name is changed to the Glenfield Veterinary Research station. Dr Hebert R Seddon's title is changed from Veterinary Pathologist to Director.	

Late 1924	The site is also expanded when 59 acres and 29 3/4 perches (23.9 hectares) is purchased to the west	
1927	A portion of land is purchased by Hipsley and Kershaw to the west of Quarter Session Road from former town Mayor Frederick Moore.	
1929	An additional laboratory, library and museum are constructed.	
1930	Laboratories adjoining to the west of the main building is constructed (now demolished).	
June 1931	Opening of new laboratories that are named as the McGarvie Smith Wing.	
17 January 1945	Resumption of Hipsley and Kershaw's land to Quarter Sessions Road is issued under Section 141 of the Public Works Act 1912.	
1945	The Glenfield Veterinary Research Station acquires two parcels of land to the south, including the Macquarie Field House estate (resumed by the Minister for Public Works from Dr Percy Leslie Hipsley).	
1948	A two-storey animal nutrition wing is constructed. The wing incorporated the 1929 library and museum.	
1 June 1950	The animal nutrition wing is officially opened by the Minister for Agriculture, Mr EH Graham. The facility is managed by GL McClymont.	
7 June 1963	Lisette Catherine Jamieson leases Lot 1 of DP 217484.	
1963 A section of the northern site is resumed by the Electricity Commission of NS construction of a transmission line including the western area.		
April 1968	Portion of land resumed between the Hurlstone Agricultural School site and Macquarie Fields House (within the current OSL site) by the Commissioner for Railways to facilitate access 'easement for railway purposes.'	
1968-1969	New laboratories, Administration Building, conference and staff facilities are constructed.	
1971	Drought research unit and agricultural engineering centre constructed.	
1972	Noxious and feral animal research unit constructed.	
1973	The Glenfield Veterinary Research Station is noted as consisting of 114 staff members of which 22 were veterinarians. The staff were specialists in bacteriology, biochemistry, toxicology, parasitology, pathology, poultry pathology, serology and virology.	
December The Commission for Main Roads resumes the former Hipsley and Kershaw (north western parcel) to Quarter Sessions Road.		
14 October The above noted parcel of land is proclaimed as a motorway. 1977		
1989-1990 Increased urbanisation of Glenfield and need for improved facilities prom relocation of the Glenfield Veterinary Research Station to the new Macarthur Agricultural Institute (EMAI) at Menangle (now known as to Department of Primary Industries' Centre for Animal and Plan Health)		
July 1990	Portion of land encroached by the State Railway Authority of railway purposes.	
31 May 2012	Lisette Catherine Jamieson's lease expires.	

4.3 Hurlstone Agricultural School

Numerous improvements were made to the Hurlstone Agricultural School site over the years and as such, the timeline below summarises key developments.

Year	Event	
1907	The Hurlstone Agricultural Continuation School was established at Ashfield (now Trinity Grammar School site). The site had 26 acres of land used for cropping, orcharding, market/ flower gardening, dairying, poultry and bee keeping.	
1910	Hurlstone renamed as a high school in response to education reforms. Also resulted in an extra year of curriculum.	
1915	The Ashfield site is considered too small.	
1916	Glenfield site identified as the potential future location of the Hurlstone Agricultural School.	
24 June and 10 July 1924	The site is transferred from Robert Ross to the Crown "for the purposes of the Public Instruction Act 1880"	
1926	The Hurlstone Agricultural School relocated to Glenfield at a cost of $\pounds40,000$. Dormitories, classroom and farm infrastructure are constructed. The land to the south was used by the students but was not formally part of the School's property.	
31 March 1926	The school is officially opened by the Mr Mutch, the Minister of Education.	
1929	The school offers a full five-year course in agriculture. This is the result of an increase in enrolments. Plans are also approved for the construction of four dormitories.	
30 June 1930	Hipsley sells part of the remainder of his allotment (joint tenant) to the Crown of a site that was formally linked to the Veterinary Research Station, although also used by the school.	
1931	The school expands and 80 acres is leased along the Georges River for grazing purposes.	
1932-1933	Construction of the new school assembly hall.	
1934-1935	Three temporary classrooms are erected near the agricultural plots.	
1936	Various improvements occur including extension of the milking bails by students in carpentry, construction of two new shelter sheds in the bull runs, construction of special single testing pens in the poultry section and a new 85 tonne silo.	
1937	Land to the south of the school consisting of 155 acres is purchased, having originally been owned by Dr Hipsley. After this purchase the school's land holdings equated to 390 acres (158 hectares).	
1937-1947	Ties to the former Veterinary Research station result in the school making use of the station's land to the north.	
1938	New senior school laboratory construction, sporting facilities increased and the oval enclosed with a picket fence. The library is also reconditioned and enlarged.	
1939	Temporary accommodation created to battle the measles epidemic.	
1941	Isolation cottage constructed.	
1945	Upgrade works undertaken by students to the library.	
1950	The memorial forest is established on a 5 acre plot, to commemorate students who served in the wars.	
1954-1955	The first swimming pool in a NSW public school is constructed (Langmuir Swimming pool). Improvements undertaken to the school buildings, hostels and dormitories by the Education department. Kitchen facilities upgrade and the gymnasium floor is re-laid.	
1956-1957	Renovations continue. Classrooms and the assembly hall are painted.	

1957	The Hindmarsh Dressing Pavilion near the pool is constructed along with Piggery Lane.		
1958-1959	Stage 1 of Wyndham building program completed - two new classrooms and manual training block.		
	Extensions made to the hostel block and the Stanley Cook Memorial Library is officially opened.		
1962	Stage II of the Wyndham building program - construction of two storey buildings for additional dormitories, new ablution blocks and toilets, new dining hall with kitchen, refrigeration room and storage rim, a new boiler house.		
1963	Stage II works completed along with renovation of the old kitchen and dining hall, which became part of the library, demolition of the old bathrooms, Stage II of development tender released.		
1964	Stage II of the Wyndham building program commenced involving the construction of two two-storey blocks, a new wool science room, tuck shop, ablution block and renovations of existing brick buildings.		
1965	Stage II works completed.		
1967	Official opening of the new buildings by Deputy Premier Charles Cutler.		
1972	Library extended.		
1978	Four new classrooms constructed, modifications made to the school plant.		
1979	The old assembly hall is demolished and a new canteen constructed.		
1981	Edmondson Hall constructed.		
1988-1989	New administration block and classrooms are built.		
1989 - 1991	The swimming pool is renovated.		
1991	The pool is reopened at an official ceremony where the Minister of Education Virginia Chadwick was present.		
1990s	Art and home economic block constructed, sick bay, nurse's quarters, laundry, new dairy, agricultural staff room and adjacent facilities.		
c.1995	The dormitories are upgraded along with the dining room used by borders.		
c.2004-2006	The female dormitory 'Guthrie' is constructed.		
2005 - 2006 New computer rooms constructed.			
	1		

4.4 Former Glenfield Special School site

Year	Event	
August 1923	106 acres 2 roods and 8 perches (approximately 40 hectares) was reserved by the Department of Education for a special residential school.	
September 1923	Preliminary sketches for the Macquarie Fields Home for Subnormal Children drafted by the Department of Public Instruction.	
December 1923	Richard McDonald Seymour Wells (architect of the Department of Education) drafted a sketch ground plan for various buildings including six cottages.	
April 1924	The first site plan was completed and the cost for constructing the school was estimated at £40,000.	
May 1924	Changes are proposed to the design by the Sydney Technical College.	
January 1925	Revised architectural plans and specifications completed. The original planning concept was retained but the superintendent's house design was changed and other concessions made	
March 1925	Mr W Jemison of Dulwich Hill begins work on the school, which is renamed 'Glenfield Special School.'	
February 1926	Construction had not been completed, however, the Department of Education began to receive applications for admission.	
March 1927	The school officially opens under the guidance of Superintendent Dr Gilbert Phillips. Staff employed included a matron, four nurses, four assistant nurses, one caretaker, one cook, an assistant cook, three housemaids, two mistresses, five female assistants, one male assistant, a manual training teacher, one teacher of needlework, a teacher of cookery and two cleaners.	
1927	Kitchen/ dining room block added to the matron's quarters.	
End of 1927	The school had performed well and had a reputation for being responsible for marked improvements in the children it housed.	
1929	The school had reached 125 pupils, all under the age of 12. Older children were considered difficult to train.	
1932	The old isolation block is converted to a cottage.	
1955	A sick bay is constructed adjacent to the kitchen/ dining room block. A hobby shed is also constructed.	
Up to 1960s	In the years prior, the school remain the only of its kind well into the 1960s, when the school's name changed to Glenfield Park School.	
1974	Renovations undertaken to the dormitory wings.	
1975	The original isolation block that had been converted into a cottage was removed and a swimming pool constructed.	
1979-1980	Renovations undertaken to the kitchen and dining room.	
1990	Renovations to the administration and residential school blocks, Campbell House opens in the two former girls' dormitory and demountable buildings were added to the area used by Campbell House School.	
1992	Dormitory block renovated and the Ajuga School opens in the two former boy's dormitory.	
2000s Minor works done including conversion of the double tennis court to a conbasketball court, a new tennis court on the Ajuga school site and a constructed adjacent to the kitchen/ dining room block.		

5. Assessment of Significance

5.1 Assessment of Criteria

The following assessment of significance has been prepared in accordance with the 'Assessing Heritage Significance' guidelines from the NSW Heritage Manual. It incorporates aspects of the significance assessment undertaken in the report prepared by Urbis (in italics) and has been expanded on, where required. In addition, it should also be noted that this assessment is to be updated following the undertaking of additional studies, including the CMP for the Hurlstone Agricultural School site.

a) an item is important in the course, or pattern, of the local area's cultural or natural history

The Glenfield Precinct, particularly the western extent, originally formed part of the Macquarie Field House estate. *The Study Area contains significant rural landscape features including vegetated escarpments, which are important historical visual links between Macquarie Field House and its rural setting.*

The Study Area has been developed with three (3) significant education and research institutions, each of which were the first of their kind in New South Wales, being;

- The first veterinary research station (1923) with only the Director's residence surviving from this period;
- The first agricultural boarding school Hurlstone Agricultural High School (1926), which has continued in this use to-date; and,
- The first established boarding school dedicated to the education of special needs children (1927), which has also continued in this use to-date.

The memorial forest within the Hurlstone Agricultural High School site was the first of its kind in New South Wales.

It is considered that the original and early parts of the Hurlstone Agricultural High School collectively meet the threshold for this criterion at a local level. It is further considered that the original group of buildings forming the former Glenfield Special School meet the threshold for this criterion at a state level.

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

The Study Area has historical associations with emancipated convict and surveyor and original owner of Macquarie Field House estate (prior to the construction of Macquarie Field House), James Meehan. Similarly, the Study Area has later historical associations with subsequent owners of the estate, including Samuel Terry "the Botany Bay Rothschild" and John Hosking, the first Lord Mayor of Sydney.

The former Veterinary Research Station and Hurlstone Agricultural High School have associations with various Directors/ Ministers for Agriculture and Education in NSW. Most notably, the Study Area is associated with Roy Watts, who attended Hurlstone Agricultural High School, became a Director of the Veterinary Research Station and later being Director-General of the Department of Agriculture. The main road dissecting the Study Area is named in his honour and his ashes are interred in the Rose Garden in the Clarke House forecourt.

It is considered that the original/ early elements of Hurlstone Agricultural High School, in particular the rose garden and Clarke House, collectively interpret the above association and together meet the threshold for this criterion at a local level. Roy Watts Road name and alignment remain an important interpretative element for this association.

Historical research to date does not indicate the eastern extend of the study area is associated with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history.

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

The Study Area overall retains a number of rural attributes and landscape features, including an overall agricultural aesthetic, vegetated ridge lines and groves of Cumberland wood-plain, that enhance the wider rural setting, and contribute to the understanding of Study Area's relationship with the adjoining Macquarie Field House as a former part of the estate.

Clarke House and the other original and early buildings that form part of Hurlstone Agricultural High School are collectively considered to have aesthetic value for their architectural attributes, purposeful design, configuration and presentation to Roy Watts Road. The original and early buildings are generally highly intact, in particular Clarke House and the original classroom block retain a number of intact internal architectural features of the period. It is considered that elements of the Hurlstone Agricultural High School meet the requisite threshold for local heritage listing under this criterion.

The rural setting, institutional-based configuration, purposeful architectural design and highlevel of intactness of the original former Glenfield Special School buildings contribute to their collective aesthetic value. In particular, the five-main buildings (former dormitories and central administration/classroom building) are of high aesthetic value for their arced alignment, internal building relationship, and their striking presentation to the corner of Roy Watts Road and Quarter Sessions Road. It is considered that the former Glenfield Special School meets the requisite threshold for state heritage listing under this criterion.

The former Director's Residence from the Veterinary Research Station phase of development is an interwar bungalow design with features typical of this typology. The loss of other buildings from this phase of development has diminished the setting and understanding of the former Director's Residence, as accordingly this building does not reach the requisite threshold for heritage listing.

d) an item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons

The Study Area has strong social associations through its long-established links with the scientific and educational communities.

In particular, there is a strong community association between Hurlstone Agricultural High School and its alumni community of former staff and students and their families.

This association is expressed throughout the Hurlstone Agricultural High School area through interpretation panels identifying built and landscaped contributions made to the school from former students, and a large collection of memorabilia donated to the school over time from former students. There is also a strong community association with the memorial forest planted by Hurlstone Agricultural School.

The former Glenfield Special School has strong associations with special needs students and their families.

It is considered that parts of the Study Area comprising the memorial forest, particular areas and buildings of the Hurlstone Agricultural High School, and the former Glenfield Special School, meet the requisite threshold for heritage listing at a local level under this criterion.

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

Historical research, in combination with the results of the Urbis HIS and Archaeological Assessment report, have indicated that the subject site contains numerous areas of archaeological sensitivity. These are summarised in *Section 5.2.1* and discussed in reference to the relevant statutory controls in *Section 7.5.1*.

f) an item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history

The Study Area has rarity value for its historical and visual relationship with the adjoining Macquarie Field House estate, one of the few remaining colonial estates set within a rural

landscape. However, this value has been substantially diminished through the continued subdivision and severing of the estate pastures over time, the development of the Study Area with new uses, and the recent development of the South West Rail Link. While some visual links between ridge lines remain, the contribution of the Study Area to the rural colonial value of the Macquarie Field House estate has been substantially lost.

The former Director's Residence is the only remaining building from the Veterinary Research Station phase of development, being the first purpose-built agriculture research station in NSW. However, this residence does not in itself demonstrate well this rarity value, as it was an ancillary building only associated the Veterinary Research Station period of use and cannot itself interpret the function and use of the site at this period.

The Hurlstone Agricultural High School was the first agricultural based school established in NSW, although the Study Area at Glenfield was the school's second location (after Ashfield). This form of educational facility with specific agricultural based curriculum is rare in the context of education throughout Australia. It has operated in this capacity continually since its commencement in 1926.

The former Glenfield Special School was the first educational facility to be developed addressing the specific special needs of children. It has operated in this capacity continually since its commencement in 1927.

It is considered that the rarity values of the Study Area associated with Hurlstone Agricultural High School and the former Glenfield Special School meet the requisite threshold for heritage listing at local and state levels respectively.

- g) an item is important in demonstrating the principal characteristics of a class of the local area's
- cultural or natural places; or
- cultural or natural environments

The former Director's Residence has features typical of its typology and is a good example externally of an interwar bungalow residence. The internal integrity of the building is unknown.

The original classroom and dormitory buildings of Hurlstone Agricultural High School, as well as the school buildings which make up the former Glenfield Special School, are architecturally representative of educational facilities of the period.

5.2 Statement of Significance

The following Statement of Significance for the Glenfield Precinct has been extracted from the Urbis report:

The whole of the Study Area has historical associations as a former part of the larger Macquarie Field House estate prior to subdivision in the early twentieth century. The rural character of the land together with the remaining visual corridors between ridgelines on the Study Area and Macquarie Field House, contribute significantly to this historical association. The agricultural use of the Study Area has been maintained overtime, initially associated with grazing uses for the estate then developing into a Veterinary Research Station and later Hurlstone Agricultural High School.

The Study Area has historical associations with the former Veterinary Research Station which operated on the site between c.1923 and c.1989 and was the first of its kind in New South Wales. However, the majority of buildings and operational structures associated with the phase of development have been demolished as other agricultural buildings for Hurlstone Agricultural High School were required. The only remaining building from this phase of development, the former Director's Residence, is a representative example of an interwar bungalow and does not meet the threshold for individual listing. Notwithstanding that this building is the last remaining from the earliest phase of development, it does not in itself represent well the former use and occupation of the site by the Veterinary Research Station.

Hurlstone Agricultural High School has operated within the Study Area from 1926 continually, as the first agriculture-curriculum based boarding school to be established in New South Wales (after relocating from Ashfield where it originally commenced operations in c.1907). The main built core of the Hurlstone Agricultural High School Glenfield campus is extant and includes the highly significant Clarke House (central administration building), original dormitory building and original classroom building. These three (3) buildings are good representative examples of educational facilities of their period and typology. Clarke House in particular is highly intact and retains a number of intricate architectural features of its period. Additional early buildings throughout the site are also extant, however these other buildings have an ancillary, contributory value compared with the principal three original buildings aligned to Roy Watts Road.

There is a strong social significance associated with Hurlstone Agricultural High School. This significance is expressed throughout the Study Area through both moveable and landscaped interpretative displays and installations created by the school and former students and staff members. This social association is more strongly linked to the Hurlstone Agricultural High School institution rather than the Study Area's specific location. There is also a strong community association with the memorial forest planted by Hurlstone Agricultural School to represent former students and staff who died in war. This memorial forest was the first of its kind in New South Wales.

Elements within the wider Hurlstone Agricultural High School site are considered to be of heritage significance at the local level for historical, aesthetic, associative, rarity, representative and social value reasons.

The former Glenfield Special School portion of the Study Area currently comprises three (3) individual schools dedicated to the education of children with special needs. The Glenfield Special School was the first educational facility established in New South Wales that was dedicated wholly to the education of special needs children. This group of buildings has continually operated as a special needs educational facility (in varying capacities) since its establishment in c.1927, and is historically highly significant as it was regarded the model institution for later special needs facilities to be based on.

The rural setting, institutional-based configuration, architectural design and highlevel of intactness of the original former Glenfield Special School buildings contribute to their collective aesthetic value. In particular, the five-main buildings (former dormitories and central administration/classroom building) are of high aesthetic value for their arced alignment, internal building relationship, and their striking presentation to the corner of Roy Watts Road and Quarter Sessions Road.

The former Glenfield Special School portion of the Study Area is considered to be of heritage significance at the state level for historical, aesthetic, associative, rarity, representative and social value reasons.

5.2.1 Assessment of Archaeological Significance

The table below summarises the archaeological potential of each Area within the subject site. Archaeological considerations and recommendations are discussed further in relation to the relevant statutory controls in *Section 7.5.1*.

CPH Area	Urbis Lot/s	Archaeological Notes
Open Landscape Area	1, 5	 Consists of extensively worked agricultural land Extant structures are limited to the caretaker's residence in the south-eastern corner Historical research did not reveal evidence of any former structures
Former Veterinary Research Station	2	 Consists of a mixture of extensively worked agricultural land and built improvements in the southern component
		 Former Glenfield Veterinary Station, located in southern portion, was demolished in the late 20th century. Only surviving structure Director's Residence in south-eastern corner
		 Low-medium potential for sub-surface remains to exist in connection with former Glenfield Veterinary Station (1923-late 20th century)
Former Glenfield Special School	3	 Comprised of extensively worked agricultural land and extant structures associated development of Glenfield Special School in north-western portion Extant historical buildings subject to reuse and retention within new school sites
		 Low potential for ancillary buildings and other sub- surface remains to exist in connection with the earlier phase of development (1800's-1910)
		 Low-medium potential for ancillary buildings and other sub-surface remains to exist in connection with the later phase of development (1910- present)
Hurlstone Agricultural School	4	 Comprised of Hurlstone Agricultural School in northern portion and extensively worked agricultural land in southern portion
		 Extant historical buildings subject to reuse and retention within school site
		 Low potential for ancillary buildings and other sub- surface remains to exist in connection with the earlier phase of development (1800's-1910)
		 Low-medium potential for ancillary buildings and other sub-surface remains to exist in connection with the later phase of development (1910- present)
		 Anecdotal evidence suggests existence of Aboriginal sites and/or objects of cultural significance
OSL Site	6, 7	 Consists of highly disturbed land resulting from South West Rail Link construction works

	CPH Area	Urbis Lot/s	Archaeological Notes
			 Aboriginal sites 45-5-2455 and 45-5-2744 are located within the curtilage but could not be relocated due to highly disturbed land
			 The status of Aboriginal site 45-5-4253 is revised to 'destroyed'
			 Historical research did not indicate the presence of any former structures
			 Anecdotal evidence indicates the existence of a tunnel beneath Macquarie House to the south of the subject site, which could potentially extend beneath the OSL site.

6. The Draft Master Plan

As noted in Section 1.1, this report is concerned with one precinct within the Glenfield to Macarthur Urban Renewal Corridor, which seeks to create housing and job opportunities within seven precincts, located along the south west railway line. This report assesses the draft master plan developed for Glenfield Precinct, incorporating a rezoning proposal.

The draft master plan has been prepared by GMU, with the following design statement detailing the concept behind the draft master plan:

The guiding vision for the proposed Master Plan attempts to transform Glenfield from a suburban/rural area to be a vibrant mixed-use urban centre with an emphasis on connecting people and places as well as creating a successful mix of land uses and activities for local residents and visitors.

The Master Plan aims to form a holistic development approach that balances the development on both sides of the railway line with enhanced connectivity and permeability. It will create a sustainable street network that complements the existing road network and block pattern on the eastern part of the precinct to maximise significant views and vistas obtained from local landmarks and public open spaces in the locality. The Master Plan also intends to create an integrated network of open spaces that incorporate the area's existing major natural assets, amenities and school facilities within the area.

To establish a strong identity and arrival points for Glenfield, the Master Plan proposes a town centre with a double-sided main street on both sides of the precinct. The western main street runs approximately 300m in length and is perpendicular to the railway line with a direct access to the station. The proposed new civic places and village greens anchoring on each end of the main streets, together with proposed density development and active uses on the ground floor, attempt to create a strong sense of place and arrival point for people to stay and visit. Place-based urban design principles suggest that a double-sided main street leads to a more vibrant and successful main street. The new main street on the western side is located to the south of the school precinct to allow a direct connectivity of the centre to the railway station as well as to avoid a single-sided main street running parallel to the railway with a compressed sense of place or sense of arrival.

The Master Plan encourages high-density development around the station to maximise job opportunities and a mix of affordable housing choices closer to the transport node, as well as reinforcing Glenfield's future role as a major interchange city in the Western City. The concentrated heights around the station also attempt to energise the main street with renewed vitality on both sides of the town centre. The proposed height and density will transition gradually from the core high to medium and low scale in the periphery. The scale also transitions to the interface with the primary schools and Macquarie Field House (listed heritage item). This is to maintain a low-density large lot spatial character upon arrival to the area as well as to provide a sympathetic response to Macquarie Field House in its significant rural landscape setting.

The western side of the precinct enjoys significant views and vistas from Roy Watts Road to the Macquarie Field House. The Master Plan aims to facilitate and enhance the views and vistas to the heritage house through the proposed grid and road alignment. The main north-south roads are aligned to increase the opportunity for views from the public realm to the heritage house. The main west-east roads attempt to create nice long boulevards with enhanced landscaped character to well connect the area from east to west and to create scenic drives and leafy streets. Future development on the OSL site will be carefully considered to maximise significant views to the heritage house gained from Roy Watts Road. The Master Plan intends to restrict the potential development to 1 storey on larger lots to mitigate any potential visual impacts to the existing visual axis to the heritage house. The development will be concentrated on the east low-lying land to ensure low visibility from the surrounding areas.

The western side of the Glenfield Precinct will be characterised by ample green spaces and large groups of vegetation with high significance (Cumberland Plain Woodland). To capitalise on and enhance the major natural assets, the proposed master plan attempts to incorporate the existing vegetated areas into the general layout and as local and regional destinations. The proposed north- south green corridor on the west side of the precinct will accommodate a regional-level playing field to meet the increasing demand for recreational and cultural activities arising from future growth. It will also form part of the wider green space network allowing the development to sit in a rural landscape setting. Vegetation buffer will be created on the interfaces with the South Western Freeway and the Macquarie Field House to mitigate visibility of the proposed development.

With a well-defined network of streets and open spaces, a well-defined core that will enhance the identity of Glenfield with a distinguishable skyline and with a vibrant main street as a new destination on both sides of the centre, the vision for the precinct hopes to transform Glenfield centre into a great place to live, work and visit.

For further information, reference should be made to the submitted draft masterplan.



Figure 55: The indicative Glenfield Precinct layout plan. (Source: GMU, revision H, courtesy of the Department of Planning)

7. Heritage Impact Assessment

The Campbelltown LEP and DCP heritage controls are not specifically concerned with rezoning, therefore, a general discussion of the likely heritage impacts of the proposed masterplan has been provided. For ease of reference, the likely impacts of the draft master plan are discussed separately for Macquarie Field House, the Hurlstone Agricultural School site and other identified significant sites. The impacts of the draft master plan and rezoning on archaeology is discussed in Section 7.5.

7.1 Macquarie Field House

There are a number of aspects of the Macquarie Field House site that required consideration in the development of the Glenfield Precinct draft master plan including views, landscape values and the original curtilage of the site (including original driveway). The draft master plan has provided various design solutions that seeks to retain these heritage aspects and provide opportunities for appreciation of the Macquarie Field House site. The ways in which this has been achieved and considered is discussed below.

7.1.1 Landscape Values and Views

The context of Macquarie Field House, as evident from the site inspection, is dominated by rural landscaping that has endured very little change although the original curtilage of the site has been reduced. This is a principal feature of the site that is considered intrinsically linked to its heritage significance and thus needs to be protected. Following advice provided by CPH, the rezoning of the OSL site located directly north of the Macquarie Field House site was modified, in order to ensure the visual impact of development within this area responds directly to the landscape character of the Macquarie Field House site. This has been achieved in the following manner:

- Proposed allotment sizes have not been allocated within the OSL site, pending approval of the draft master plan. They are currently shaded to show that they will consists of 'large lot residential (1 storey).' The intention is that the southern section of the OSL site would benefit from being rezoned as larger farmlet sized allotments, approximately 1200m² in size with the RL 60 zone being allocated for 2000sqm allotments. This would serve to improve the transition between the rural landscape character of the Macquarie Field House site and the new Glenfield Precinct development. It would also serve to minimise the impact of potential future development within the OSL site on the visual relationship between the Macquarie Field House site and the Hurlstone Agricultural School;
- Macquarie Field House is located at an elevated position on a prominent knoll. This is a significant aspect of the site that affords views towards the Glenfield Precinct. The western third portion of the OSL site is within the similar RL of the Macquarie Field House (RL60 to 40); therefore, this area is recommended to be largely landscaped recreational area with only small public park style structures associated with playgrounds, small open gazebos and bench seating are provided. In response to these identified views, the western area of the OSL site, partially incorporating the plateau, has been allocated in the draft master plan as open space/ local park land. While the main views looking out from the Macquarie Field House site noted in the Urbis CMP (and evident from the site inspection) are mainly gained looking directly north, to the east and to the west, no views of the plateau could be gained from within the Macquarie Field House site. However, development directly on the plateau would have the potential to detract from significant views to the Macquarie Field House site, gained from Roy Watts Road. Development on the lower topographical points of the plateau are therefore considered acceptable, provided they are of a low scale, as they will not be as prominently visible. DCP controls have been prepared in Appendix B - Design Guidelines and recommended DCP Controls to appropriately manage future development in this area accordingly;

From the view analysis undertaken by GMU, in the Macquarie Field House CMP and following the site inspections undertaken by CPH, views to this area of the OSL site are restricted by the landscaping present within the Macquarie Field House site. Provided this landscaping is retained within the Macquarie Field House site, there are no existing visual links to the eastern portion of OSL site. The impacts requiring consideration therefore pertain primarily to retention of the setting of the Bunbury Curran Creek which again could be managed through appropriate DCP controls, ensuring development in proximity does not visually impact on the Creek. The eastern area has therefore been allocated for use as open space/ local park to mitigate any potential impacts to the creek. Appropriate DCP controls have also been included in Appendix B - Design Guidelines and recommended DCP Controls

The following snapshot from the draft master plan illustrates where these changes have been applied.



Figure 56: The updated masterplan provisions for open land to the east and west, to minimise impacts on heritage and the creek, along with larger rural allotments. Note the anticipated location for a substation for the whole precinct, which will be designed in a manner that minimises impact on the visual corridor of the Macquarie Field House. Such as, it is to be a low scale (two-storey the most) and articulated to resemble a residential house appearance with appropriate landscaped buffer around it to mitigate further its infrastructure building architectural presentation. (Source: GMU, courtesy of the Department of Planning)

The GMU visual analysis study and the CMP prepared by Urbis for the Macquarie Field House site note significant views are possible from Roy Watts Road towards Macquarie Field House. This view is considered of significance, owing to the prominence of Macquarie Field House, which can be clearly seen on top of the hill. In order to ensure this view is retained, development within the OSL site is restricted to the central low-lying area, as indicated in Figure 56. As such, the single storey residential development in this area on larger allotments proposed will allow development while also prevent this view from being obstructed. The DCP guidelines detailed in Appendix B - Design Guidelines and recommended DCP Controls will also ensure the character of the area directly responds to the Macquarie Field House site, mitigating any potential future development from aesthetically detracting.

The view from Roy Watts Road is further enhanced through the allocation of a central parcel of land between Roy Watts Road and the OSL site as open space/ local park. The heritage benefits of this corridor are noted in GMU's design statement:

The western side of the precinct enjoys significant views and vistas from Roy Watts Road to the Macquarie Field House. The Master Plan aims to facilitate and enhance the views and vistas to the heritage house through the proposed grid and road alignment. The main north-south roads are aligned to increase the opportunity for views from the public realm to the heritage house. The main west-east roads attempt to create nice long boulevards with enhanced landscaped character to well connect the area from east to west and to create scenic drives and leafy streets.

In addition to the views explored by GMU and Urbis, CPH undertook analysis of key views to and from the Macquarie Field House site. As such, a strong visual connection can be gained from the southern section of the Hurlstone Agricultural School towards Macquarie Field House, across the OSL site. While access to the OSL site was not possible at the time of inspection, nor to the low-lying areas of the Macquarie Field House site, it is understood that this view is reciprocated. This view is considered significant due the strong visual connection that can be gained and historic associations between the school and Macquarie Field House (noted during the site inspection by the school archivist). Consequently, this view has been considered in the draft master plan whereby the rezoning of the central area to the OSL land as single storey residential on larger allotments, will also ensure visual connections between Macquarie Field House and the Hurlstone Agricultural School site are also retained.

The following image illustrates the view that can be gained from Roy Watts Road to the Macquarie Field House site, and the views possible from the southern end of the Hurlstone Agricultural School site.



Figure 57: Aerial view of the western section of the study area showing additional key views from Roy Watts Road. (Source: SIX Maps captured 29 November 2017)



Figure 58: View from Roy Watts Road looking south towards the Macquarie Field House site.



Figure 59: Excerpt from the masterplan showing the central green area ensuring the views from Roy Watts Road are retained and enhanced. Providing this visual connection encourages the passer-by to engage with the view. The orientation of the street alignment has also been created in order to maintain views to Macquarie Field House. (Source: GMU, courtesy of the Department of Planning)



Figure 60: Aerial view of the western section of the study area showing additional key views to and from Macquarie Field House and the Hurlstone Agricultural School. Views can be gained from various areas to the southern end of the school site. (Source: SIX Maps captured 29 November 2017)



Figure 61: View 1: the Macquarie Field House site looking south west from the boundary of the Hurlstone Agricultural School site.

7.1.2 Driveway

In addition to the modifications noted above, the street alignment indicated in the draft master plan has also been developed with consideration to the Macquarie Field House site. In the preliminary HIS and Archaeological Assessment prepared by Urbis, recommendations were made for the street alignment to reflect the original driveway to Macquarie Field House, which originally extended into the OSL site. This has been implemented in the revised draft master plan, as indicated below and is considered a positive outcome, providing a means of interpreting the original extent of the Macquarie Field House driveway.



Figure 62: Excerpt from the draft master plan showing the extension of the Macquarie Field House driveway, outlined in purple. (Source: GMU, courtesy of the Department of Planning)

7.1.3 DCP Controls

Design guidelines have been prepared, as noted above, in order to ensure future development as a result of the rezoning (and the draft master plan generally) appropriately responds to the heritage context of the Glenfield Precinct. The following elaborates on the controls developed that specifically relate to managing the potential impacts of development at the OSL site on the Macquarie Field House site.

- Landscaping consisting of medium to high trees and shrubs is considered a positive aspect of the surrounding area and will assist in obscuring any future development from view. It will also assist in retaining the rural character of the area. As such, DCP controls have been provided stating that planting new trees and shrubs to the southern section of the OSL land is required;
- The newer residential development located to the south (Macquarie Links development) of Macquarie Field House is considered unsympathetic for a variety of reasons, particularly in terms of scale, bulk, design and the materials used. In order to ensure residential development within the Glenfield Precinct does not have the same adverse impact on the locality, a number of guidelines have been developed in order to ensure new development is sympathetic.

Due to the low-lying nature of the OSL site, the proposed rezoning is not considered to have an impact on the heritage values of the Hurlstone Agricultural School site.

7.2 Hurlstone Agricultural School site

Following review of the Urbis report on the school site and the second site inspection undertaken by CPH, it is clear that the Hurlstone Agricultural School site is of significance at

a local level and potentially at a state level, as the first agricultural school in NSW. While the proposed rezoning has considered the feedback provided in the Urbis report and is considered appropriate, further detailed analysis of the site in the form of a Conservation Management Plan (CMP) is required (prior to the subdivision stage of the project) in order to adequately assess the significance of the site and its structures, advise on the proposed reduction in the site's curtilage, demolition of buildings and the potential impacts of the wider Glenfield Precinct project on the site.

Therefore, at this preliminary planning stage there are a number of positive and potential negative impacts that have been identified in relation to the proposed rezoning of the Hurlstone Agricultural School site. These are listed and discussed below:

Positive impacts:

- Partial retention of the Hurlstone Agricultural School site has been proposed where four key highly significant school buildings have been retained, including Clarke House;
- Retention of the rose garden and original gates to Roy Watts Road has also been included in the draft master plan;
- It is the intention to continue operating the school site as a selective high school;
- A connection between the school and the road aligning the western side of the railway, currently afforded by Horne Park, will be interpreted through a pedestrian connection. The buildings along this connection will be articulated in order to give a two-storey appearance in a podium-like street section and allow for human-scale for the buildings creating an enjoyable public lane;
- The significant view (seen in the figure below) towards Clarke House from Roy Watts Road will be retained;
- Views between the Hurlstone Agricultural School site and the Macquarie Field House site will be somewhat possible through the proposed street alignment.



Figure 63: Views towards Clarke House can be gained from various areas along Roy Watts Road. (Source: SIX Maps captured 29 November 2017)

The following further studies are required to inform the assessment and mitigate any likely adverse impacts:

- Additional studies are required to adequately assess the landscape, archaeological or social significance of the site;
- Further studies are required adequately assess or attribute significance rankings to buildings located within the site;
- The historic connections of the school and the Macquarie Field House site require further analysis in historical documentation to be produced for the site prior to the subdivision stage;
- The reduction of the site's curtilage and indicated demolition is informed by previous studies and will be further analysed in documentation produced prior to the subdivision phase;
- The rezoning to the south may result in medium to high rise development within this area, which may have potential to impact on the views between the Macquarie Field House site and the Hurlstone Agricultural School site. The historic link between these two sites has not been fully established, and it is required to be established in order to allow for adequate assessment of the likely impacts. Notwithstanding, the draft master plan has implemented a road alignment to allow some sight lines between the sites;
- The social significance of the school oval requires further investigation, in order to ascertain its relative value. This could be undertaken prior to the subdivision stage of the project as part of a Conservation Management Plan (CMP).

Although some areas of potential negative impacts identified with the draft master plan in relation to the Hurlstone Agricultural School site, the significance of their impact on the school has not yet been fully established. As such, CPH has advised that additional studies are to be undertaken prior to the subdivision stage, in order to mitigate potential impacts of future development, as a result of rezoning. No changes are required to the draft master plan. However, changes may be required to future development or subdivision of the area, depending on the findings of the social significance, archaeological and landscape assessments.

As previously noted, there is moveable heritage present within the site, commemorative plaques and stones and a number of significant trees and plantings. CPH has advised the Department of Planning to undertake consultation with relevant stakeholders, prior to subdivision, in order to ensure this fabric is appropriately assessed and managed.

7.3 Former Veterinary Research Station and Former Glenfield Special School Site

During the investigations undertaken by CPH and following the review of documentation provided to date, it is evident that the former Veterinary Research Station and the former Glenfield Special School site are of heritage significance at both a local and state level. Of particular note is the 1920s bungalow located on the corner of Roy Watts Road, an area that is allocated in the proposed masterplan for mixed use retail and residential (6-20st).

According to the report prepared by Urbis, this residence is considered of high significance with the following comments made regarding the significance of the site:^{*s*}

The Study Area has historical associations with the former Veterinary Research Station which operated on the site between c.1923 and c.1989, and was the first of its kind in New South Wales. However, the majority of buildings and operational structures associated with the phase of development have been demolished as other agricultural buildings for Hurlstone Agricultural High School were required. The only remaining building from this phase of development, the former Director's Residence, is a representative example of an interwar bungalow and does not meet the threshold for individual listing. Notwithstanding that this building is the last

⁸ Urbis, HIS and Archaeological Assessment, Glenfield, June 2017, p.206

remaining from the earliest phase of development, it does not in itself represent well the former use and occupation of the site by the Veterinary Research Station.

The following recommendations were also made regarding the Director's Residence:9

The significance of the Study Area as the site of the former Veterinary Research Station has lost is contextual relevance through the redevelopment of the site for Hurlstone Agricultural High School. The retention of the former Director's Residence will not substantially enhance the understanding of the Veterinary Research Station phase of development. Likewise, its removal, if required to facilitate additional new development, will not reduce the Study Area's significance as the site of the former Veterinary Research Station, as this significance is already substantially diminished and is now generally intangible...

However, as the demolition of the former Director's Residence is proposed only to create additional open landscaped areas, and not to facilitate further development, it is preferred that retention and adaptive re-use options are explored in the first instance. With regard to feasibility of uses and divestment of this asset, it is noted that single residential occupation is not likely to be a realistic option. Alternative options may include integration of the dwelling and landscape curtilage into the proposed adjoining aged care facility to the west (for communal recreation, administration or function purposes), or adaptation of the dwelling for a community / town centre use (including community centre / retail / café or restaurant uses).

The draft master plan is considered to appropriately respond to the established heritage significance of the aforementioned sites, which have been identified in the Urbis report as being of some merit. While CPH notes additional studies are required, the CMP and heritage assessment will assist in determining the appropriate subdivision and future development of the area and are not considered necessary at the rezoning draft master plan stage. Careful consideration of the views and elements of heritage value will provide a positive outcome in relation to the future subdivision and development of the area.

7.4 Rezoning to the North and East

During the site inspections undertaken by CPH, investigation of the visual connections between the eastern side of the Precinct and northern development area to the heritage items were undertaken. These views were undertaken in addition to the view analysis by GMU. No significant views or visual connections were noted with only minor glimpses to Macquarie Field House possible from either location. This is evident in the following images.

Due to the already built up nature of these areas, location of the railway which obstructs views and the topography of the precinct, the proposed rezoning to the north and east is not considered to impact on the heritage values of the Hurlstone Agricultural School site or the Macquarie Field House site. By intensifying development within these areas to respond to the aims of the Glenfield Precinct draft masterplan, various areas of single storey residential zoning and open space/ land were able to be allocated to the east. This has prevented intense development directly to the north of the Macquarie Field House site, to the west of the Hurlstone Agricultural School site, within the former Veterinary Research Station or the former Glenfield Special School site.

Limited views of the top of the pine tree next to Macquarie Field House could also be gained from Railway Parade, although this view is mostly obscured by the railway's fencing and other structures. Views from the eastern side of the Glenfield Precinct, other than those explored by GMU, are restricted.

Views from the new residential development to north of the Glenfield Precinct were also restricted, particularly towards the southern extent. It is understood views may be possible from the vacant land adjoining the development to the south, however, access to this area

⁹ Ibid, p.215

was not possible. Views from the backyard of properties located towards the southern extent of the development may also be possible.

Therefore, the proposed rezoning to the eastern and northern areas of the Glenfield Precinct is considered a positive outcome, occurring away from heritage fabric and ensuring key views are retained.



Figure 64: Aerial view of the western section and part of the eastern section of the study area showing where non-significant views were explored. (Source: SIX Maps captured 29 November 2017)



Figure 65: View from Railway Parade looking south west towards Macquarie Field House. The tree adjacent to the house can be seen in the distance. This view is mostly obscured.



Figure 66: View looking south from the northern residential development. No views to the Hurlstone Agricultural School or Macquarie Field House sites were possible.



Figure 67: View looking south from the northern residential development. No views to the Hurlstone Agricultural School or Macquarie Field House sites were possible.

7.5 Archaeological Impact Assessment

7.5.1 NSW Heritage Act 1974

Legislative management and protection of Aboriginal objects and places comes under the NSW National Parks and Wildlife Act, 1974 and it is an offence under that Act to disturb or otherwise alter Aboriginal objects without the express permission of the Director General of the NSW National Parks and Wildlife Service.

The protection provided to Aboriginal objects and places applies irrespective of the level of their significance or issues of land tenure. Any future development of the Richmond Main Colliery site should be undertaken with due regard. Contractor and subcontractor contracts should also specify obligations which need to be met relating to the National Parks and Wildlife Service.

The National Parks and Wildlife (NPWS) Act, 1974 provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Indigenous occupation of New South Wales) under Section 90 and for 'Aboriginal places' (areas of cultural significance to the Aboriginal community) under Section 84. Aboriginal objects and places are afforded automatic statutory protection in New South Wales whereby it is an offence (without the Minister's consent) to:

(a) Damage, deface or destroy Aboriginal sites without the prior consent of the Director-General of the National Parks and Wildlife Service (now the Department of Environment and Conservation).

The Act defines an Aboriginal object as:

(b) any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

The protection provided to Aboriginal objects and places applies irrespective of the level of their significance or issues of land tenure. Any future development on this site should be undertaken with due regard.

Three Aboriginal sites were registered on the AHIMS database for the subject site (Figure 68). These included:

- Artefact Scatter (45-54253) destroyed
- Artefact Scatter (45-52744)
- Artefact Scatter (45-52495)



Figure 68: AHIMS search results indicating location of Aboriginal sites 45-52744 (indicated in green), 45-5-2495 (indicated in orange) and 45-5-4253 (indicated in red).

It was determined that Aboriginal site 45-5-4253 was destroyed, as has been modified in association with the construction of the South West Railway. The Urbis HIS and Archaeological Assessment was unable to relocate any of the three registered Aboriginal sites as they were located in 'highly disturbed' and 'obviously modified' terrain.¹⁰ Prior to commencement of the next phase of works (4) it is therefore recommended that these be further investigated.

A further consideration relates to Aboriginal objects and sites within the subject site which may not currently be declared under Section 84 of the NPW Act. During the site inspection undertaken by CPH on 27 November 2017 anecdotal evidence was received which made reference to objects or places of Aboriginal cultural value within the subject site. These included:

- a site within the vicinity of a grove of trees (Figure 18) south of the Hurlstone Agricultural School; and
- a scarred tree within the Memorial Forest.

¹⁰ HIS and Archaeological Assessment Report (June 2017) Urbis, p.179.

CPH agrees with the recommendations contained within the Urbis *HIS and Archaeological Assessment* report, which advise that consultation be undertaken prior to the commencement of the next phase (4) of works. This should be undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH 2010), which specify the following:

As part of this consultation, the proponent must also seek cultural information from registered Aboriginal parties to identify:

a) Whether there are any Aboriginal objects of cultural value to Aboriginal people in the area of the proposed project

b) Whether there are any places of cultural value to Aboriginal people in the area of the proposed project (whether they are Aboriginal places declared under the s.84 of the NPW Act or not). This will include places of social, spiritual and cultural value, historic places with cultural significance and potential places/areas of historic, social, spiritual and or cultural significance.

Following the above assessment, the Department of Planning commissioned additional Aboriginal heritage advice from Extent Heritage Pty Ltd, which is included in Appendix C - Aboriginal Heritage Advice, Extent Heritage Pty Ltd, 9 March 2018. The findings of the advice letter came to the same conclusion that, "given the presence of documented Aboriginal sites within the precinct that will require management and potentially be impacted, and the proximity of Georges River upon which significant cultural material is known to occur, we would concur with these previous recommendations...we therefore similarly recommend that more detailed Aboriginal heritage investigation in the form of a ACHA should be implemented at the earliest opportunity." The advice also notes two sites areas identified in this report are unlikely to have Aboriginal cultural significance and therefore unlikely need to be managed as an Aboriginal site in the master planning process.

7.5.2 NSW Heritage Act 1977

The archaeological resources ('relics') of New South Wales are recognised through the protection offered under the Heritage Act in which a 'relic' is defined as:

...any deposit, artefact, object or material evidence that:

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

(b) is of State or local heritage significance.

Under the terms of the Act, automatic statutory protection is provided for 'relics'. Section 139 (1) of the Heritage Act provides that:

A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.

The Urbis *HIS and Archaeological Assessment* report made the following determinations in relation to historical archaeology at the subject site:

 There is a limited (low) potential for structural remains/deposits to be found in association with the earlier subject site (from the 1800's - 1910) in which the original land grants were made to Throsby and Meehan. This early occupational phase would likely be represented by:

- structures associated with Meehan's estate (located to the south of Macquarie House in Lot 7); and
- structural remains associated with agricultural activities, such as ancillary structures, fence posts, drainage, rubbish pits and wells.
- From the 1910's onwards there is greater (low-medium) potential for more substantial buildings or ancillary structures, now no longer extant, to have existed in connection with the Veterinary Research Station/Glenfield Experimental Farm, former Glenfield Special School and Hurlstone Agricultural School. These structures, should they exist, are unlikely to be either aesthetically or technically significant and would be limited to those areas which have not been subject to extensive earth works associated with the agricultural activities at the site.
- Site survey did not yield any evidence of historical archaeological resources, nor were any areas identified as likely to contain subsurface remains.

It is therefore advised that the recommendations, as contained within Section 14.2 of the Urbis *HIS and Archaeological Assessment* report be adhered to so as to prevent any harm to historical archaeological remains. It is further recommended that:

- a ground-penetrating radar (GPR) survey be undertaken in any archaeologically sensitive areas prior to the commencement of works as a means of identifying any potential subsurface remains prior to the commencement of works;
- anecdotal evidence, (received during the 27 November 2017 site visit), which made reference to a tunnel located beneath Macquarie House, be further investigated;
- anecdotal evidence, (received during the 27 November 2017 site visit), which made reference to tunnels beneath the Agricultural School, be further investigated;
- the precise location and curtilage of Meehan's estate be further investigated; and
- historical evidence, which details students of the Agricultural School creating World War II (1942) trenches in the southern portion of the subject site, be further investigated.

8. Conclusion and Recommendations

Overall, the proposed rezoning of the Glenfield Precinct is considered a positive outcome that will assist in rejuvenating the area, while also providing additional residential housing and job opportunities.

As noted in the sections above, additional studies would be of significant benefit as they would serve to better inform the urban design employed in the area. It should be noted that no changes are required to the master plan and any changes required as a result of the findings of the additional studies can be undertaken prior to subdivision or could be addressed in the DCP guidelines. The findings would not require amendments to an approved rezoning (including approved FSR and heights).

Additional documentation and analysis recommended includes the following:

- A CMP should be prepared for the Hurlstone Agricultural School site in order to provide a detailed analysis of its significance and appropriate management (to be completed prior to subdivision stage). The CMP will also assist in providing a greater understanding of how the proposed rezoning will impact on the heritage values of the site while also considering the following:
 - Detailed investigation into the Director's Residence should be undertaken, potentially as part of the CMP. A comparative analysis would assist in establishing the rarity and significance of the building, thereby advising if demolition is appropriate;
 - The CMP should also consider the facebrick barn structure located on the former Veterinary Research Station site. It is not considered of sufficient significance to warrant retention, however, further consideration of this structure is required in order to better understand its values and association with the former Veterinary Research Station.
- A detailed heritage landscape assessment of the Glenfield Precinct should be undertaken generally, with specific consideration to the Hurlstone Agricultural School and OSL sites. The assessment should be prepared by a heritage landscape specialist and provide information regarding landscape elements that require retention (to be completed prior to subdivision stage);
- A social significance assessment of the Hurlstone Agricultural School, former Veterinary Research Station and Ajuga School should also be undertaken to ensure the social significance of the site is acknowledged and appreciated in any future redevelopment of the school. This could be undertaken as part of a Conservation Management Plan (CMP) for the Hurlstone Agricultural School site (to be completed prior to subdivision stage);
- Further archaeological investigation is required, as noted in the advice letter prepared by Extent Heritage Pty Ltd, to ratify the additional historical and anecdotal information provided regarding the historical and aboriginal archaeological potential of the site (to be completed prior to subdivision stage);
- Consultation with the Aboriginal community is also recommended, in tandem with the social significance assessment, to create a better understanding of the significance of the area to the Aboriginal community. This may also assist in resolving the anecdotal information regarding potential aboriginal archaeology (to be completed prior to subdivision stage);
- A heritage assessment of the former Glenfield Special School site should be undertaken to create a better understanding of its significance, which is noted as being at a state level in the Urbis report (to be completed prior to subdivision stage).
- Any future works to the Glenfield train station should consider retaining and improving the view gained from the raised platform area of the station. Heritage interpretation could also be added to the railings where these views can be gained, in order to inform passengers about the site.

It is recommended that consultation be undertaken to ensure the Hurlstone Agricultural School, when relocating, leaves appropriate documentation and moveable heritage items relating to the site for interpretation. Consultation may also need to be undertaken with officials associated with the new school to ensure the movable heritage left is appropriately stored and displayed.

CITY PLAN HERITAGE NOVEMBER 2018 9. Appendix A - Urbis, 'History,' Hurlstone Development Project Heritage Impact Statement and Archaeological Assessment, June 2017 HERITAGE IMPACT STATEMENT & ARCHAEOLOGICAL ARCHAEOLOGICAL ASSESSMENT HURLSTONE DEVELOPMENT PROJECT AT GLENFIELD NSW 2167

1 JUNE 2017 SH1003 FINAL PREPARED FOR PROPERTY NSW



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Report Number

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EXECUTIVE SUMMARY

BRIEF AND BACKGROUND

Urbis has been engaged by Property NSW to prepare the following heritage impact statement (HIS) and archaeological assessment regarding the property known as Hurlstone Agricultural High School, the former Glenfield Special School and Office of Strategic Lands land, at Glenfield NSW (hereafter referred to as the Study Area). This report has been prepared to analyse the built heritage significance and archaeological potential of the Study Area, and assess the potential heritage impacts of the proposed site redevelopment based on the draft Concept Plan provided.

The Study Area comprises a large land holding at Glenfield in Sydney's south-west, approximately 32 kilometres (by direct line) south-west of the Sydney Central Business District, approximately 20 kilometres (by direct line) south-west of Parramatta CBD and approximately 13 kilometres (by direct line) north-east of Campbelltown CBD. The site is an amalgamation of seven (7) large lots situated between the T2 Inner West & South Railway Line to the south, and the Hume Motorway to the north, described as follows:

Lot	Legal Description	Approx. Area	Ownership / Use
1	Lot 1 DP 177010	24 hectares	Department of Education & Training Hurlstone Agricultural High School farm
2	Lot 22 DP 1035516	40 hectares	Department of Education & Training Hurlstone Agricultural High School farm
3	Lot 1 DP 175963	43 hectares	Department of Education & Training Hurlstone Agricultural High School farm / Campbell House School / Ajuga School / Glenfield Park School
4	Lot 21 DP 1035516	40 hectares	Department of Education & Training Hurlstone Agricultural High School
5	Lot 5 DP 808118	10.5 hectares	Department of Education & Training / rural land
6	Lot 11 DP 1201109	22 hectares	Office of Strategic Lands / rural land
7	Lot 12 DP 1201109	19.5 hectares	Office of Strategic Lands / rural land

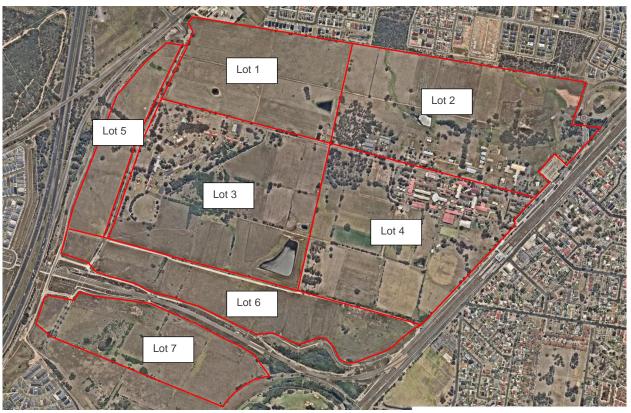
Table 1 – Study Area Summary

Lots 1, 2 and 4 are primarily occupied by the Hurlstone Agricultural High School (HAHS) including the main school campus (Lot 4), farm and agricultural use out buildings (Lot 2) and residual farmland (Lot 1). HAHS also occupy part of Lot 3. The greater portion of Lot 3 is occupied by three (3) distinct schools for the education of children with learning difficulties and behavioural problems.

Lot 5 is also owned by the Department of Education and Training but does not appear to be occupied for a particular educational use. Lots 6 and 7 are owned by the Office of Strategic Lands and are essentially surplus land parcels residual from the development of the South West Rail Link Extension to Leppington in 2012/13.

The general configuration of the seven (7) lots throughout the Study Area is shown on the following diagram.

Figure 1 – Configuration of the Study Area



Source: SIX Maps, 2017

SIGNIFICANCE

Both an archaeological and a built heritage significance assessment have been undertaken within this report at Sections 10 and 11 respectively.

The archaeological significance assessment has determined the following (amongst other conclusions):

- It is assessed that there is a low to moderate degree of potential for the site to contain archaeological remains from the previous phase of occupation (c. 1810s-1910s). It is noted, however, that any such remains (whether structural or occupational), if present, are likely to have been disturbed by subsequent phases of use and development. The potential for archaeological remains from c. 1910s present, associated with the Veterinary Research Station/Glenfield Experimental Farm, former Glenfield Special School, and Hurlstone Agricultural School, to be present on site is assessed as low to moderate. However, there is no evidence to suggest that any former buildings or structures were of greater significance than those which are extant.
- There is no historical evidence to suggest that any buildings previously present on site would have been particularly aesthetically distinctive or representative of a high degree of creative or technical achievement. Rather, any former buildings from the phase 1810s 1910s are likely to have been ancillary structures or buildings associated with the agricultural use of the site.
- Archaeological remains from the phase 1810s-1910s, if present, if found relatively intact, and if able to
 be conclusively associated with this period, have the potential to be of local significance by way of their
 association with notable historical figures such as James Meehan. However, the anticipated nature and
 condition of such remains means, as well as the relatively low potential for them to be recovered intact,
 means that they are highly unlikely to be of state significance.

The built heritage significance assessment included in Section 11 has determined the following (amongst other conclusions):

- The whole of the Study Area has historical associations as a former part of the larger Macquarie Field House estate prior to subdivision in the early twentieth century. The rural character of the land together with the remaining visual corridors between ridgelines on the Study Area and Macquarie Field House, contribute significantly to this historical association. The agricultural use of the Study Area has been maintained overtime, initially associated with grazing uses for the estate then developing into a Veterinary Research Station and later Hurlstone Agricultural High School.
- The Study Area has historical associations with the former Veterinary Research Station which operated on the site between c.1923 and c.1989, and was the first of its kind in New South Wales. The only remaining building from this phase of development, the former Director's Residence, is a representative example of an interwar bungalow and does not meet the threshold for individual listing.
- Hurlstone Agricultural High School has operated within the Study Area from 1926 continually, as the first
 agriculture-curriculum based boarding school to be established in New South Wales (after relocating
 from Ashfield where it originally commenced operations in c.1907). The main built core of the Hurlstone
 Agricultural High School Glenfield campus is extant, and includes the highly significant Clarke House
 (central administration building), original dormitory building and original classroom building. There is a
 strong social significance associated with Hurlstone Agricultural High School. This significance is
 expressed throughout the Study Area through both moveable and landscaped interpretative displays and
 installations created by the school and former students and staff members. There is also a strong
 community association with the memorial forest planted by Hurlstone Agricultural School to represent
 former students and staff who died in war. This memorial forest was the first of its kind in New South
 Wales.

Elements within the wider Hurlstone Agricultural High School site are considered to be of heritage significance at the local level for historical, aesthetic, associative, rarity, representative and social value reasons.

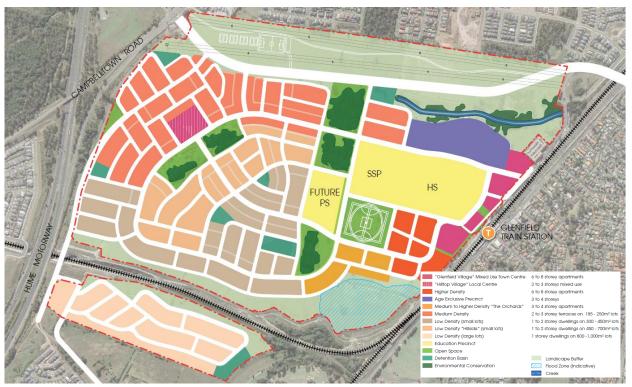
- The former Glenfield Special School portion of the Study Area currently comprises three (3) individual schools dedicated to the education of children with special needs. The Glenfield Special School was the first educational facility established in New South Wales that was dedicated wholly to the education of special needs children. This group of buildings has continually operated as a special needs educational facility (in varying capacities) since its establishment in c.1927, and is historically highly significant as it was regarded the model institution for later special needs facilities to be based on.
- The rural setting, institutional-based configuration, architectural design and high-level of intactness of the original former Glenfield Special School buildings contribute to their collective aesthetic value. In particular, the five-main buildings (former dormitories and central administration/classroom building) are of high aesthetic value for their arced alignment, internal building relationship, and their striking presentation to the corner of Roy Watts Road and Quarter Sessions Road.

The former Glenfield Special School portion of the Study Area is considered to be of heritage significance at the state level for historical, aesthetic, associative, rarity, representative and social value reasons.

PROPOSED REDEVELOPMENT

Property NSW have commenced investigations into the proposed redevelopment of the Study Area. The large scale of the site, its generally undeveloped nature and its strategic south-western corridor location makes it an appropriate site for large scale urban release containing a range of proposed uses. Group GSA have been engaged by Property NSW to prepare a draft masterplan report, providing a draft subdivision concept plan and proposed uses. The draft Concept Plan, as discussed in detail in Section 3, proposes to integrate residential, commercial, retain and educational uses within the Study Area.

Figure 2 – Draft Land Use Plan prepared by Group GSA, dated January 2017



CONCLUSIONS AND RECOMMENDATIONS

The proposed Concept Plan proposal has been assessed from a heritage perspective in Section 13 of this report. This impact assessment has informed a range of recommendations for the Study Area redevelopment which are outlined in Section 14. These recommendations provide guidance on the heritage requirements from both a built heritage and archaeology perspective for the development process, and identify areas requiring further investigation.

Overall the proposed Concept Plan is considered to be acceptable from a heritage perspective, subject to the following specific recommendations (which should be read in conjunction with the full recommendations outlined in Section 14). Additional heritage impact assessments will be required as part of later stages of the development to assess the potential impact of any physical works to buildings identified as having High Conservation Value.

Archaeology Recommendations

- Should any unexpected historical archaeological remains or material be uncovered during excavation works, the Heritage Division must be notified in accordance with Section 146 of the Heritage Act 1977.
 Works must stop and a suitably qualified and experienced archaeologist must be brought in to assess the finds.
- It is recommended that an ASIRF is lodged to OEH to have the status of site #45-5-2495 formally changed to 'destroyed' or 'not a site' on AHIMS. An updated extensive search of the AHIMS database should be undertaken in the future to confirm that the status of site #45-5-4253 has been updated to 'destroyed'. If an updated search reveals that the status has not been updated, it is recommended that an ASIRF is lodged to OEH to have the status updated.
- Prior to any physical works occurring at the Study Area, a full ACHA Report must be prepared for the entire Study Area, including full consultation with the local Aboriginal community in accordance with OEH's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.

Built Heritage Recommendations

• The proposed Concept Plan as discussed in Section 3 of this report proposes to demolish all of the buildings which form the former Glenfield Special School precinct, and develop a "Hilltop Village" Local

Centre, as well as medium density residential development (2-3 storey townhouses). The former Glenfield Special School site has been identified in this report (at Section 11.2) to be of state heritage significance. Accordingly, the proposed Concept Plan will need to be amended to incorporate the former Glenfield Special School precinct. Key recommendations specific to the former Glenfield Special School are as follows:

- The buildings and structures identified as having High Conservation Value in Section 11.3.2 of this report must be retained and integrated into the proposed future redevelopment of the Study Area. Continuation of an educational use within the existing buildings would be the preferred outcome for this precinct. However, having regard to the broader redevelopment concept for the Study Area, and feasibility of future uses for these buildings, exploration of adaptive re-use options for these buildings is encouraged. Proposed new uses must be developed in consultation with and assessed by a qualified heritage consultant to ensure that they are appropriate, and will not require adverse intervention to original fabric or detrimentally impact the significance of the buildings. Adaptive re-use of the five (5) original classroom / dormitory buildings should not sever the relationship between the buildings, and should provide for the interpretation of their heritage significance.
- We are aware that Property NSW intends to locate a small neighbourhood centre in this precinct. Discussions to date have explored (at a high level) the opportunity for adaptive re-use of the central building (Building 7) for a mixed-use community centre, including community use spaces, retail etc. Having regard to the feasibility of alternate uses for this building, and the future intended residential context of this precinct, this proposed use is considered appropriate, subject to the other recommendations in Section 14.
- The remaining four (4) High Conservation Value buildings within this precinct (the former dormitory buildings) have a range of available alternative uses. We are aware that Property NSW intends for this area to be a low-density residential precinct, and therefore we have assumed that the most likely alternative use of the subject buildings would be for residential use. This proposed use is considered appropriate, subject to the other recommendations in Section 14: This form of alternative use would require careful management of fabric to mitigate the impact of intervention, and its achievability would be subject to full investigations by a suitably qualified architect with experience in adaptation of heritage buildings.
- The arced axis (road) configuration of the five (5) main buildings (Buildings 4,5,7,8,9) is a significant feature of the former Glenfield Special School site. This axis/road should be integrated into the proposed masterplan design to create a defined and continual avenue (vehicular or pedestrian) along the front of these buildings, and ensure the buildings retain an appropriate curtilage depth. This axis is essential to the interpretation of the relationship between the existing buildings on the site.
- The circular drive and rose garden immediately north of Building 7 is an important landscape element of the former Glenfield Special School. The retention and interpretation of this arrival avenue should be integrated into the proposed Concept Plan, to help retain a sense of identity of the place. This landscaped forecourt area could be used as a park or general landscaped buffer for the proposed new community use of Building 7 (see proposed visual corridor at Figure 117).
- As the demolition of the former Director's Residence is proposed only to create additional open landscaped areas, and not to facilitate further development, it is preferred that retention and adaptive reuse options are explored in the first instance. With regard to feasibility of uses and divestment of this asset, it is noted that single residential occupation is not likely to be a realistic option. Alternative options may include integration of the dwelling and landscape curtilage into the proposed adjoining aged care facility to the west (for communal recreation, administration or function purposes), or adaptation of the dwelling for a community / town centre use (including community centre / retail / café or restaurant uses).
- The northern forecourt of Clarke House should be retained and conserved, with no additional buildings
 or structures being permitted to be constructed within this area. This area provides a significant curtilage
 to this building, and contains a number of significant features, including the original rose garden and
 original HAHS entrance gates. This forecourt area should be retained and used for the continued
 interpretation of HAHS. The extent of the forecourt which should be retained is shown in Figure 116.
- The buildings and structures identified as having High Conservation Value in Section 11.3 of this report <u>must</u> be retained and integrated into the proposed future redevelopment of the Study Area. It is <u>preferred</u> that the buildings and structures identified as having Medium Conservation Value in Section 11.3 of this report are also retained and integrated into the proposed future redevelopment of the Study Area. The

buildings and structures identified as being of Low Conservation Value may be demolished or redeveloped. However, adaptive re-use of existing buildings should be considered as a first means of redevelopment where possible.

- Any proposed adaptive re-use or alteration to buildings herein identified as having High Conservation Value should only be undertaken in consultation with a qualified heritage consultant to provide advice on appropriate uses and establish appropriate curtilages of the building, and sympathetic setbacks from new development.
- An interpretation strategy should be prepared by a suitably qualified heritage consultant to provide for the interpretation of the HAHS site's significance and the former Glenfield Special School site's significance, in the context of the proposed Study Area redevelopment.
- We are of the opinion that the proposed dwelling type (single level detached) and lot size (800 1,000 square metres) are appropriate for Lot 7 development within proximity to Macquarie Field House estate. The proposed development should be progressively larger in lot size and lower in height the closer it is to the Macquarie Field House property. Development should also consider the integration of landscaping within the dwelling buffers, to try and mitigate the loss of open rural land character.
- A qualified heritage consultant should be engaged during the design development stage of the development to advise on appropriate scale, design and response of new buildings within the Study Area.
- Prior to any redevelopment works commencing within the Study Area, an archival recording must be undertaken to document the existing configuration and condition of the built elements, setting and visual corridors within Study Area. This archival recording should document all existing buildings and structures, including farm buildings, throughout the whole of the Study Area. Particular attention should be given to the exteriors, interiors and settings of all buildings and structures identified as having High Conservation Value or Medium Conservation Value in Section 11.3 of this report.

1. INTRODUCTION

1.1. BRIEF

Urbis has been engaged by Property NSW to prepare the following heritage impact statement (HIS) and archaeological assessment regarding the property known as Hurlstone Agricultural High School, the former Glenfield Special School and Office of Strategic Lands land, at Glenfield NSW (hereafter referred to as the Study Area). This report has been prepared to analyse the built heritage significance and archaeological potential of the Study Area, and assess the potential heritage impacts of the proposed site redevelopment based on the draft Concept Plan provided.

1.2. STUDY AREA SUMMARY AND LOCATION

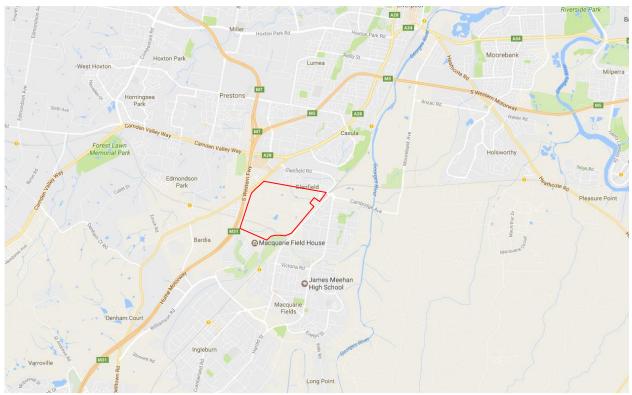
The Study Area comprises a large land holding at Glenfield in Sydney's south-west, approximately 32 kilometres (by direct line) south-west of the Sydney Central Business District, approximately 20 kilometres (by direct line) south-west of Parramatta CBD and approximately 13 kilometres (by direct line) north-east of Campbelltown CBD. The site is an amalgamation of seven (7) large lots situated between the T2 Inner West & South Railway Line to the south, and the Hume Motorway to the north, described as follows:

Lot	Legal Description	Approx. Area	Ownership / Use
1	Lot 1 DP 177010	24 hectares	Department of Education & Training
			Hurlstone Agricultural High School farm
2	Lot 22 DP 1035516	40 hectares	Department of Education & Training
			Hurlstone Agricultural High School farm
3	Lot 1 DP 175963	43 hectares	Department of Education & Training
			Hurlstone Agricultural High School farm / Campbell House School / Ajuga School / Glenfield Park School
4	Lot 21 DP 1035516	40 hectares	Department of Education & Training
			Hurlstone Agricultural High School
5	Lot 5 DP 808118	10.5 hectares	Department of Education & Training / rural land
6	Lot 11 DP 1201109	22 hectares	Office of Strategic Lands / rural land
7	Lot 12 DP 1201109	19.5 hectares	Office of Strategic Lands / rural land

Table 2 – Study Area Summary

The location and general configuration of the Study Area is shown on the following diagrams.

Figure 3 – Locality diagram



Source: Google Maps, 2017





Source: SIX Maps, 2017

1.3. METHODOLOGY

This Heritage Impact Statement has been prepared in accordance with the NSW Heritage Branch guideline 'Assessing Heritage Significance' (2001). The philosophy and process adopted is that guided by the *Australia ICOMOS Burra Charter* 1999 (revised 2013).

Relevant archaeology legislation and guidelines referred to and used in the preparation of this report have been outlined at Section 4.

1.4. AUTHOR IDENTIFICATION

The following report has been prepared by Karyn Virgin (Senior Heritage Consultant and Archaeologist) and Ashleigh Roddan (Heritage Consultant). Unless otherwise stated, all drawings, illustrations and photographs are the work of Urbis.

1.5. ACKNOWLEDGEMENTS

We would like to acknowledge the assistance and information provided by the following people and organisations in the preparation of this assessment:

- Campbelltown & Airds Historical Society
- Johanna Leglise, HAHS Archivist
- Jeff Doolan, HAHS
- Marisa Pjanic, Principal of Campbell House School
- Karen Willis, Principal of Glenfield Park School
- Samantha Jackson, Principal of Ajuga School

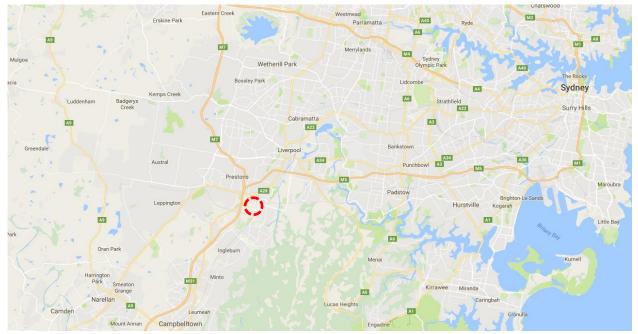
We have substantially drawn from the historical analysis contained within the Heritage Assessment undertaken by Graham Brooks and Associates in 2009 on behalf of Campbelltown City Council.

2. SITE DESCRIPTION

2.1. GENERAL LOCALITY

The Study Area comprises a large land holding at Glenfield in Sydney's south-west, approximately 32 kilometres (by direct line) south-west of the Sydney Central Business District, approximately 20 kilometres (by direct line) south-west of Parramatta CBD and approximately 13 kilometres (by direct line) north-east of Campbelltown CBD.

Figure 5 - Locality map showing approximate location of Study Area



Source: Google Maps 2017

The site is an amalgamation of seven (7) large lots situated between the T2 Inner West & South Railway Line to the south, and the Hume Motorway to the north. The legal description, approximate area (in hectares), ownership and current use of each of these seven (7) lots is detailed in the table hereunder.

Table	3 –	Studv	Area	Summary
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Lot	Legal Description	Approx. Area	Ownership / Use
1	Lot 1 DP 177010	24 hectares	Department of Education & Training
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Lots 1, 2 and 4 are primarily occupied by the Hurlstone Agricultural High School (HAHS) including the main school campus (Lot 4), farm and agricultural use out buildings (Lot 2) and residual farmland (Lot 1). HAHS also occupy part of Lot 3. The greater portion of Lot 3 is occupied by three (3) distinct schools for the education of children with learning difficulties and behavioural problems.

Lot 5 is also owned by the Department of Education and Training but does not appear to be occupied for a particular educational use. Lots 6 and 7 are owned by the Office of Strategic Lands and are essentially surplus land parcels residual from the development of the South West Rail Link Extension to Leppington in 2012/13.

The general configuration of the seven (7) lots throughout the Study Area is shown on the following diagram.



Figure 6 – Configuration of the Study Area

Source: SIX Maps, 2017

Access to the site is generally restricted given its predominantly educational use. The site has various access points;

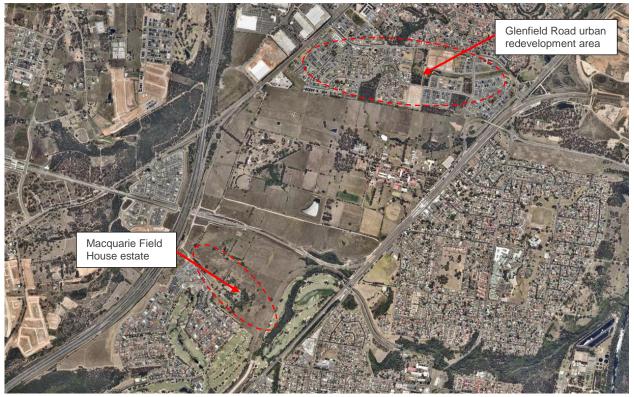
- Lots 1, 2, 3 and 4 are accessed via Roy Watts Road, an internal road running east to west across the site, extending west from the T2 Inner West & South Railway Line; and,
- Lots 5, 6 and 7 are accessed via Quarter Sessions Road, a private road, which extends south from Campbelltown Road and originally formed the entrance drive to the adjoining Macquarie Field House estate.

Immediately surrounding development comprises the Hume Motorway to the west, the Glenfield Road residential release area to the north, the T2 Inner West & South Railway Line to the east, and the Macquarie Field House estate to the south. A small section of the Bunbury Curran Creek adjoins the south-eastern corner of the Study Area.

The Glenfield Road residential release area is a Mirvac urban redevelopment precinct containing two stages of residential redevelopment called "Panorama" and "Vista at Panorama". The development commenced in circa 2000 with the last stages of construction being undertaken currently. The development comprises a mixture of low density free-standing dwellings and medium density attached dwellings, and extends along the entire northern boundary of the Study Area.

Macquarie Field House estate is the residual (approximately) 23-hectare parcel of rural land originating from the original Macquarie Field House estate, which at one time extended north and south throughout Glenfield until its subdivision and development in the twentieth century. Macquarie Field House itself is an item of state heritage significance, identified as item 00424 on the NSW State Heritage Register. This property has been the subject of a number of recent development proposals to subdivided its land and provide further residential development. We are aware that a new proposal to redevelop the site is currently underway, and have had regard to this in our analysis and recommendations relating to the Study Area.

Figure 7 – Locality map identifying adjoining development



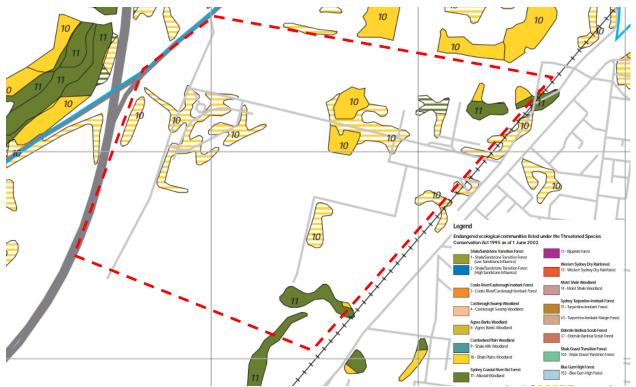
Source: Nearmap 2017

South of the Macquarie Field House estate lies the Macquarie Links development. This development comprises a 'locked-gate' community with lower to medium density housing and integrated golf course amenities. The development commenced in the mid-1990s and is currently being completed. More generally the suburb of Glenfield comprises low scale residential development extending east to the Heathcote National Park, and south towards the Ingleburn industrial precinct.

The Study Area, together with the remaining Macquarie Field House estate, form a large potential development site for future residential development, linking together the northern and southern urban development precincts of the region.

There are a number of endangered ecological communities identified across the Study Area by the NSW National Parks and Wildlife Division. These comprise areas of shale plain woodland and Sydney coastal river-flat forest. These areas of environmental sensitivity are shown on the following diagram.

Figure 8 – Extract of Native Vegetation of the Cumberland Plain Map identifying the endangered ecological communities on the Study Area (Study Area generally outlined in red)



Source: NSW National Parks and Wildlife Service, accessed at http://www.environment.nsw.gov.au/resources/nature/vegmapCumberlandPlain06Campbelltown.pdf

2.2. LOT 1 DESCRIPTION

2.2.1. General Description

Lot 1 is generally rectangular in shape, and is located in the north west of the site occupied by HAHS. Access to Lot 1 is available both from Campbelltown Road to the north-west, and from within the greater HAHS site via Roy Watts Road.

Lot 1 comprises generally cleared and vacant undulating pastural land, divided into four (4) quadrants and then into nine (9) paddocks. Internal unsealed roads (North Lane) bisect the four quadrants of Lot 1. The land is used for grazing purposes for the cattle owned by HAHS. Two large overhead electrical easements extend along the northern portion of Lot 1. Improvements on Lot 1 are limited in number, and comprise a basic caretaker's residence to the south-east corner, fencing throughout and a water /sewerage tank.



Figure 9 – Aerial diagram showing Lot 1

Source: Nearmap 2017



Picture 1 – View of Lot 1, from the middle of all four quadrants facing south-west



Picture 2 – View of Lot 1, from the middle of all four quadrants facing north-west



Picture 3 – View of Lot 1, from the middle of all four quadrants facing south



Picture 4 – View of Lot 1, from the middle of all four quadrants facing east



Picture 5 – View of Lot 1, from the middle of all four quadrants facing south-east



Picture 6 - View from within Lot 1, facing west



Picture 7 – View of overhead power lines from within Lot 1, facing north-west



Picture 8 – View of overhead power lines from within Lot 1, facing west



Picture 9 – View of caretaker's dwelling in south-east corner of Lot 1



Picture 10 – View of rear of caretaker's dwelling in south-east corner of Lot 1

2.3. LOT 2 DESCRIPTION

2.3.1. General Description

Lot 2 is a generally irregular shaped parcel of land, and is located in the north-east of the whole site occupied by HAHS. Access to Lot 2 is available directly from Roy Watts Road, the main entrance to the Study Area. An extension to Glenfield Road is located at the north-eastern corner of Lot 2, extending from an existing round-a-bout. This road extension enters Lots 2 but is blocked by metal wire fencing and does not currently provide access to the site. Lot 2 comprises a mixture of cleared undulating pastural land and built improvements.

Figure 10 – Aerial diagram showing Lot 2



Source: Nearmap 2017

2.3.2. Description of Buildings

The southern portion of Lot 2 originally accommodated the Glenfield Veterinary Station. This agricultural establishment commenced operations on the site in 1923 and was the first known use of the Study Area overall. Further detail regarding the history of the Glenfield Veterinary Station is included in Section 0 of this report. During this phase of development, a number of administration and research buildings were constructed on the southern portion of Lot 2. However, the majority of these structures were demolished in the latter half of the twentieth century, with only one building remaining extant; this building is the former Director's Residence and is located in the south-eastern corner of Lot 2.

The remaining buildings on Lot 2 comprise a range of agricultural farm buildings and administration buildings. The buildings are used by HAHS for various agriculture and research purposes. The location and basic description of these structures is identified in the following table and diagram.

Table 4 – List of buildings on Lot 2

Buil	ding	Date Constructed	Photo
2	Metal storage / farm shed	1970-75	-
3	Metal storage / farm shed	1970-75	-
4 dwelli	Brick and tiled caretaker's ng	1970-75	-
5	Metal hay shed	1982-91	
6	Metal farm shed	1965-70	-
7	Farm shed	1965-70	-
8	Farm shed	1975-82	-
9 shed	Metal framed and clad farm / pig stalls	1975-82	
10	Metal farm shed	1970-75	

Building	Date Constructed	Photo
11 Metal framed and clad farm shed and silos	1991-98	
12 Metal framed and clad farm shed	1970-75	
13 Brick and metal sheet roof farm building / shed	1956-67	
14 Brick and metal sheet roof farm building / shed	1967-70	

Building	Date Constructed	Photo
15 Brick and metal sheet roof piglet pens (former goat pens)	By 1956	
16 Green metal clad and roofed farm shed	By 1956	
17 Metal framed and roofed storage canopy	1956-67	
18 Metal storage farm shed	1956-65	

Building	Date Constructed	Photo
19 Metal framed and clad shed	1991-98	
20 Brick walled and metal roofed research / administration building	In stages 1975-91	
21 Brick walled and metal roofed research / administration building	1970-75	
22 Brick walled and metal roofed research / administration building	Central part by 1956, northern extension 1967-70, southern extension 1970-75	-
23 Brick and metal sheet roofed residence / former Director's Residence from Veterinary Research Station phase of development	c.1923	

Building	Date Constructed	Photo
24 Brick and tiled caretaker's dwelling	1970-75	-

Figure 11 – Aerial diagram identifying buildings and larger structures on Lot 2



Source: Nearmap 2017

2.3.3. General Landscape Description

The northern portion of Lot 2 comprises pastural land utilised by HAHS for grazing of cattle. This area is divided into just under one dozen paddocks. A number of smaller water courses meander through this portion of the site and there is one large dam. A small section of remnant shale plain woodland is located at the south-western corner of Lot 2 (refer Figure 8) and identified by NSW National Parks and Wildlife as an endangered ecological community.



Picture 11 – View of Lot 2, looking south towards the dam from North Lane



Picture 12 – View of Lot 2, looking north towards a watercourse



Picture 13 – View of Piggery Lane in Lot 2



Picture 14 – View of North Lane in Lot 2



Picture 15 - View of additional farm structures in Lot 2



Picture 16 - View of additional farm structures in Lot 2

2.4. LOT 3 DESCRIPTION

2.4.1. General Description

Lot 3 is a generally regular shaped lot located in the south-west of the site occupied by HAHS. Lot 3 is accessed via Roy Watts Road from within the Study Area. Additional internal roads extend along Lot 3's western and southern boundaries and throughout the site.

The south-western portion of Lot 3 is currently utilised by HAHS for grazing pasture land. The north-west portion of Lot 3 comprises a collection of education buildings, original operating as the Glenfield Special School, and now operating as three (3) separate but similar schools providing educational facilities for children with learning difficulties and behavioural issues. These three (3) schools are known as Campbell House School, Glenfield Park School and Ajuga School.

The former Glenfield Special School site comprises a number of school buildings and former dormitory buildings, arranged in an arced landscape setting oriented towards the north-west. Additional outbuildings are located on the site which dated from this phase of occupation. Detailed information regarding the historical development of the former Glenfield Special School site is included in Section 5.1.4 of this report.



Figure 12 – Aerial diagram showing Lot 3

Source: Nearmap 2017

2.4.2. Description of Buildings

The buildings and structures on Lot 3 all relate to the development of the former Glenfield Special School, and more recently, the conversion of these buildings to smaller specialised schools. The original formation of the former Glenfield Special School is evident in the arc of five (5) principal buildings which faces north-west towards Campbelltown Road. These original five (5) buildings comprise a centrally located single-storey brick classroom building with administration podium building, and four (4) single-storey brick former dormitory buildings which have now been converted to classroom use.

Additional ancillary buildings from the original development phase remain extant and include the Superintendent's Residence, caretaker's residence, kitchen and hall building and workshops. More recent

development on the site has included the construction of a swimming pool, extension to one of the former dormitories, and additional demountable classroom buildings. The location and description of each building on Lot 3 is included in the below table and aerial diagram.

Table 5 – List of buildings on Lot 3

Building	Date Constructed	Photo
1 Caretaker / staff cottage	1927	
2 Pool and ancillary structures	5 1975 	
3 Original Superintendent's br and tile dwelling	ick 1926	
4 Brick and tile original dormite building / current classroom building Ajuga School		

Building	Date Constructed	Photo
5 Brick and tile original dormitory building / current classroom building for Ajuga School	1926 (extended 2010)	
6 Demountable classroom building	2011	
7 Brick and tile former school / classroom / administration building / current administration and classroom building for Glenfield Park School	1926	
8 Brick and tile original dormitory building / current classroom building for Campbell House School	1926	

Buile	ding	Date Constructed	Photo
	Brick and tile original dormitory ng / current classroom building for bell House School	1926	
10	Lightweight shade structure	1998-2005	
11	Metal shed	1991-1998	
12	Metal clad classroom building	2010	

Building	Date Constructed	Photo
13 Brick toilet block	2005-2009	
14 Demountable classroom building	1990	
15 Brick and tile, original dining hall and kitchen block with 1927 extension providing Matrons Quarters	1926 extended 1927	
16 Brick and tile sick bay building	c.1956	

Building	Date Constructed	Photo
17 Metal shed	1991-1998	
18 Brick and tile laundry / workshop building	1935	
19 Brick and tile laundry / workshop building	1935	
20 Potential former water tower, now structure for telecommunication devices, and ancillary telecommunication hub equipment	By 1956 (water tower) Telecommunication equipment more recent	

Figure 13 - Aerial diagram identifying buildings and larger structures on Lot 3



Source: Nearmap 2017

2.4.3. General Landscape Description

The former Glenfield Special School site is situated within a landscaped setting. The arched design and layout of the precinct is derived from ideologies of the period regarding the benefits of open space and landscaping for mental health. Particular landscape features of note include the precinct's hill-top location on an escarpment (allowing extensive views of the surroundings and to the nearby Macquarie Field House), early designed plantings including avenues of palm trees and remnant circular entrance rose garden, and former school kitchen garden plots.

The south-eastern portion of Lot 3 comprises pastural land utilised by HAHS for grazing of cattle. This area is divided into paddocks and comprises the former school kitchen garden plot area and two dams. Vegetation along the escarpment ridge and throughout the former Glenfield Special School site is remnant shale plain woodland and identified by NSW National Parks and Wildlife as an endangered ecological community (refer Figure 8).

Views of the general landscape of the former Glenfield Special School site are shown in the photographs hereunder.



Picture 17 – Only remaining avenue of palm trees



Picture 18 – Remnant circular rose garden and early plantings at former Glenfield Special School main entrance



Picture 19 – View from Roy Watts Road on Lot 3, facing south, showing the escarpment to right (at rear of former Glenfield Special School site) and view south towards Macquarie Field House across Office of Strategic Lands owned land



Picture 20 - View of rear of former Glenfield Special School site, facing south-east at escarpment

2.5. LOT 4 DESCRIPTION

2.5.1. General Description

Lot 4 is a generally irregular shaped parcel with an extended frontage to the T2 Inner West & South Railway line, and a northern frontage to Roy Watts Road. Lot 4 comprises the majority of buildings, structures and recreation areas associated with the HAHS. HAHS is an agriculturally focused boarding school which has operated continually at the Study Area since 1927. A detailed historical analysis of the origin, development and progression of HAHS is included in this report at Section 5.1.3.

Figure 14 – Aerial diagram showing Lot 4



Source: Nearmap 2017

2.5.2. Description of Buildings

The majority of improvements relating to the HAHS are situated along the Roy Watts Road frontage of Lot 4, towards the north-eastern corner of the lot. Improvements include administrations buildings, classroom buildings and dormitory buildings. Additional recreational buildings and improvements, including a pool (non-functional), tennis courts, gymnasium and basketball court are located on the site. A number of smaller dwellings are also situated on the lot providing accommodation for live-on-site teaching staff and visitor accommodation for families of the boarders.

The location and basic description of these structures is identified in the following table and diagram. Small ancillary and non-significant or moveable structures have not been included.

Build	ling	Date Constructed	Photo
25 dwellin	Brick and tiled caretaker's g	1965-70	-
26 resider	Brick and tiled caretaker/staff	1975-82	
27 staff / v	Timber and metal dwelling for risitors	1982-91	
28 resider	Brick and tiled caretaker/staff	By 1956 (likely 20s / 30s)	
29 shed	Metal framed and clad garage /	1982-91	

Building	Date Constructed	Photo
30 Metal framed carport	1982-91	
31 Metal framed and clad dairy building	1982-91	
32 Two-storey brick classroom building with metal roof	1982-91	
33 Brick and metal amenities block for pool – Hindmarsh Dressing Pavilion	1957	
34 Inground pool (not functional) – Longmuir Swimming Pool	1954/55	-

Building	Date Constructed	Photo
35 Original dormitory block (with extension to north west and southern toilet blocks in 1970-75)	1926	
36 Two-storey brick dormitory building with metal roof (not used)	1963	
37 Two-storey brick dormitory building with metal roof (not used)	1963	
38 One-storey brick dormitory building with metal roof	c.2005	
39 Metal shed	1982-91	-

Building	Date Constructed	Photo
40 Original principal's residence, dormitory block and dining hall, known as Clarke House	1926 (with 1956-65 extension)	
41 Current dining hall and kitchen building, brick walls with pitched metal roof	1963	
42 One-storey brick sick-bay building with metal roof	1982-91	

Buil	ding	Date Constructed	Photo
43	Metal carport structure	1991-98	
44	Metal storage shed	1998-2005	
45	Metal storage shed	1970-75	
pre-da	Timber framed, timber clad and roofed building. Suggested to ate HAHS use of the land. ble former cottage / classroom.	c.1911 (?) Moved to its current location 1975-1982 from unknown location	

Building	Date Constructed	Photo
47 Brick and metal roof building.	1963	
48 The English Cottage, formerly the school isolation hospital cottage. Timber cottage with metal roof.	1941	
49 Brick and metal roofed front administration and classroom building.	1988/89	
50 Brick and metal roofed classroom building perpendicular to front administration building	1963	

Building	Date Constructed	Photo
51 Demountable classroom building	1998-2005	
52 Demountable classroom building	1998-2005	
53 Single level brick amenities / bathrooms building with flat metal roof	1963 extended later in 1975-82	
54 Single level brick and metal roofed classroom / workshop building	1963	

Building	Date Constructed	Photo
55 Canopy structure over basketball courts	2010	
56 Original brick classroom block	1926	
57 Two-storey brick and metal roofed library and classroom building	1970-75	
58 Two-storey brick and metal roofed science classroom building	1967	

Building	Date Constructed	Photo
59 Original / early brick classroom block	1926	
60 Single-storey brick classroom building for dance	1963	
61 Brick and metal roofed hall / gymnasium known as Edmondson Hall	1981	
62 Brick and tiled dwelling	By 1956	

Building		Date Constructed	Photo
63	Metal shed	1982-91	
64 roofed	Single-storey brick and metal classroom building	1982-91	
65	Brick and tile dwelling	1982-91	
66	Metal shed	Early 2000s	

Building		Date Constructed	Photo
67	Brick pavilion	c.1956	
68	Metal shed	Early 2000s	

Figure 15 – Aerial diagram identifying buildings and larger structures on Lot 4



Source: Nearmap 2017

2.5.3. General Landscape Description

The south-western portion of the Lot 4 area is utilised by HAHS for cattle and sheep grazing and pasture. The land is divided into smaller paddocks and is fenced. There is a single small dam centrally located within Lot 4.

The top north-western corner of Lot 4 comprises a grove of trees planted in the 1950s (and progressively thereafter) as a memorial to those who served in World Wars 1 and 2 from the HAHS community. This grove of trees is considered to be shale plain woodland and identified by NSW National Parks and Wildlife as an endangered ecological community (refer Figure 8).

Other landscaped / open areas within Lot 4 include the school oval, which is picket fenced and includes a small grove of shale plain woodland around its northern tip, the planted school entrance walk and various plantings throughout the school commemorating various students or staff members. The forecourt of Clarke House contains a rose garden, and the original HAHS entrance gates, amongst other plantings. The cremated remains of Roy Watts and Alison Watts are interred in the rose garden along with commemorative plaques. Roy Watts was the Director General of Agriculture and an 'Old Boy' from Hurlstone. Roy Watts Road is named after him.

There are various small gardens and plantings located throughout the site which have been established by the Environment Group, an internal extra-curricular group dedicated to planting new gardens throughout the school.

A small triangular park adjoining the train station is called Horne Park. This small park contains the main pedestrian pathway from the train station to the HAHS site and has been in continual operation since the 1930s.



Picture 21 - Clarke House rose garden



Picture 22 – Original HAHS entrance gates in front of Clarke House



Picture 23 – Shale plain woodlands memorial forest



Picture 24 – Shale plain woodlands memorial forest memorial stone



Picture 25 - HAHS oval



Picture 26 - Shale plain woodlands adjacent to oval



Picture 27 – Grove of phoenix palm trees in front of $\ensuremath{\mathsf{HAHS}}$



Picture 28 - Planting adjacent to Clarke House





Source: Nearmap 2017

2.5.4. Additional HAHS Site Improvements and Features

The HAHS has operated on the site from 1927 until the present. Over this extensive period, the school has acquired a number of moveable assets which are located throughout the site. In addition, the school has installed and constructed a number of structural and landscape features which are representative of the school's agricultural history and of past students and staff members. These features were identified to us throughout the site inspection as having significance to HAHS community, both present and past.

2.5.4.1. Centenary Walk

The Centenary Walk is a landscaped courtyard area between the main administration buildings and Clarke House. It was established in 2007 to mark the centenary of HAHS operations (from 1907 at the Ashfield site). The area comprises paving engraved with the names of ex-principals and ex-students. These pavers are updated continuously with names of the alumni.

The area also houses two of the school's early objects being the 'Mouldboard Plough', an early plough used at the school and donated by the Lawrence family in 2007, and the early school bell (no longer used). These items are displayed on plinths for observation and are accompanied by information plaques.



Picture 29 - Centenary Walk

Picture 30 - Engraved pavers of the Centenary Walk



Picture 31 - Mouldboard Plough



Picture 32 – Early school bell

2.5.4.2. Farm Equipment and Machinery

Disused pieces of farm machinery and equipment are located throughout the site, usually on observation plinths and accompanied by information plaques. These pieces of machinery are reflective of the historic agricultural use of the HAHS and have been retained as a historical display.



Picture 33 - Farm machinery



Picture 34 – Farm machinery

2.5.4.3. Moveable Memorabilia

In addition to 'fixed' memorabilia throughout the school, including plaques for people of the HAHS community and the various buildings on the site, the school currently contains a huge array of moveable memorabilia. The memorabilia are stored throughout the site in different buildings but mainly Clarke House, which itself presents generally as a museum, the original dormitory block which has a large store room, and the on-site archivist's offices. In addition, there are cabinets and display shelves located throughout the other buildings which contain specific displays regarding the history of the school. These memorabilia include:

- Pieces of furniture throughout the school, particularly the furniture in principal spaces of Clarke House (writing desk, display cabinets, sideboard, tables and bureaus), and the large bookshelf and display cabinet in the library.
- Old photographs of the HAHS site, alumni and the general community throughout the site in various buildings.
- Past plaques, awards, shields, trophies and ribbons from events at HAHS throughout its history, donated to the school by ex-students and ex-teachers, and kept in storage or displayed throughout the site.
- Student graffiti on old school furniture retained and displayed.
- Old school signs and foundation stones.
- School honour rolls and plaques.
- Artwork and sculpture throughout the school either created from within the school or donated.



Picture 35 – Furniture, photographs and paintings in Clarke House



Picture 36 – Furniture, photographs and paintings in Clarke House



Picture 37 – Old awards and trophies donated back to the school



Picture 38 – Old school graffiti



Picture 39 - Shed full of stored memorabilia



Picture 40 - Stored original school sign



Picture 41 - Large cupboard stored



Picture 42 – School honour roll plaques



Picture 43 – Tom Bass 1968 sculpture in library, donated



Picture 44 – Display cabinet in science block



Picture 45 – Former Glenfield railway station sign donated to the school and displayed in garden



Picture 46 - Display cabinet in administration / reception

2.6. LOT 5 DESCRIPTION

2.6.1. General Description

Lot 5 is an irregular shaped lot wedged between the main HAHS site to the east, and Campbelltown Road to the west. The land parcel is generally cleared with no improvements located on it. A portion of the overhead electricity wire easements crosses Lot 7's northern tip. The site is generally used for grazing purposes and the land appears to contain some degree of fill from previous uses. Lot 7 is owned by the Department of Education and Training along with Lots 1 through 4.

Figure 17 – Aerial diagram showing Lot 5



Source: Nearmap 2017



Picture 47 - View of Lot 5



Picture 48 - View of Lot 5





Picture 49 - View of Lot 5

Picture 50 - View of Lot 5



Picture 51 - View of Lot 5



Picture 52 - View of Lot 5

2.7. LOT 6 DESCRIPTION

2.7.1. General Description

Lot 6 is the northern-most land parcel within the Study Area that is owned by the Office of Strategic Lands. Lot 6 comprises an irregular shaped site, formed as a result of the South West Rail Link corridor construction to the immediate south.

The land contains a high escarpment at its western edge, with the land descending steeply towards the east to a large expanse of low-lying land. The eastern portion of Lot 7 appears to have been substantially disturbed throughout the South West Rail Link construction process, with raised mounds of fill occupying this portion of the site. The site is currently vacant with minimal vegetation, and is not occupied or used.



Figure 18 – Aerial diagram showing Lot 6

Source: Six Maps 2017



Picture 53 – View of Lot 6, facing south-east from the northern boundary of the lot



Picture 54 – View of Lot 6, facing south-east from the northern boundary of the lot



Picture 55 – View of Lot 6, facing south (towards Macquarie Field House) from the northern boundary of the lot



Picture 56 – View of Lot 6, facing south-west from the northern boundary of the lot



Picture 57 - View of low-lying land on Lot 6



Picture 58 - View of low-lying land on Lot 6



Picture 59 - View of low-lying land on Lot 6



Picture 60 – View of Lot 6, facing west towards the escarpment from the low-lying land at the north-eastern portion of the lot

2.8. LOT 7 DESCRIPTION

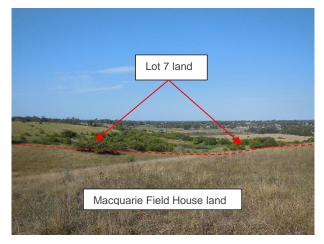
2.8.1. General Description

Lot 7 is the southern-most land parcel within the Study Area that is owned by the Office of Strategic Lands. Lot 7 comprises an irregular shaped site, formed as a result of the South West Rail Link corridor construction to the immediate north. The Macquarie Field House estate adjoins Lot 7 along its southern boundary.

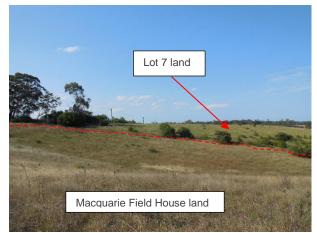
The land contains a high escarpment at its western edge, with the land descending steeply towards the east to a large expanse of low-lying land. The site is currently vacant with minimal vegetation, and is not occupied or used. A large dam is located at the southern portion.

Figure 19 – Aerial diagram showing Lot 7

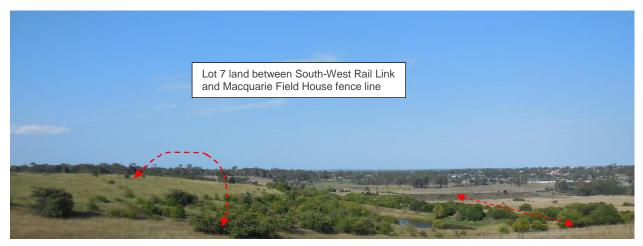
Source: Nearmap 2017



Picture 61 – View of Lot 7, from escarpment on adjoining Macquarie Field House land, facing northeast towards low-lying land of Lot 7 (boundary between Macquarie Field House and Lot 7 shown dotted)



Picture 62 – View of Lot 7 escarpment from adjoining Macquarie Field House land, facing northwest (boundary between Macquarie Field House and Lot 7 shown dotted)



Picture 63 - View of Lot 1, from the middle of all four quadrants facing south

3. THE CONCEPT PLAN PROPOSAL

Property NSW have commenced investigations into the proposed redevelopment of the Study Area. The large scale of the site, its generally undeveloped nature and its strategic south-western corridor location makes it an appropriate site for large scale urban release containing a range of proposed uses. Property NSW intend to integrate residential, commercial, retain and educational uses on the Study Area as part of its wider redevelopment.

Group GSA have been engaged by Property NSW to prepare a draft masterplan report, providing a draft subdivision concept and proposed uses. The draft report provided to Urbis is dated January 2017 and provides for the following uses across the site:

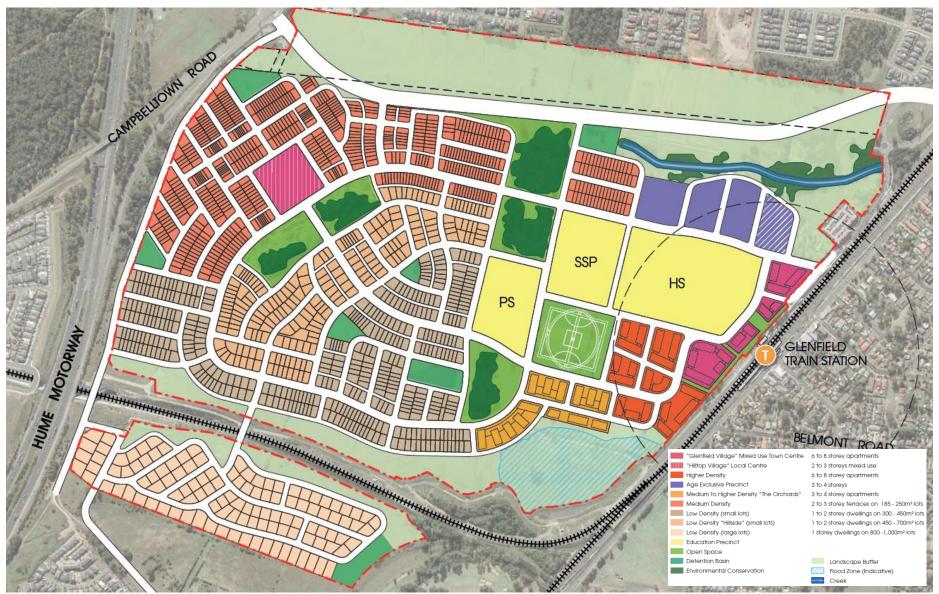
- A "Glenfield Village" Mixed Use Town Centre is proposed around the train station.
- An educational precinct is proposed adjacent to the "Glenfield Village" Mixed Use Town Centre", generally comprising a High School and School for Special Purposes (SSP) within the existing HAHS built area, and an adjoining Public School and playing field area south of the existing Memorial Forest on Roy Watts Road.
- Higher density residential (apartments) is proposed to be located within 400m of the train station, around the "Glenfield Village" Mixed Use Town Centre
- Transitional medium density apartments are proposed to be located between 400-800m of the Glenfield Train Station.
- A Seniors Living precinct of Independent Living Units and a Residential Aged Care Facility are proposed to be located within a 5-minute walk of the "Glenfield Village" Mixed Use Town Centre and Glenfield Train Station.
- A "Hilltop Village" is proposed to be on the existing former Glenfield Special School site, requiring the demolition of all existing improvements.
- Terraced and semi-detached housing are proposed to be located around the "Hilltop Village," on relatively gentle sloping land.
- Multi-dwelling housing is proposed on corner lots in the Medium Density zone. Each lot allows for 3 units.
- Detached houses on 300-450m² lots are proposed where topography is relatively gentle in the Low-Density areas.
- Larger lots (500m² +) for detached housing are provided on hillside areas to negotiate the steeper topography.
- Large lots (800-1,000m²) with single storey dwellings at the interface with the Macquarie Field House curtilage (Lot 7 – Office of Strategic Lands land).

The northern-most portion of the Study Area, currently vacant land underneath two large overhead electricity wire easements, is proposed to be retained as open space, incorporating playing fields and recreation pedestrian pathways.

Further open space will be retained by the retention of both the grove of shale plain woodland north of Roy Watts Road, and the 1950's Memorial Forest south of Roy Watts Road. Vegetation along the escarpment south of the existing former Glenfield Special School site is also to be retained. The existing watercourse along the northern portion of Lot 2 will be retained as open space, along with the low-lying flood-prone land at the eastern portion of Lot 6.

The following diagrams show the proposed redevelopment concept.

Figure 20 – Draft Land Use Plan prepared by Group GSA, dated January 2017



The proposal discussed above has been developed following the site's identification within the NSW Government's Draft Glenfield to Macarthur Urban Renewal Corridor Strategy.

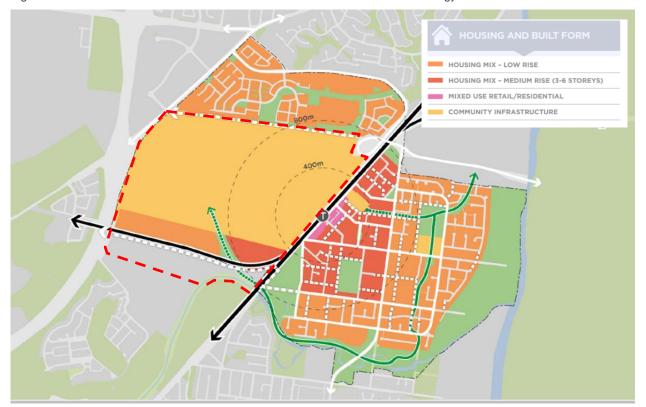


Figure 21 – Extract of Draft Glenfield to Macarthur Urban Renewal Corridor Strategy Plan

Source: NSW Government

The above Draft Glenfield to Macarthur Urban Renewal Corridor Strategy differs from the proposal described herein, which includes land to the south of the South West Rail Link, and provides for a more intensive residential use.

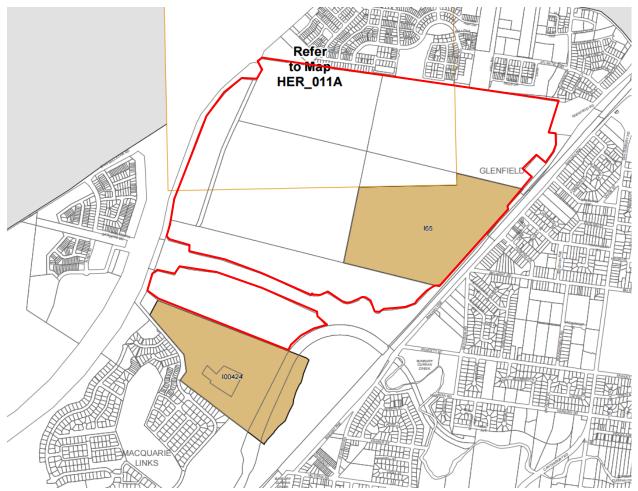
4. LEGISLATIVE CONTEXT

4.1. BUILT HERITAGE AND HISTORICAL ARCHAEOLOGY

4.1.1. Heritage Listings

Lot 4 within the Study Area is identified as a locally listed heritage item, being Item 65 under the Campbelltown Local Environmental Plan (LEP) 2015 "*Hurlstone Agricultural High School—original school building*". There is no existing heritage inventory sheet summarising the Item's heritage values.

Figure 22 – Extract of Heritage Map



Source: Campbelltown Local Environmental Plan 2015, Heritage Map, HER_011 & HER_011A

We are aware of previous studies which have been undertaken on the subject site, which have identified the former Glenfield Special School portion of the Study Area to have heritage significance at a state level.¹ Notwithstanding these previous studies, the former Glenfield Special School portion of the Study Area, namely Lot 3, has not been listed on any heritage register.

The Study Area also adjoins a NSW State Heritage item, being Macquarie Fields House, a significant colonial rural property dating from 1838-40 "of state and national heritage significance as one of the finest examples of early Australian residential architecture and a landmark, carefully sited in an intact 19th Century rural cultural landscape"².

² Macquarie Fields House Heritage Inventory Sheet,

¹ Graham Brooks and Associates 2009, Heritage Assessment, Department of Education and Training Sites Roy Watts Road, Glenfield (Client: Campbelltown City Council), Graham Brooks & Associates Ply Ltd, Sydney.

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?id=5044970

4.1.2. Heritage Act 1977

The *NSW Heritage Act 1977* (the Heritage Act) provides protection to items of environmental heritage in NSW. This includes places, buildings, works, relics, moveable objects and precincts identified as significant based on historical, social, aesthetic, scientific, archaeological, architectural, cultural or natural values. State significant items are listed on the NSW State Heritage Register (SHR) and are given automatic protection under the Heritage Act against any activities that may damage an item or affect its heritage significance. Impacts to heritage items require Heritage Council approval.

As discussed above, the adjoining Macquarie Field House site is listed on the State Heritage Register as Item 00424.

Historical Archaeology

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

"any deposit, artefact, object or material evidence that: relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and is of State or local heritage significance."

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

"A person must not disturb or excavate any land knowingly or having reasonable cause to suspect that the disturbance or excavation will, or is likely to result in a relic being discovered, exposed, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit."

Permits to disturb or excavate 'relics' are issued by the NSW Heritage Council or a Delegate of the NSW Heritage Council under Section 140 (for relics not protected by an SHR listing) or Section 60 (for relics protected by an SHR listing) of the Heritage Act. Exceptions or exemptions to these permits may be applicable under certain conditions.

Section 139(1c) exception states that evidence relating to the history or nature of the site, such as its level of disturbance, indicates that the site has little likelihood of Relics or no archaeological research potential.

S.170 Registers

Section 170 of the Heritage Act requires government agencies to keep a Register of heritage items, which is called a Heritage and Conservation Register or more commonly, a s170 Register. A s170 Register is a record of the heritage assets owned or managed by a NSW government agency.

We have been verbally advised that the former Glenfield Special School / Glenfield Park School is not currently listed on the Department of Education's Section 170 Register.

4.1.3. Campbelltown Local Environmental Plan 2015

As discussed above, the Lot 4 portion of the Study Area is an item of local heritage under the Campbelltown LEP 2015.

Part 5.10 of the Campbelltown LEP 2015 contains heritage provisions for the protection and management of heritage items. These provisions outline when consent is required, the potential requirements associated with any works that may potentially impact heritage items or places, and the obligations of the consent authority. Some provisions for heritage items under Part 5.10 of the Campbelltown LEP 2015 are set out below, however reference should be made to the current instrument before/when undertaking works.

(2) Requirement for consent

Development consent is required for any of the following:

(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):

- (i) a heritage item, an Aboriginal object,
- (iii) a building, work, relic or tree within a heritage conservation area,

(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,

(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,

- (d) disturbing or excavating an Aboriginal place of heritage significance,
- (e) erecting a building on land:
 - (i) on which a heritage item is located or that is within a heritage conservation area, or
 - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,
- (f) subdividing land:
 - (i) on which a heritage item is located or that is within a heritage conservation area, or
 - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

In the event that any of the above are proposed, Council will not grant consent unless it has taken into consideration the extent to which the carrying out of the proposed development would affect the heritage significance of the item, of any heritage item group of which the item is part, of any heritage items in the vicinity and any stylistic or horticultural features of its setting. A Heritage Impact Statement may be required by Council in order to inform their assessment of the proposal in accordance with provisions (5) and (6) of 5.10 set out below:

(5) Heritage assessment

The consent authority may, before granting consent to any development:

- (a) on land on which a heritage item is located, or
- (b) on land that is within a heritage conservation area, or
- (c) on land that is within the vicinity of land referred to in paragraph (a) or (b),

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.

4.2. ABORIGINAL CULTURAL HERITAGE/ARCHAEOLOGY

4.2.1. The National Parks and Wildlife Act 1974 (NSW)

The *National Parks and Wildlife Act 1974* (NSW) (the 'NPW Act') is the primary piece of legislation for the protection of Aboriginal cultural heritage in New South Wales. The Office of Environment and Heritage (OEH) administer the NPW Act. The NPW Act provides statutory protection for Aboriginal objects by making it illegal to harm Aboriginal objects and Aboriginal places, and by providing two tiers of offence against which individuals or corporations who harm Aboriginal objects or Aboriginal places can be prosecuted. The NPW Act defines Aboriginal objects and Aboriginal places:

Aboriginal object means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

Aboriginal place means any place declared to be an Aboriginal place under section 84. The highest tier offences are reserved for knowledgeable harm of Aboriginal objects or knowledgeable desecration of Aboriginal places. Second tier offences are strict liability offences—that is, offences regardless of whether or not the offender knows they are harming an Aboriginal object or desecrating an Aboriginal place—against which defences may be established under the National Parks and Wildlife Regulation 2009 (NSW) (the 'NPW Regulation').

Section 87 of the NPW Act establishes defences against prosecution under s.86 (1), (2) or (4). The defences are as follows:

- An Aboriginal Heritage Impact Permit (AHIP) authorising the harm (s.87(1));
- Exercising due diligence to establish Aboriginal objects will not be harmed (s.87(2)).

This assessment generally follows the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (NSW Department of Environment, Climate Change and Water 2010) (the 'Due Diligence Code') and aims to establish whether Aboriginal objects would be harmed by the proposed works in accordance with S.87(2) of the NPW Regulation.

It is noted that two registered sites are located within the Study Area, and one registered site is located in the immediate proximity of the Study Area. The nature and status of these sites is discussed further at Section 7.4, below.

4.2.2. The National Parks and Wildlife Regulation 2009 (NSW)

The NPW Regulation 2009 (cl.80A) assigns the Due Diligence Code as one of the codes of practice that can be complied with pursuant to s.87 of the NPW Act.

Disturbed land is defined by cl.80B (4) as "disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable". Examples given in the notes to cl.80B (4) include "construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure)".

4.2.3. The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales 2010

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales 2010 (the Code) describes the process that must be followed and the actions that must be taken by a proponent, and the site conditions that must be satisfied, to show due diligence in the consideration of potential harm to Aboriginal objects.

The Due Diligence Code sets out a basic framework with the following steps followed in order to make an assessment of whether or not proposed activities may impact Aboriginal objects:

- Step 1. Will the activity disturb the ground surface?
- Step 2a. Search the AHIMS database and use any other sources of information of which you are already aware

- Step 2b. Activities in areas where landscape features indicate the presence of Aboriginal objects
- Step 3. Can the harm or the activity be avoided?
- Step 4. Desktop assessment and visual inspection
- Step 5. Further investigations and impact assessment

The process set out in the Code involves consideration of harm to Aboriginal objects at increasing levels of detail, with additional information incorporated at each step and used to support the decisions being made. If the proposed activities are not "low impact activities" (a defence for which is provided under the Regulation) the considerations result in a determination of whether or not;

- further approval (an AHIP) under the NPW Act is required; or
- Due Diligence obligations for the protection of Aboriginal objects are discharged by the process under the Code.

Aboriginal consultation is not required for an investigation under the due diligence code.³ However, if the due diligence investigation shows that the activities proposed for the area are likely to harm objects or likely objects within the landscape, then an Aboriginal Heritage Impact Permit will be required with full consultation.

A record of the due diligence procedure followed must be kept to ensure it can be used as a defence from prosecution.⁴

Following a due diligence assessment (where an AHIP application was not required), an activity must proceed with caution. If any Aboriginal objects are identified during the activity, then works should cease in that area and OEH notified.⁵ The due diligence defence does not authorise continuing harm.

4.2.4. Aboriginal Community Consultation

Aboriginal community consultation is not a formal requirement of the due diligence process, and is generally triggered when it is known or likely for harm or impact to occur to registered Aboriginal archaeological sites (and as part of the AHIP process).⁶ For the purposes of this Analysis and Assessment, the proponent is therefore not obliged to undertake Aboriginal community consultation as part of this assessment.

Based on the findings of this assessment, the commencement of full consultation with the relevant Aboriginal stakeholders has been recommended at Section 14 of this report. Full consultation should be undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH 2010).

³ DECCW 2010:3

⁴ DECCW 2010:15

⁵ DECCW 2010:13

⁶ DECCW 2010:3

5. HISTORICAL CONTEXT

5.1. HISTORICAL DEVELOPMENT OF THE STUDY AREA

The following historical context has been drawn from the Heritage Assessment undertaken by Graham Brooks and Associates in 2009 on behalf of Campbelltown City Council, and amended and expanded on where necessary.

5.1.1. Early Site Development

The Study Area was originally part of two separate estates, that belonged to Charles Throsby granted 1 January 1810 (950 acres), and a crown grant of 2,020 acres made to James Meehan on 8 October 1816.

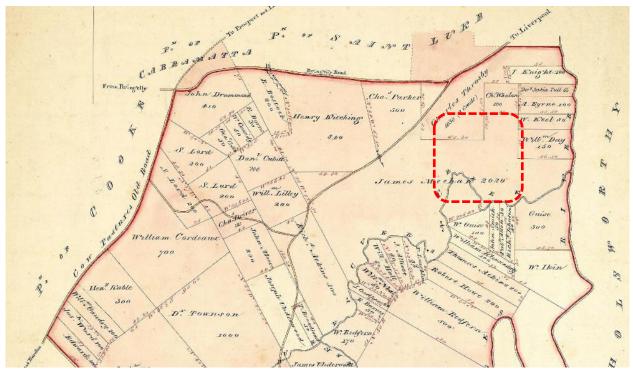


Figure 23 – Extract of undated Parish of Minto Plan showing original land grants

Source: Land and Property Information, Historical Land Records Viewer

Charles Throsby (1777-1828), surgeon and explorer, was born in Glenfield, England and joined the Royal Navy as a surgeon in 1797, arriving in the New South Wales Colony on the Coromandel in 1802. He served in various districts as medical officer and magistrate, and in 1805 was for a time in charge of the settlement of Newcastle. In 1808 Lieutenant-Governor Joseph Foveaux had granted Throsby 500 acres (202 ha) at Cabramatta for his services at Newcastle and in 1809 Paterson made him grants of 500 (202 ha) and 100 acres (40 ha) at Minto. These he had to surrender in 1810, but Governor Lachlan Macquarie granted him 1,500 acres (607 ha) in their place, and confirmed the cattle exchange. He built Glenfield Farm, named after his birthplace, at Upper Minto and for the next few years concentrated on pastoral activities.⁷

Throsby was one of the first settlers in the Illawarra district, and in March and April 1818 he accompanied Surveyor-General James Meehan on a journey from the Cowpastures through Moss Vale to Bundanoon Creek and south-east to Jervis Bay; after the party divided Throsby reached the Shoalhaven River and Jervis Bay.

In April 1819, he made a tour from the Cowpastures to Bathurst, opening up fertile country which Macquarie felt would meet the increase of settlers for many years; for this he granted Throsby 1,000 acres (405 ha). In 1825, Throsby was appointed to the Legislative Council. However, he was plagued by

⁷ Australian Dictionary of Biography. Vol.2, Melbourne University Press, 1967, p.530-53

financial troubles brought on by a £5000 surety he had undertaken. After ten years' litigation, drought and the falling prices for wool and prematurely aged by ill health, he committed suicide on 2 April 1828, aged 51, with his property inherited by his nephew, Charles Throsby junior.

James Meehan (1774-1826) was a former convict who had arrived in the New South Wales colony in 1800 and worked – both as convict and subsequent emancipist from 1806 - with the Acting Surveyor General, Charles Grimes. Involved in much of the field survey work done in the colony, Meehan was able to assess and identify potential land parcels and acquire land with good quality soil, and was appointed Acting Surveyor of Lands in 1808. After John Oxley assumed the office of Surveyor-General in 1812, Macquarie appointed Meehan Deputy-Surveyor of Lands, and in 1814 he became Collector of Quitrents and Superintendent of Roads, Bridges and Streets as well.8

His residence 'Meehan's Castle (c.1811), based at Macquarie Fields, was visited by outgoing Governor Lachlan Macquarie and Governor-elect Sir Thomas Brisbane as it was one of the few substantially sized dwellings in the area.⁹ The house was constructed on the ridge line overlooking Bunbury Curran Creek, and following his resignation in 1821, 700 acres of land was cleared at Macquarie Fields for the production of wealth, barley, maize, potatoes, peas and beans, together with the establishment of an orchard.¹⁰

He retired to Macquarie Fields where he died on 21 April 1826. At the time of his death, the estate boasted 550 head of cattle, 1,884 sheep, 16 horses and 90 pigs.¹¹ His son, Thomas, inherited the estate, but the property was managed by trustees and by the time Thomas turned twenty-one, the estate formerly valued at £15,000 was in debt and he was obliged to sell by 1831.

The purchaser was businessman Samuel Terry, known as "The Botany Bay Rothschild."¹² Meehan had mortgaged his land parcel to Terry on 10th June 1823,¹³ with Terry eventually acquiring ownership of Meehan's land on 25th January 1831 for the cost of £5,000. This was earmarked as the inheritance of Samuel and Rosetta Terry's daughter Martha Foxlowe. born in 1811. Martha married John Hosking Jnr. of the merchant company Hughes and Hosking, in 1829. By 1842, Hosking had risen to become the first elected Mayor of Sydney.¹⁴

With the onset of economic depression in the 1840s, the firm Hughes and Hosking collapsed, but Samuel Terry had ensured that his daughter's inheritance was retained. The other properties, estate and livestock of John Hosking were offered for sale at the end of 1843, while the Macquarie Fields Estate was administered for Martha by trustees following Terry's death in 1838.15

Macquarie Field House was constructed in ca.1841-43, as a visible sign that the estate had escaped the downfall of Hughes and Hosking. The house was erected on the ridgeline itself, north-west of the earlier c.1811 'Meehan's Castle, and comprised a single-storied Regency style sandstone mansion' with a wide stone-flagged verandah.

After Martha Hosking's death in 1875, the Macquarie Field estate was administered by the executors of her will, Richard Rouse Terry and George Rattray. In their hands, the estate began to be subdivided.¹⁶ On 24th August 1877 Rattray and Terry, conveyed a large portion to Nyngan grazier James Ashcroft,¹⁷ comprising 1,800 acres on the 'north side of Bunbury Creek and known as Macquarie Fields'.¹⁸ This included Macquarie Fields House as well as the 1,600 acres of the western part of the estate. James and Amelia Ashcroft lived on the property until their deaths¹⁹ in 1893 and 1902 respectively: the Lands Title

⁸ Australian Dictionary of Biography. Vol.2, p.219-220

⁹ R. Roxburgh, Early Colonial Houses in New South Wales. Lansdowne Press. Sydney.

^{1980,} p.154

¹⁰ L. Voss. 'James Meehan,' in Grist Mills: The Journal of the Campbelltown and Airds District Historical Society, Vol.5, No.4, p.57.

 ¹¹ G. Dow, Samuel Terry: The Botany Bay Rothschild, Sydney University Press, 1974, p.129.
 ¹² Australian Dictionary of Biography, Vol.2. p.508-509

¹³ Primary Application No.1 5732, Lands Title Office of NSW.

¹⁴ Australian Dictionary of Biography, Vol .1 pp.554-555

¹⁵ No.18382122.1838, NSW Registry of Births Deaths and Marriages.

¹⁶ Godden Mackay Logan, Macquarie Links Estate Archaeological Assessment. August 2000, p.10

¹⁷ V.132. Bk.172. LTO

¹⁸ V.172 Bk.230, LTO

¹⁹ Godden Mackay Logan. Archaeological Assessment, p.1 0.

Office acknowledged in 1902 that Amelia's nephew Thaddeus Bourke Rea held a claim to 1,700 acres of the Macquarie Fields estate.20

Rea died two years after his aunt, with his will administered by Henry Herrick, allowing the sale of this property.²¹ Rea's executors sold 1,660 acres of the estate to the Ross Brothers (Alexander, John, James, William and Robert), listed as Germanton (Campbelltown) graziers.²² The brothers were the sons of Scottish immigrants who had initially farmed properties in South Australia and then Albury. The Macquarie Fields Estate was added to their already extensive landholdings, with Alexander Ross using it as a Sydney base during his term in the Legislative Council from 1900.²³

The Primary Application for the property notes the value of the estate in 1908 as 16,560 pounds.²⁴ Alexander Ross died in 1914, with the property then transferred from the surviving brothers to Robert Ross.25

Thereafter, the northern half of the Macquarie Field Estate, the Study Area, was sold to the Crown in stages, represented by the Minister for Education, for instruction purposes, being a veterinary research station, agricultural school, and school for special needs children. The southern half, including Macquarie Field House, was sold to Sydney solicitor Joseph Cuthbert Kershaw, of Kershaw Matthew Glasgow and Lane.²⁶ That property was run as a dairy farm by his brother Frank, until 1936, when Joseph died. Kershaw's trustees then sold the house to the Department of Agriculture to extend their research station.27

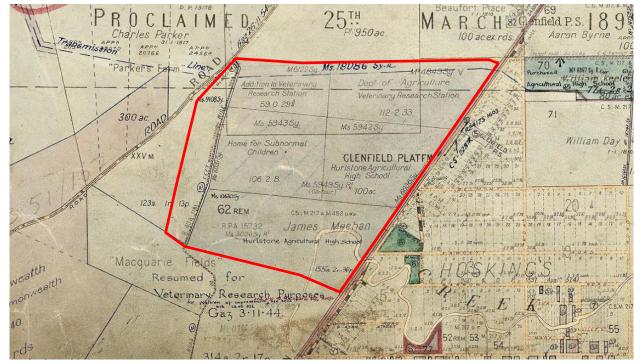


Figure 24 - Extract of 1930 Parish of Minto Plan

Source: Land and Property Information, Historical Land Records Viewer

60 HISTORICAL CONTEXT

²⁰ Bk.720, No.859. LTO

²¹ Bk.863 No.428. LTO ²² V.2051 F.230, LTO

²³ Godden Mackay Logan, Archaeological Assessment, p.10

²⁴ PA1573

²⁵ A96690, LTO

²⁶ Godden Mackay Logan, Archaeological Assessment, p.10

²⁷ C. Liston, Campbel//ow11: tile Bice11te1111ial History, Allen & Unwin. Sydney, 1988, p. 172

5.1.2. Glenfield Experimental Farm

On 11th July 1917, Robert Ross sold part of the northern section of the estate to 'His Majesty King George V';²⁸ the north-west remainder of the Macquarie Fields Estate was later conveyed to Campbelltown Mayor Frederick Moore²⁹ in April 1920.³⁰ This parcel (Lot 2 of the Study Area) acquired for the Veterinary Research Station comprised 112 acres, 2 roods and 33 perches (approximately 45.33 acres), selling at 100 pounds per acre.³¹

Plans for the first purpose-built "Government Veterinary Station, Glenfield" were prepared in the Government Architects Branch of the Department of Public Works between 1919 and 1921. Funding was supplemented by substantial donations from the McGarvie Smith Institute, a non-government foundation established to monitor production of an anthrax vaccine (and the profits derived from it) discovered by John McGarvie Smith.³²

Construction of this first New South Wales facility commenced in the early 1920s, on 45 hectares (approximately 18 acres) of semi-cleared land. The Research Station, costing £16,800 for both land purchase and building construction,³³ was opened in November 1923. The initial building phase included a laboratory, farm buildings, residences for staff, fencing and the construction of a railway crossing.³⁴ One wing of the new Glenfield Station was named in honour of John Gunn, McGarvie Smith's partner.³⁵ At the opening of Glenfield Experiment Farm, in November 1923, its Veterinary Pathologist, former University of Melbourne lecturer Dr Herbert R Seddon, stated that the research facility would initially focus on concerns of direct economic importance. In June 1924, the Farm's name was changed to Glenfield Veterinary Research Station and Dr Seddon's title was changed to Director.³⁶

The station consisted of the cottage type laboratory building, the Director's residence, the foreman's cottage and various shed type animals building and yards located on either side of the main access road. The only building remaining from this initial construction phase is the Director's residence.

²⁸ V.2785 F.216, LTO

²⁹ Moore was also President of the Campbelltown Show. J. Leary. And /he Show Goes On: tile 100-year history of Campbelltown S/1ow 1898-1998. Campbelltown City Show Society, 1988, p.28

³⁰ V.3054 F.128, LTO

³¹ Pollock, Daygos. Bedbugs and Slabs, p.12

³² J. Todd, Colonial Technology: Science and Ille Transfer of Innovation Io Australia, Cambridge

University Press, p.105

³³ Fiftieth Anniversary of the Veterinary Research Station, Glenfield, p.1

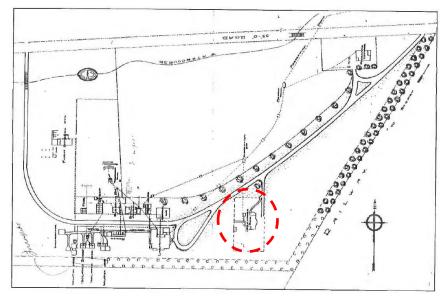
³⁴ P.J. Mylrea and D.W. Dredge, Glenfield Veterinary Research Station: tile physical structure

^{1916-1990,} Campbelltown and Airds Historical Society Inc, 2002

³⁵ Todd, Colonial Technology. p.10

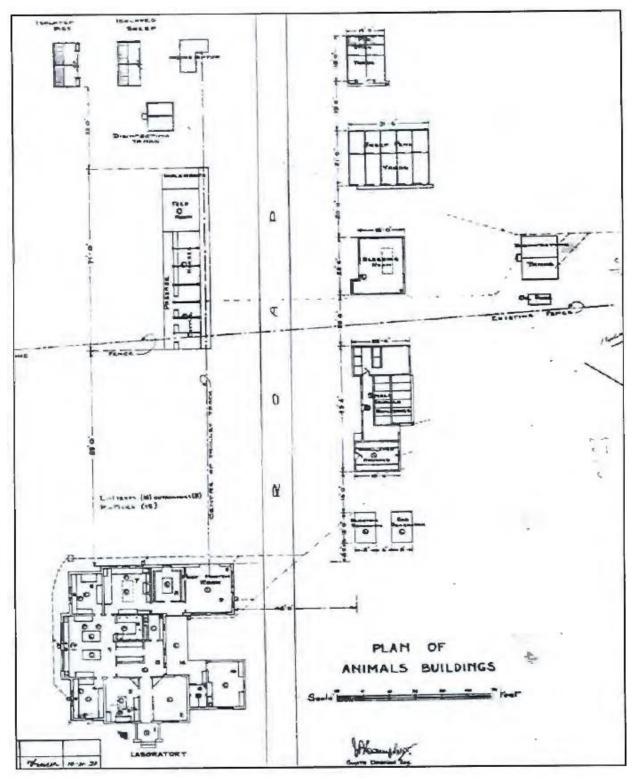
³⁶ John R Seddon, Remembering Herbert Robert Seddon D V Sc Pioneer Veterinarian, Campbelltown and Airds Historical Society Inc. 2002

Figure 25 - Block plan of the Glenfield Veterinary Station, 1923 (Director's Residence outlined)



Source: Department of Commerce, Plans Room- MISC28/43

Figure 26 - Plan of animal buildings, Glenfield Vet Farm, 1921



Source: Department of Commerce, Plans Room - MISC28/1

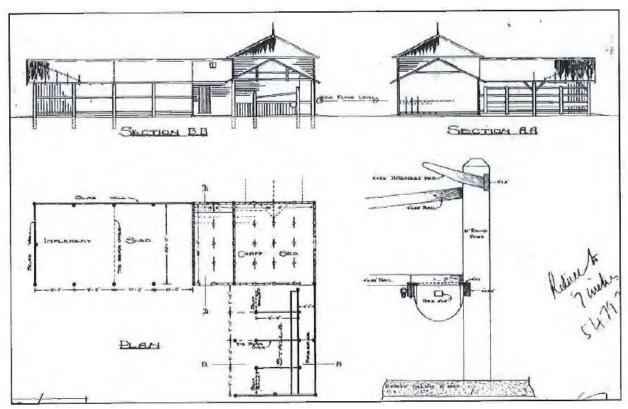
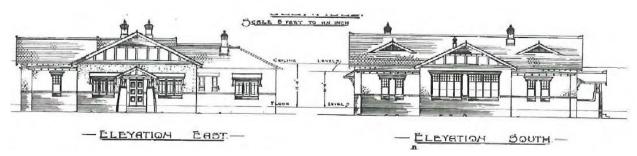


Figure 27 - Plan of shed and stables to be erected on the Government Veterinary Station, Glenfield, 1921

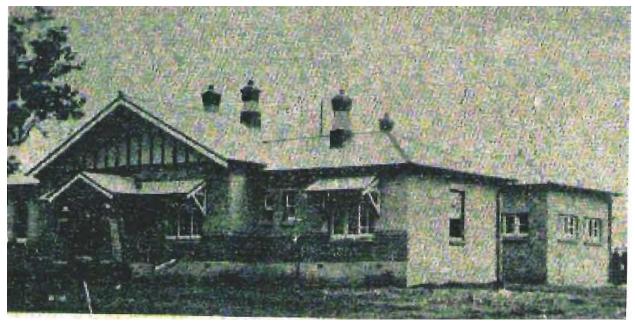
Source: Depar1ment of Commerce. Plans Room - MISC28/41

Figure 28 - East and south elevation of tile laboratory building, 1921



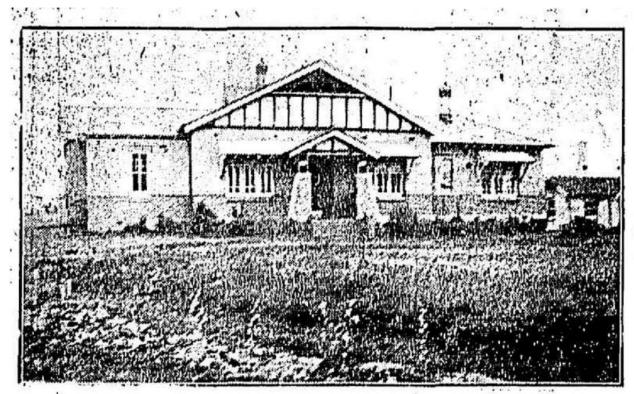
Source: Department of Commerce, Plans Room - MISC28/40

Figure 29 - Glenfield Veterinary Research Station Laboratory. photographed on its opening in 1923

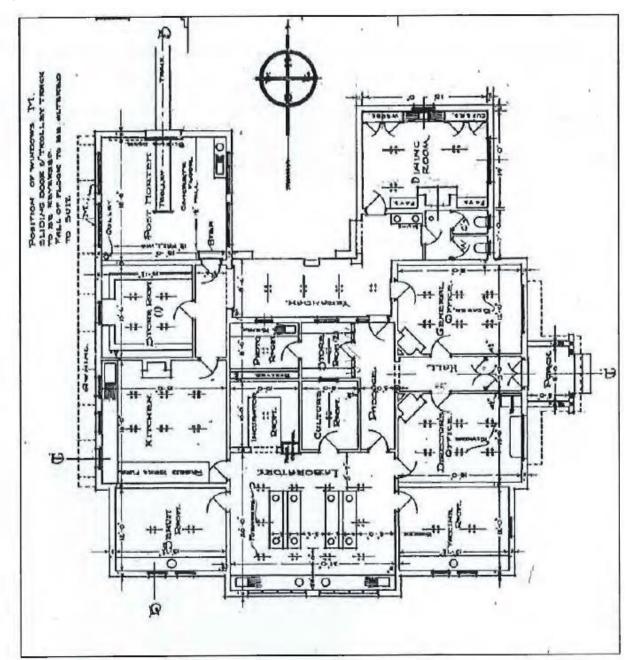


Source: Campbelltown and Airds Historical Society

Figure 30 - Glenfield Veterinary Research Station Laboratory, 1925



Source: 1925 'SCIENCE AND THE FARMER', The Farmer and Settler (Sydney, NSW: 1906 - 1955), 4 September, p. 9., viewed 02 Mar 2017, http://nla.gov.au/nla.news-article118026024





Source: Department of Commerce, Plans Room - MISC28/40

5.1.2.1. The Work of the Glenfield Research Station

Due to its close proximity to the Glenfield Railway Station, specimens from all over New South Wales were able to be delivered to Glenfield via the railway network. Four hundred and forty-nine specimens were tested during its first year of operation. Early research work at Glenfield included³⁷;

- breeding of the chalcid wasp (*nasonia brevicornis*) for distribution throughout Australia, to combat blowflies;
- investigation of plants poisonous to livestock diagnosis of pullorum disease (1924);
- myxoma virus for the control of rabbits (laboratory testing from 1926 and production and supply to New South Wales graziers in the 1950s);
- introduction of the use of carbon tetrachloride in parafin oil for liver fluke control (1927);
- recognition of infectious laryngotracheilis in fowls (1935);
- bovine brucellosis; and,
- pig paralysis (in conjunction with the CSIRO, formed in 1927).

From 1945 - 1952 the Station provided a service for the artificial insemination of cattle for the local area. In the 1940s vaccines were developed for the control of spirochaetrosis in fowls and contagious ecthyma in sheep.

5.1.2.2. Expansion of the Department of Agriculture Facilities 1924-1945

The 1924 renaming of the Farm to the Glenfield Veterinary Research Station coincided with the expansion of the site. Purchase of the parcel of land adjoining its western boundary, comprising a further 59 acres 29 ³/₄ perches (approximately 23.9 hectares), was made in late 1924³⁸.

Additional facilities were constructed in 1929 (laboratory, library and museum) and 1930 (laboratories adjoining to the west of the main building and since demolished).³⁹ The formal opening of the three new laboratories in June 1931 announced the naming of the new work as the McGarvie Smith Wing.⁴⁰

These two parcels of land were eventually eroded by infrastructure development; the Research Station having a small section resumed by the Electricity Commission of NSW in 1963 for a transmission line. Similarly, the western parcel was partially resumed by the Electricity Commission for the transmission line, and subsequently in December 1975 by the Department of Main Roads. Further encroachment was made by the State Rail Authority for railway purposes in July 1990.

In 1945 the Glenfield Veterinary Research Station acquired two additional land parcels in the vicinity. This land was south and contained the remaining Macquarie Field House estate, which belonged to Dr. Percy Leslie Hipsley (and Joseph Kershaw until his death in 1935) until 1944-1945, when it was resumed by the Minister for Public Works.⁴¹

A section of one of these parcels (Lot 1 of DP217 484) was leased to Lisette Catherine Jamieson, together with right of way, from 7th June 1963, to expire 31st May 2012. For the land parcel immediately south of the agricultural school and the land parcel on which Macquarie Field House is sited, a subsequent resumption notice, issued by the Commissioner for Railways, gave notification of intended works to the site, to facilitate access easement' for railway purposes' in April 1968. Further resumption notices were issued by the Commissioner for Main Roads in 1975 and the Minister for Public Works in June 1981, with Jamieson's right of way cancelled as a consequence.

On the western side of Quarter Sessions Road, the Veterinary Station acquired the second parcel of Dr Hipsley's land.⁴² Hipsley, together with Kershaw, had purchased it from former town Mayor Frederick Moore in 1927; he in turn bought the parcel from Robert Ross. This was part of a larger parcel of 908 acres 2 roods 20 perches (approximately 368 hectares), which was effectively all of the former Macquarie

³⁸ V.3670, F.73, LTO

³⁷ Fiftieth Anniversary of the Veterinary Research Station, Glenfield, 1923-1973

³⁹ P.J. Mylrea and D.W. Dredge, Glenfield Veterinary Research Station: The physical structure 1916-1990

⁴⁰ Canberra Times, 18 June 1931, p.2.

⁴¹ V.4876, F.227 and V.5436. F.117, LTO

⁴² V.5436, F.117, LTO

Fields estate lying west of Quarter Sessions Road and east of Campbelltown Road;⁴³ the land acquired for the Research Station formed 126 acres 3 roods and 18 3/4 perches (approximately 51 hectares) of this larger estate.

Site acquisition occurred progressively, with the Commonwealth of Australia notifying intention under Section 57 of the Lands Acquisition Act, registered 29th May 1942. A new certificate of title was issued confirming Hipsley's ownership of the remainder, but a formal notice of resumption was issued under Section 141 of the Public Works Act 1912, under the authority of the Minister for Public Works on 17th January 1945. Of this resumed property, the Commissioner for Railways laid claim to a portion in April 1968, followed by the Commissioner for Main Roads in December 1975 and its subsequent proclamation as a motorway on 14th October 1977.

5.1.2.3. Major Building Programs at Glenfield Research Station

To facilitate the development of animal nutrition as a specialist discipline, a two storey Nutrition wing was constructed in 1948, incorporating the 1929 library and museum. The animal nutrition laboratory, which had cost £40,000 to build and equip, was officially opened by the Minister for Agriculture, Mr E.H. Graham, on 1st June 1950. This new facility was to be managed by G. L. McClymont.⁴⁴

New laboratories, conference and staff facilities and an Administration Building were added to the site in 1968-9. The following facilities were established on the site during the 1970s:

- Drought research unit 1971
- Agricultural engineering centre 1971
- Noxious and feral animal research unit 1972

By 1973 the Glenfield Veterinary Research Station had a staff of 114, including 22 veterinarians, in specialities of bacteriology, biochemistry, toxicology, parasitology, pathology, poultry pathology, serology and virology.⁴⁵

5.1.2.4. Significant People Associated with the Station

Two people of significance to the local area, associated with the Veterinary Research Station, are Herbert Robert (Bert) Seddon and Roy Watts.

HR Seddon (1887-1964)46

Seddon was born and raised in New Zealand. He joined the New Zealand Public Service as a cadet in the Department of Agriculture in 1904. He moved to Melbourne in 1909 to take up a position as Chief Laboratory Assistant at the Veterinary Research Institute of the Melbourne University. He was admitted to study at the university and graduated in 1913. After this he was registered as a Veterinary Surgeon in Victoria.

He began his war effort with the training of veterinary officers to serve the mounted units of the Australian Imperial Force (AIF). In 1918 he applied to join the Australian Army Veterinary Corps and served as a captain until the end of the war.

He returned to Melbourne where he took up the position of Senior Lecturer in Pathology and Bacteriology. In 1921 he received the first doctorate in Veterinary Science awarded by Melbourne University.

Seddon took up the residential position as Veterinary Pathologist at Glenfield Experiment Farm in 1923, and was appointed Director when the facility was renamed the Glenfield Veterinary Research Station the following year. During his time at Glenfield he lectured in Veterinary Pathology at the University of Sydney and was Honorary Lecturer in Investigational Method from 1928-1936.

He was appointed as the first Dean of the School of Veterinary Science at the University of Queensland when it was established in 1936. During World War 2 Seddon was initially responsible for transferring food supplies to inland Australia. When this task was complete he moved to Melbourne to join the staff of the Rationing Commission.

⁴³ V.3054 F.128, LTO

⁴⁴ Sydney Morning Herald, 2 June 1950.

⁴⁵ Fiftieth Anniversary of the Veterinary Research Station, Glenfield, 1923-1973

⁴⁶ John R Seddon, Remembering Herbert Robert Seddon D V Sc Pioneer Veterinarian

In 1946 Seddon took up an appointment in the Commonwealth Department of Health Division of Veterinary Hygiene where he published a series of studies on animal diseases in Australia. After retiring to Ingleburn in 1952 Seddon established a private veterinary practice, in which he worked until his death. He also lectured at the University of Sydney from 1957 - 1961.

RM Watts47

Roy Merven Watts was bought up in Glenfield and attended Glenfield Public School, where his father was the Teacher in Charge, and Hurlstone Agricultural High School. He studied Veterinary Science at the University of Sydney before joining the NSW Department of Agriculture as a Veterinary Officer in 1937. He held several positions during his distinguished career with the Department, including:

- Director of the Glenfield Veterinary Research Station, (a position first held by his brother in law, H R Seddon);
- District Veterinary Officer for the County of Cumberland; and,
- Director-General of the NSW Department of Agriculture (1966-1980).

Roy Watts Road was named in his honour. He is further remembered with the annual award of the McGarvie Smith Roy Watts Memorial Scholarship, established in 2004, which funds two students for the new Veterinary Public Health Program at the University of Sydney.

5.1.2.5. The Establishment of Further Veterinary Research Stations

In 1965 the Department of Agricultural expanded its services with the establishment of the first District Veterinary Laboratory at Armidale, this was followed by one at Wollongbar in 1968 and Wagga Wagga in 1973.

5.1.2.6. Relocation to Menangle, 1989-90

Towards the end of the twentieth century the need for improved laboratory facilities and the increasing urbanisation of Glenfield prompted the NSW Department of Agriculture to relocate its Glenfield facility.⁴⁸ In 1989-90 it was transferred to the new \$35 million state-of-the-art Elizabeth Macarthur Agricultural Institute (EMAI) at Menangle and is now known as the NSW Department of Primary Industries' Centre for Animal and Plant Health, incorporating the Centre of Excellence for Animal and Plant Health, and the NSW Centre for Animal & Plant Biosecurity.⁴⁹

5.1.2.7. Re-use of the Glenfield Site

The Department of Agriculture land holding north of Roy Watts Road was taken over by the Department of Education and Training (DET) after the relocation of the Veterinary Research Station. The site plan below shows the buildings initially proposed for demolition because they were unsound or not suitable for re-use.⁵⁰ Those that were demolished are listed in the following table.

Building No.	Description / Use
А	Machinery shed
В	
B1	
С	Glass / mouse house
D	Animal / dog shelters
Н	Galvanised iron shed

⁴⁷ Glenfield Veterinary Research Station: the physical structure 1916-1990

⁴⁸ Glenfield Veterinary Research Station: the physical structure 1916-1990

⁴⁹ www.dpi.nsw.gov.au/research/centres

⁵⁰ Meeting minutes of 419/1989 'Hurlstone Agriculture High School Transfer of Farm to Veterinary Research Station', sourced from School files, NSW State Records

Building No.	Description / Use
1	Concrete block isolation building
J	Open shed
L	Poultry shed
Ν	Brick pig shed and yards
0 & 02	Brick / rendered isolation box buildings
Ρ	Painted galvanised iron shed
Q	Stock yard shelters
U	Galvanised iron poultry shed
V	Machine shed and galvanised iron garages
W	Hay shed and concrete silo
Z	Machinery shed
1	Sheep shed
13A	Electrical shed
13B	Bottle wash
13C	
15	Parasitology laboratory
22A, 22B	
23	Infection animal house
24	
25	Brick / rendered isolation box buildings
26	Old incinerator shed
27	Lubrication oil sheds
	Fibro Cottage
	Pottery shed
	Fibro toilets

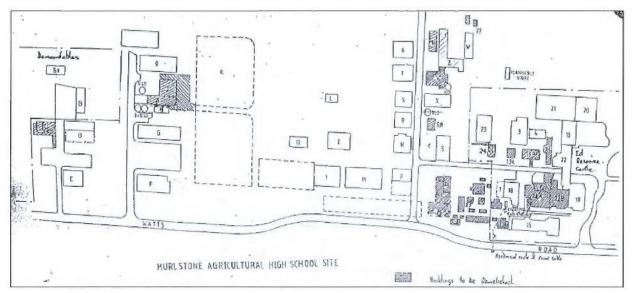


Figure 32 - 1989 site plan showing the proposed demolition of the Veterinary Research Station buildings

Source: School files, State Record NSW

The Department's Liverpool Regional Office now occupies the main buildings of the Research Station (The Nutrition Wing, the Serology-Virology-Conference Room Complex, the Administration Block and the Tuberculosis and Brucellosis buildings). The Glenfield Tutorial Centre, part of Campbell House School, is located within the former Director's cottage. These buildings are located north of Roy Watts Road, adjacent to the Railway. The remaining farm buildings of the Research Station and land north of Roy Watts Road are used by Hurlstone Agricultural High School.

5.1.3. Hurlstone Agricultural School

5.1.3.1. Establishment of Agricultural Schools in Australia

Hurlstone Agricultural High School was the first agricultural school established in New South Wales. Within New South Wales, agricultural studies were of low priority in the educational system given a practical education was readily available within the pastoral community.⁵¹ Although the Superintendent of Technical Education appointed in 1890, Frederick Bridges, endeavoured to encourage agricultural education with his publication of Elements of Australian Agriculture, few students were interested as agriculture was not a compulsory subject. As a result, in the early twentieth century the only agricultural education in New South Wales was provided through Hawkesbury Agricultural College, established in 1891 and under the control of the Department of Mines and Agriculture.⁵²

Within the broader Australian context, the first agricultural continuation school was established in Melbourne in 1905. Its purpose was to bridge the gap between elementary schools and the agricultural colleges.⁵³

State education in New South Wales was reviewed at the beginning of the twentieth century in response to criticism of the system. The Minister for Public Instruction, Labour and Industry, John Perry called a Royal Commission into Education in 1902. He appointed two Commissioners, (Sir) George Handley Knibbs and John William Turner to review and report on education overseas.⁵⁴ The Commissioners visited seventeen countries and published a three-volume report, Interim Report of the Commissioners on Certain Parts of Primary Education (Sydney, 1903), on their return.⁵⁵

The key public figure responsible for some of the most significant educational reforms in New South Wales education was Peter Board (1858-1945), who as a practicing teacher had experience in inner city working class schools, and with rural schools through his appointment as Inspector at Lismore in 1893. During this period, he witnessed the great drought, depression and strikes of the 1890s. Biographers Crane and Walker ascribed this as the factor that: "coloured his attitudes to such problems as free and compulsory education, vocational training, apprenticeship, evening education, reform of delinquents, universal secondary education and the provision of large numbers of scholarships and exhibitions to the University [of Sydney]. He made no secret of his faith in education as a social leveler, and in later years he often expressed the hope that social barriers would disappear."⁵⁶

From 1903 onwards Board's personal philosophy regarding education was influenced by diverse reformists and intellectual movements, from Pestalozzi, Froebel, Herbart, the neo-Herbartians and Francis Parker.⁵⁷ In this same year the report on Primary Education (Sydney, 1903), was prepared by Peter Board who had previously spent his long service leave reviewing overseas education. Board was appointed Under-Secretary of the Department of Public Instruction and Director of Education in 1905, a position he held until 1922.⁵⁸

He oversaw the reform of the State's education with John Turner, who was appointed as his Assistant Under-Secretary in 1905, and succeeded Sir George Knibbs as Superintendent of Technical Education in 1906.⁵⁹

In 1906 Board set out objectives for secondary education, which were subsequently further explored in his 1909 wide-ranging Report on Observations of American Educational Systems, which addressed rural schools, education for industrial purposes, secondary education, and the university as a public institution.⁶⁰ In his 1907 Report, Board proposed a new examination system which entailed an increase in the number of state high schools, a new direction in the curriculum, and the establishment of post-primary continuation schools of a vocational character for students not qualified to enter high schools.⁶¹

⁵¹ Barcan, Two Centuries of Education in Australia, p.162.

⁵² A. Crane and W. Walker, Peter Board: His Contribution to the Development of Education

in New South Wales, p.241

⁵³ Joe Costelloe, Rugged days, my friends, Hurls tone Agricultural High School, 1982

⁵⁴ Australian Dictionary of Biography entry for John Perry (1845-1922), accessed at www.adb.online.anu.edu.auladbonline on 8/112009

⁵⁵ Australian Dictionary of Biography entry for John William Turner (1849-1913), accessed at

www.adb.online.anu.edu.au/adbonline on 811/2009

 ⁵⁶ Crane and Walker. Peter Board, p. 7
 ⁵⁷ Crane and Walker, Peter Board, p.55

 ⁵⁸ Australian Dictionary of Biography, Vol. 7, Melbourne University Press, 1979, pp.327-330

⁵⁹ Australian Dictionary of Biography, vol. 1, Melbourne Oniversity (1833, 1913, pp ⁵⁹ Australian Dictionary of Biography entry for John William Turner (1849-1913)

⁶⁰ Australian Dictionary of Biography, Vol. 7, Melbourne University Press, '1979, pp.327-330

⁶¹ Barcan, Two Centuries of Education in Australia, p.186

This was to address the perceived need to keep apace of advances in the field of secondary education throughout the western world. In America and Great Britain there began a wave of scientific and industrial development which led to the natural resources of countries being exploited in new ways. With a rapid rise in urban populations testifying to the need for labour to operate factories, the labour required was no longer skilled; it had to be trained in new tools and techniques, and required mastery of new forms of knowledge. New types of schools arose to meet these demands, with the result that the problem of what relationship these new schools should have to the traditional academic secondary school soon arose.

Board's solution to this problem in the Australian context derived from the Scottish Education Department, which boasted a system of post-primary education catering for commercial, industrial, rural and home management fields. Each course was carried on in a separate school, even though there was a substantial core of curriculum material common to all.⁶² Board argued that post-primary schooling was to be pre-vocational in nature:

"During this period when secondary education, in some form, should be a boy's object, we have to remember that the main aim of that education should be the preparation of the boy for a career.... That most obvious obligation that rests upon every boy as he enters upon manhood, is that he should earn a living honestly, and the preparation for doing so becomes the most obvious object of his education in the few years preceding manhood... This particular aim should be the main directing spirit of his education."⁶³

His view concurred with Turner's impressions, gained from his own travels abroad. Turner's suggestion that a school for practical agriculture should be set up in New South Wales, modelled on one he had visited at Vilvorde, near Brussells, was modified and it was decided to establish a school that would provide both the ordinary education of boys beyond the primary standard, and a grounding in the elementary theory and practice of agriculture.

The first of these schools was Hurlstone, set up at the vacant Women's Teacher's' Training College at Ashfield.⁶⁴ In the same year another continuation school, specialising in sheep, wool and agriculture, opened in Goulburn Technical College.⁶⁵ These were followed by Yanco Agricultural High School, in the Riverina in 1922, the relocation and expansion of Hurlstone Agricultural High School at Glenfield in 1926, Farrer Memorial Agricultural High, 1939 and James Ruse in 1959.

5.1.3.2. Hurlstone Agricultural Continuation School

Peter Board's Report for 1905 paid special attention to the problem of agricultural education. Board was seen to have a curriculum that was "in harmony with local industry, and requested a school in which "manual training, physical science and the application of science to agriculture". This request was eventually met by the Hurlstone Agricultural Continuation School, which offered a two-year course and by arrangement with the Department of Agriculture, allowed students to enrol directly in second year at Hawkesbury Agricultural College.⁶⁶

The Hurlstone Agricultural Continuation School was established at Ashfield in 1907, on a site now occupied by Trinity Grammar School.

The school complex on the Ashfield site had been constructed as a private school by Maths Tutor John Kin loch. He originally named it Hurlstone after his mother Helen Hurlstone. Kinloch's school failed as a business venture and he later sold it to the government for £5,520. It was used as a residential women's Teaching College for almost twenty-five years before that facility was moved to the grounds of Sydney University. The Hurlstone Agricultural School was established in 1907 partly in response to Superintendent of Technical Education Turner's view that "there was a need for students practically and technically trained to fit them for a life on the land. Hurlstone College was designed specially to fulfil this ever-growing need of scientifically and technically trained agriculturalists in Australia."⁶⁷

At Ashfield, the agriculture school had twenty-six acres of land which was used for instruction in cropping, orcharding, market/flower gardening, dairying, poultry and beekeeping.

The school also taught farm carpentry and black smithing. It initially acted as a feeder school for the Hawkesbury Agricultural College which provided tertiary level education. The course at Hurlstone was

⁶² Crane and Walker, Peter Board. p.98

⁶³ P. Board, in The Australian Journal of Education, Vol. 5, No.2, August 1907, p.9

⁶⁴ Costelloe Rugged days, my friends

⁶⁵ A. Barcan, Two Centuries of Education in Australia, p.186

⁶⁶ Crane and Walker, Peter Board, p.242-243

⁶⁷ "Hurlstone Continuation School" adapted from a report by former Principal F. McMullen, in The Haivester, 1965.

two years, and graduating students were given one year's advance standing at Hawkesbury College. The first student to enrol at Hurlstone was Timothy McCarthy who later became Chief of the Entomology Branch of the NSW Department of Agriculture.

Education reforms saw Hurlstone renamed a high school in 1911, with the addition of an extra year of curriculum. This arose from Board's new 1911 high school syllabus, which made provision for an agricultural course to be given in country high schools. The course was practical in outlook, devoting a considerable proportion of weekly teaching to scientific studies and field work. This course was only applied at Hurlstone after it had been raised to the status of a high school.

By 1915 the Department realised the Ashfield site was too small to allow for development of the school. It had already had to restrict the number of boarding pupils to forty-one. In 1916 agricultural courses were offered at the high schools in Albury, Wagga Wagga, Orange, Casino and Yass.⁶⁸ These five schools failed completely at agricultural studies, and after a revision of the whole area of agricultural education, plans were made for the removal of Hurlstone High to a more remote area where large tracts of land were available, and made plans for the establishment of a new agricultural high school at Yanco.⁶⁹

5.1.3.3. Construction of Hurlstone Agricultural High School at Glenfield, 1926

Although the site at Glenfield had been identified for the future use of the Hurlstone Agricultural School as early as 1916, the land on which the School is now situated was transferred from Robert Ross to the Crown "for the purposes of the Public Instruction Act 1880" on 24th June 1924 and 10th July 1924.⁷⁰ The Certificate of Title for the school grounds was issued as in the ownership of the Minister for Education, and contained one parcel of 100 acres (approximately 40 hectares) abutting the railway line (the current Hurlstone Agricultural High School land), and a second parcel of 106 acres 2 roods and 8 perches to its immediate west, terminating at Quarter Sessions Road (the land for Glenfield Special School).

Hurlstone Agricultural High School was relocated to Glenfield in 1926 at a cost of nearly £40,000.⁷¹ The new site had been cleared and dormitories, classrooms and farm infrastructure were constructed.

On 31st March 1926, the new Hurlstone Agricultural High School was opened by the Minister for Education, Mr Mutch. The initial school buildings were constructed to address present day Roy Watts Road and were clustered around the main building which is now known as Clarke House. This building contained a dining hall, kitchen, hospital, maids' quarters and Principal's residence.

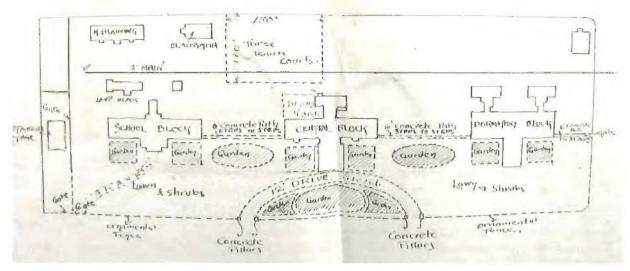


Figure 33 – 1920's sketch of the school site showing original building components and landscaping elements

Source: School files, State Record NSW

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⁶⁸ Crane and Walker, Peter Board, p.244.

⁶⁹ Crane and Walker, Peter Board, p.24 7.

⁷⁰ V.3623 F181 and F.113, LTO

⁷¹ C. Liston, Campbell/own: The Bicentennial History, p.1 88.

The Dormitory wing, west of the main wing, consisted of six 12-bed dormitories, three verandahs (used for sleeping-out), and two shower rooms at the rear. A gymnasium, and a sleeping area underneath that became known as the dungeon, were added to the eastern side of the building. A residence for unmarried live-in teachers was attached at the front (north) of this wing. The day school was located in a third wing, symmetrically located to the west of the main building. It had four classrooms, a science lab and a staff room.

The land south of the official school property was also used by the students, and they had free access to its creek and paddocks. However, this was not formally the property of the School - parcel (Lot 4 DP845870) of 372 acres 3 roods 29 ³/₄ perches (approximately 150 hectares) had been sold by Ross in January 1926 to Joseph Cuthbert Kershaw, solicitor and Percy Leslie Hipsley, medical practitioner.⁷² Part of this parcel was transferred to the Railway Commissioners of New South Wales in December 1930, while Kershaw and Hipsley retained the majority until Kershaw's death in 1935.⁷³

On 30th June 1937, Hipsley, as the surviving joint tenant, sold part of the remainder to the Crown "for the purposes of the Public Instruction Act 1880" comprising 155 acres 2 roods 36 perches,⁷⁴ (approximately 63 hectares) which became formally linked with the Veterinary Station. However, it continued to be used as a cooperative effort between the Research Station and the Agricultural School.

Hurlstone offered a full five-year agricultural course from 1929, resulting in a rapid increase in enrolments to 169 boarders and 46 day students by 1930, and a total enrolment of 407 by 1936. As early as 1930, the school considered itself:

something of a minor university. Students hail from all parts of the State; the boy from snug suburbia rubs shoulders with his bush bred cousin from the Never Never; some boys have their homes in other State, while several "gather-round" from such remote regions as Norfolk Island and Rabaul.⁷⁵



Figure 34 - Hurlstone Agricultural High School's main Administration Building, 1925

Source: Hurlstone Agricultural High School Archives

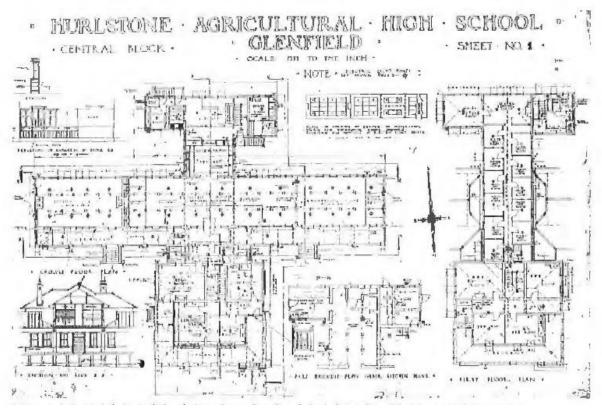
⁷² V3281 F1 70, LTO.

⁷³ Certificate no.4321/1935, NSW Registry or Births, Deaths and Marriages

⁷⁴ V4876 F219, LTO

⁷⁵ Tiie Harvester, 1930, p.11





Source: NSW Department of Commerce

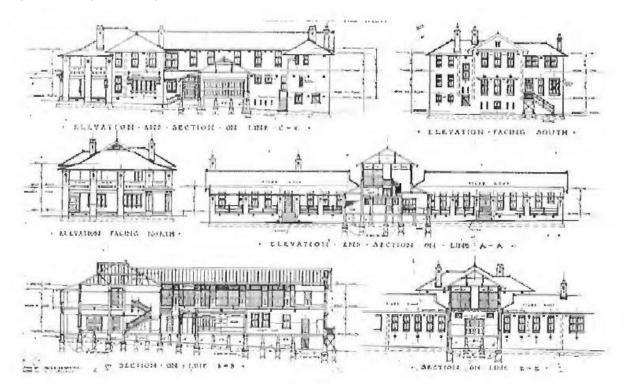


Figure 36 – Original drawings for the Administration Block, now known as Block E, Clarke House

Source: NSW Department of Commerce

Figure 37 - Hurlstone Agricultural High School's dormitory block, 1925



Source: Hurlstone Agricultural High School Archives



Figure 38 - Hurlstone Agricultural High School's dormitory block, 1925

Source: Hurlstone Agricultural High School Archives

Figure 39 - Hurlstone Agricultural High School photographed upon its opening 1926



Source: Hurlstone Agricultural High School Archives

SCENE AT THE OPENING CEREMONY.

Figure 40 - Hurlstone Agricultural High School photographed upon its opening 1926



of 2.4

F. Logar

Figure 41 - Hurlstone Agricultural High School's main Administration Building, 1927



Source: Hurlstone Agricultural High School Archives



Figure 42 - Hurlstone Agricultural High School's main Administration Building, 1927

Source: Hurlstone Agricultural High School Archives

Figure 43 - Hurlstone Agricultural High School's main Administration Building dining hall, 1927



Source: Hurlstone Agricultural High School Archives

5.1.3.4. Expansion and use of the School Site from 1931

The school began to expand in 1931, when eighty acres, outside the subject area and fronting the Georges River, was leased as a grazing area for the cattle, and in 1937 when 155 acres south of the school, originally owned by Dr Hipsley, was purchased. By 1937 the school property totalled 390 acres (approximately 158 hectares).

In conjunction with this expansion of official school grounds, the Hurlstone Agricultural High School also made use of land and resources of the Veterinary Research Station, together with long-term 'loan' of the undeveloped land adjoining to the west. This land, belonging to the Glenfield Special School, ranged in area from 30-50 acres depending on school requirements.

The Research Station worked closely with Hurlstone, with many students later employed there, cementing the ties between the neighbouring institutions. For a decade, this relationship was enhanced, with Percival Hindmarsh employed as Principal of Hurlstone (1938-1945) and his brother William (Bill) Hindmarsh serving as Director of the Glenfield Veterinary Research Station (1937-1947).

Around the immediate school building curtilage, sections were devoted to the more aesthetic production of plants, including zinnias, hippeastrums, and prize-winning delphiniums. Outlying pastures were typically used for grazing purposes, or for the production of fodder crops for the animals. The remaining paddocks were used to grow a variety of produce. The 1930 edition of the school publication *The Harvester* showed that the crop grown in each paddock was rotated, with some land rested and others prepared for seeding, so that a continuous process of nurturing, seeding, growing and resting of farmland was in place.

Farming activities conducted on site related principally to animal husbandry and crop cultivation. Produce was disposed of in one of three ways. The school's boarding hostel received a wide range of items from the orchards, vegetable gardens, pasturelands and the animal yards, including eggs and pork. Other produce was either sold and the proceeds ploughed back into the school (or stored in the school silos), or used for scientific experiments, breeding or instruction, including the private sale of animals to farmers in the district.

The School regularly borrowed bulls, rams and pigs from local farmers during the breeding season, and on occasions when their own animals were declared unfit for breeding purposes. Prize livestock was exhibited at the local Campbelltown Show. The livestock served to educate the students in animal husbandry, disease prevention, health and routine maintenance (such as sheep shearing, shoeing etc) and slaughtering practices. Other skills included backsmithing, carpentry and beekeeping, with a small apiary initially established between two tennis courts.

Typical crops recorded as grown for commercial sale, school consumption or experimentation included, but was not limited to: lucerne, cereal crops (maize, millet, oats, rye) sorghum, and stone-fruit (apricots, nectarine and peaches, Japanese Shiro plums).

Garden vegetables were supplied to the boarding hostel (beans, peas, cabbage, cauliflower, rhubarb, pumpkin, spinach, onions, turnips, tomatoes, parsnips, carrots, lettuce, beetroot, cucumber and rock melon). The school's livestock included cattle varieties (Ayrshires, Freisians), pigs (Large White Yorkshires, Tamworths) and poultry (Australops, Light Sussex Anconas, White Leghorns, Black Orpinglons).

The following summaries of the school's evolution in terms of its farm activities and its physical expansion has been compiled from information available in *The Harvester*, from 1929-1966. Information relating to the later period of development has been sourced from Pollock's Daygos, Bedbugs and Slabs.

Changes to School farmland and landscape

1929

- Larger pens created on site due to addition of more pigs
- Arbor Day tree planting.
- Grass plots grown for green fodder and hay.
- Grape growing area established
- 1/3 acre of land used for school grass plots worked by student
- teams with 40 species of grasses and 16 of fodder plants,
- formerly used for vegetable garden.

1930

- Romney Marsh ram purchased;
- 7 acres in paddocks 5 and 1 OA sown with maize for green fodder. Cow peas paddock #1, Sudan grass and Sorghum in #6, Japanese fodder millet in #8.

1931

- An additional area of 80 acres with a frontage lo George's River leased by the Department as a grazing area for the school's cattle
- Tennis courts on site, unknown date of construction, with two bee hives in between.

1934-5

Proposed new silo 85-ton capacity of reinforced concrete.

Additional stable accommodation for four horses under construction, including feed room and loose-box

1936

- Intensive system of pasture improvement undertaken for food for increased sheep flock, with 8
 paddocks each of 4 acres.
- Construction of three cement and one turf cricket wickets by students.

1937

• "An additional area of 155 acres on the southern side of the School area, originally owned by Dr Hipsley, has recently been purchased to enlarge our farm. The block includes 18 acres of deep, loamy soil along the creek, to be used for the production of Lucerne and annual fodder crops. About 48 acres of shallower land will also be utilized for cropping, and the balance for grazing." School total land now 390 acres.

1937

 Two heavy draught mares and 13-tooth rigid-tyne cultivator added to farm equipment for fallowing purposes.

- Alterations to poultry section of barbed wire fencing and the "single-testing pens, which were originally close to the kitchen, have been removed and re-erected in the poultry enclosure," to be used on experimental work on hereditary characteristics of fowls.
- New breeds introduced include Australops, Light Sussex and Anconas, and join existing stocks of White Leghorn s and Black Orpingtons).

• Establishment of shrubbery near the railway station to beautify the approach to the school, requiring the relocation of students plots for annual wheat-growing competition to the western side of the poultry section.

1939

- A new silo was added to the school property, as was a modern piggery and new pig breeds.
- During the same period, studies commenced in the areas of milk production and sheep and poultry breeding, with a cooperative effort with the neighbouring Glenfield Veterinary Research Station resulting in the first Australian calf bred through artificial insemination.
- In the poultry section, an electric incubator was introduced, with 288-egg capacity.
- Construction of a large bush-house, and a bridge across the creek, enabling harvested crops to be brought across the creek and up to the hay shed or dairy feed stalls.
- Land on the creek flat prepared for lucerne sowing.
- Reconstruction of piggery, with old pens along the road pulled down and area planted as shrubbery to screen the piggery from the kitchens.
- Construction of fattening pens under way.

1940

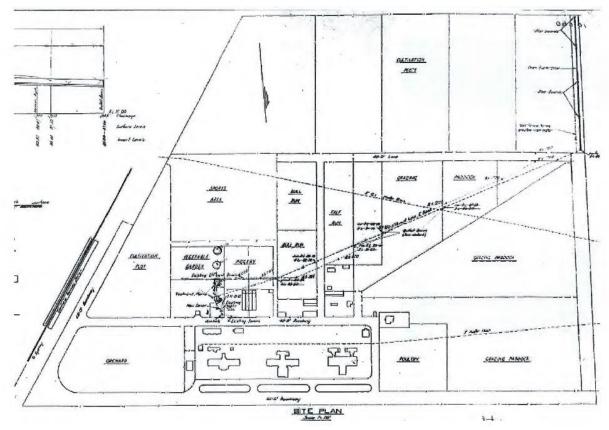
- Two basketball courts erected.
- Electric shearing plant established.

1941

- An area of 1.5 acres enclosed by a 6-foot paling fence as an addition to the vegetable garden.
- New septic system installed, also fire hydrants.
- Construction of a second silo.
- In piggery section, the second group of four fattening pens completed, and assembly and draughting yard constructed.
- Old piggery building close to the road fully demolished, and self-feeders under construction.

- No.2 Oval improved.
- Wartime trenches dug by students, with air siren installed on library roof

Figure 44 - Site plan of Hurlstone Agricultural High School shown on a 1942 plan of sewerage treatment works



Source: Department of Commerce Plan Room, 29527

- Erection of new sheep mustering yards to the shearing shed, with improvements to the shed itself.
- Slaughter house under construction
- Miniature rifle range completed.

1945

- Several rows of old apricot, nectarine and peach trees in the orchard replaced with young trees.
- In dairy, a steam sterilizer installed and alterations and additions to bails and buildings for installation of 3-sland Milking Machine.
- Work undertaken by students

- New orchard site of 3 Y2 acres selected, for production of peaches, Wilson and Shiro Japanese plums, and apricots.
- Poultry brooder house fitted out for instruction purposes
- a sheep catching pen was constructed in the shearing shed
- a number of paddocks netted in,
- the slaughtering yard cemented.

• Planting of first scientifically planned woodlot in NSW at Hurlstone of 4.4 acres.

1948

• Improvements in poultry section, with repairs to rearing pens and new outside runs constructed

1949

- Introduction of Kentucky farrowing pig pen with wooden sloping floor. In poultry, improvements comprised erection of new laneways, giving ready access to the colony runs.
- Orchard area reduced and vegetable garden extended.

1**950**

- Memorial forest established on 5-acre plot to commemorate Hurlstone students who served in the wars.
- Old 1926 orchard replaced by vegetable garden extension, and new lawn/landscaping in front of the dormitories.

1952

• Boundary fences renewed on the western and eastern sides, and other boundary fencing made rabbit-proof.

1954

• No.1 oval resurfaced and fenced, tennis court fencing.

1955

• Garden seating introduced around buildings and tennis courts renovated.

1957 -1965

- Glenfield Special School loan of 40 acres of land to be used for stock grazing.
- Old Experimental Plots converted for use as a nursery.

1957

- A road (formerly "piggery lane" constructed from the lower road to the oval. Constructed by parents and students
- Renovation work on the dairy, and the erection of a new brick petrol shed and pump with underground tank.
- New cricket pitches laid, and construction of a new piggery.

- Old piggery replaced with tennis and basketballs courts and landscaping.
- Seating accommodation in the school grounds supplemented by the purchase of old tram seats, converted into moveable units
- Removal of old vegetable garden paling fence and erection of new wire fencing.
- Modern intensive poultry pens upgrade and removal of old poultry unit.
- Construction of vegetable garden tool shed, made from timber and iron from the demolished piggery

 50 acres successfully irrigated. Also "we have progressed further toward our ultimate goal of completely changing our method of farming from the growing of annual crops, such as wheat and sorghum, to the establishment of permanent pastures."⁷⁶

1961

- Flower gardens and lawns extended and area alongside Railway Station improved.
- Landscaping of area around new tennis courts and manual arts block, together with erection of bush houses around the school for propagation of shrubs.
- P&C and Education Dept: four new tennis courts, and upgrading of three existing courts. P&C also provide for two additional basketball courts.

1965

• Glenfield Park Special School loan of 30 acres of land for grazing purposes.

1966

• Glenfield Park Special School loan of additional 20 acres for grazing purposes.

1966

• Establishment of rockery and pebble gardens around Administration building and Prefect's Cottage (former Isolation cottage).

1990s

• School exchanged a parcel of land on its southern border for Department of Agriculture grounds and buildings on its northern boundary, enabling the school to diversify education programmes on offer

School Building Development

1929

• Plans approved for construction of four new dormitories.

1932-3

Construction of new school assembly hall of cypress pine "The noble hall, designed by and built under Mr Pinn's capable supervision, will be a lasting memorial to the School, and the enthusiasm of the boys of 1932-33. Another fine major effort is the construction of the Sports Oval. In our spare time, capable hands have guided ploughs, harrows, scoops and drays, not forgetting the little Rotary Hoe, which has done such wonderful work in the hands of our Deputy Headmaster, Mr Cook. Hundreds of tons of soil have been moved, the field drained and graded, and the only work not done by the boys of the School is the draining."

1934-5

• Three new temporary classrooms erected near the agriculture plots.

- Students in carpentry quads extended the milking bails by erecting another four on the western end of the existing bails.
- Two new shelter sheds under construction in the bull runs.
- In the poultry section, special single testing pens constructed to eliminate undesirable types. New 85ton silo officially opened.

⁷⁶ The Harvester, 1959, p.30.

- Construction of new senior school laboratory, and "Sporting facilities have been increased, with the oval now almost enclosed by an attractive picket fence."
- The library has been reconditioned and enlarged.

1939

• Temporary accommodation required for measles epidemic, later transferred to the Oval.

1941

• An isolation cottage constructed to complement the hospital.

Figure 45 - Isolation cottage, 1940s

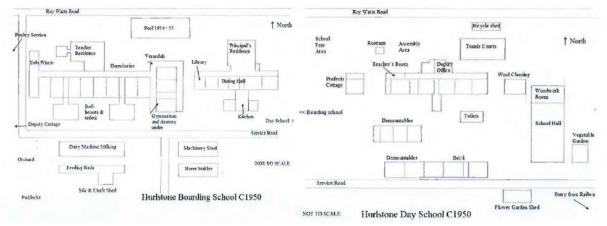


Source: Hurlstone Agricultural High School Archives

1945

• Upgrading of library room with new lighting, paint and erection of dividing rail. Work undertaken by students

Figure 46 - Circa 1950 site plan of Hurlstone Agricultural High School



Source: Hurlstone Agricultural High School Alumni website

1954-5

- Construction of the first swimming pool in a NSW public school: Langmuir Swimming Pool measuring 11 Ox42 ft.
- Improvements made by Education Department to school buildings, hostel and dormitories.
- All buildings, including teachers' and headmaster's residences, fitted with new doors and windows, and the building exteriors painted, while new floors laid on the portable classroom and dormitory verandahs, and new cement floors in the bathrooms.
- Kitchen facilities upgraded,
- Gymnasium floor re-laid and there remained lawns to be made around new dormitory block.

1956-7

- Continuation of renovations to buildings, with new paintwork to classrooms and assembly hall.
- New lockers installed in dormitories

1957

- Completion of painting of all dormitories, gymnasium residence, and cottages.
- Completion of Hindmarsh Dressing Pavilion for the pool.

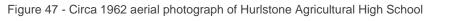
1958-9

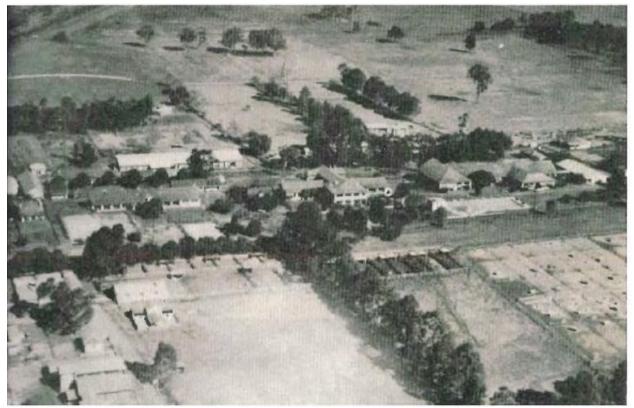
- Completion of Stage I of Wyndham building programme, with two new classrooms and a manual training block on the site of the old piggery, with a farm mechanic's room, a woodwork room and a hobbies room, staff and store rooms.
- Other work included extensions made to the hostel block, with a substantial store room of brick and tile.
- Official opening of the Stanley Cook Memorial Library.

1962

Work commenced on Stage II "complete facelifting of the rear-wall of Hurlstone. This comprises two storey buildings of prestressed concrete, steel, brick and timber construction, providing an additional dormitory, together with new ablution blocks and toilets, for the one hundred and twenty additional boarders and a new dining hall to seat three to four hundred....Attached to this will be a modern kitchen,

refrigeration room and a storage room ...Completing this stage will be the construction of a new boiler house with boilers and equipment to provide steam for kitchen appliances, for hot water service to ablution blocks and for heating the new school block."





Source: Hurlstone Agricultural High School Alumni website

- Completion of two new dormitory blocks, dining hall/refectory and kitchen, as well as renovations to the old kitchen and dining hall block "which have now become part of the library."
- Demolition of old bathrooms.
- Tenders called and contract signed for Stage 111 of development, with new school buildings and renovations, including science labs, wool science room, music rooms, art rooms, class rooms as well as an administrative unit.

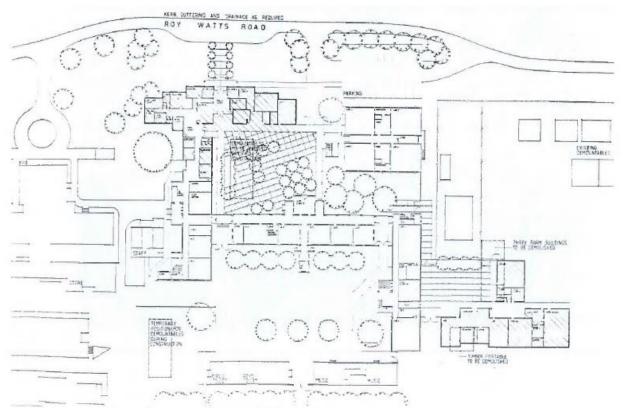


Figure 48 - Plan of the Stage 3 building programme designed by the Government Architects in 1963

Source: Hurlstone Agricultural High School Archives

Commencement of Stage II I building programme. Construction of "two two-storeyed blocks...The project also provides a new Wool Science room, tuckshop, and ablution block, as well as renovation to all existing brick buildings. The buildings are modern, well-lit, well-ventilated, heated in winter, and soundproofed for better working conditions." Western block provided for administration, classrooms and library. Eastern block contained classrooms ("to replace the ugly ones in existence") and laboratories, demonstration room, staff room and photography dark room, and tuckshop. Wool Science Room completed at eastern end of the Farm Mechanics Building. Portable buildings removed, renovation and conversion of music room, demolition of old tuckshop, concreting of playground area and conversion of Hobbies Room for woodwork and metalwork courses.

1965

• Completion of Stage III of Wyndham building programme.

Figure 49 - Circa 1965 aerial photograph of Hurlstone Agricultural High School



Source: Hurlstone Agricultural High School Alumni website

1967

• New buildings officially opened by Deputy Premier Charles Cutler

1972

• Extension of school library.

1978

• Construction of four new classrooms, and modification of existing school plant.

1979

• Demolition of old assembly hall, replaced by existing canteen

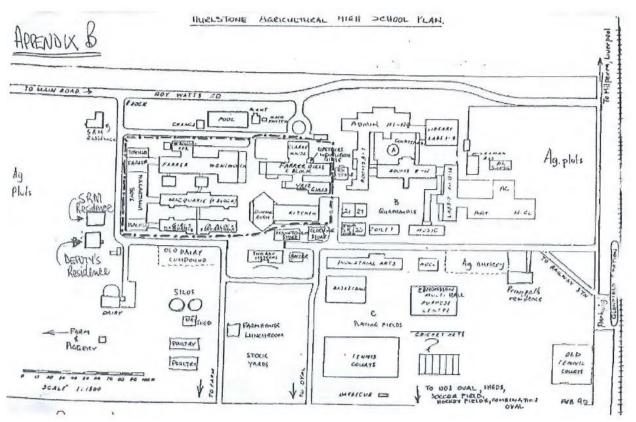
1981

• New school hall built (Edmondson Hall)

1988-9

• Construction of new administration block and classrooms

Figure 50 - 1990 sketch of the school site



Source: Hurlstone Agricultural High School Archives

1989-91

• Renovation of swimming pool

1991

• Official pool reopening ceremony with Minister of Education Virginia Chadwick

1990s

• Construction of art and home economics block, agriculture staff room and adjacent facilities, sick bay, nurse's quarters, existing Principal's residence, laundry and new dairy

c.1995-

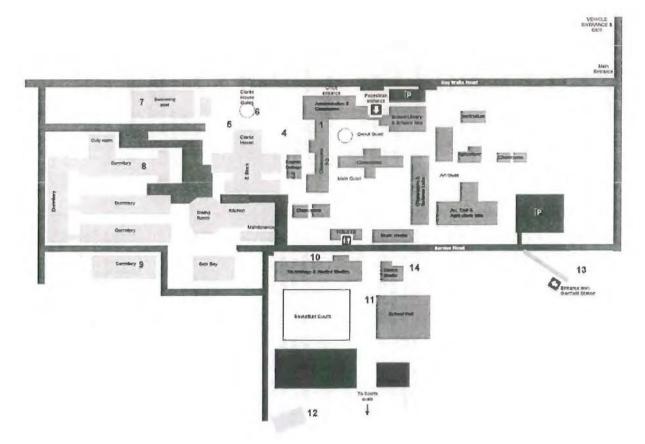
• Upgrading of dormitories and boarders dining room

c.2004-6

Construction of new female dormitory 'Guthrie'

2005-6

• Construction of new computer rooms, installation of fibre optic cabling and computer infrastructure



Source: Hurlstone Agricultural High School Historical Walk Brochure



Picture 64 – Staff picture, 1c.938

Source: NSW Government, State Archives & Records, Digital ID 15051_a047_006698



Picture 65 - Poultry lesson, c.1940

Source: NSW Government, State Archives & Records, Digital ID 15051_a047_006697



Picture 66 – Wool classing lesson, c.1940 Source: NSW Government, State Archives & Records, Digital ID 15051_a047_006696



Picture 67 – Boys working an engine, c.1940 Source: NSW Government, State Archives & Records, Digital ID 15051_a047_006695

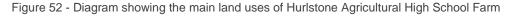
5.1.3.5. The Current School Farm

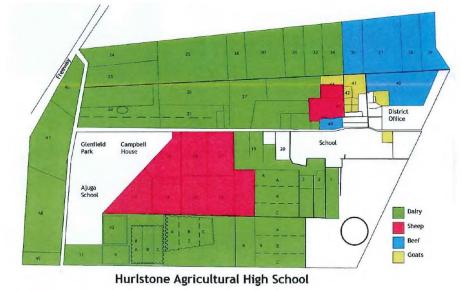
Seventy percent of the farm is used to support the school's dairy operation which is run as a commercial enterprise, generating \$120,000 in milk sales each year. Additional income is generated by the raising of pigs and beef cattle.⁷⁷

The agricultural curriculum at H.A.H.S is divided equally between practical and theory classes. Students assist in all aspects of the farm operations, including the supply of eggs and chicken for the school kitchen. Crops such as rye grass, lucerne and hay, are grown for animal feed and students also maintain market garden beds in a dedicated area, east of the school buildings.

In addition to their regular studies members of the school's Rural Youth Group work with the farm staff before and after school, and at the weekends.

The school continues to successfully exhibit animals at agricultural shows, including the Sydney Royal Easter Show.





Source: Hurlstone Agricultural High School Farm

⁷⁷ Interview with HAHS farm manager, Ms D Krix

5.1.3.6. Memorial Forest

The Memorial Forest was first planted on Saturday, 27th May 1950, as the outcome of an idea by Max Moore, son of the school's P&C Council President, and serves as the site of the Hurlstone Agricultural High School's Anzac Day Service. *The Harvester* reported that:

The nucleus of a forest of 600 flowering eucalypts, the first of its kind in the State, was planted on a fiveacre plot of land facing that old historic building, Macquarie House, to commemorate those Hurlstone lads who offered their services in both world wars. Yes, that day is history, and history based on the best traditions of our race.

Guy Moore, President of the P&C Council, "contended that brass and stone are not fitting memorials of the valour and service of the immortal or living saviours of the lane, and in their place should be substituted a memorial which in itself was living - a tree.⁷⁸

The trees enclose what will be a circle of lawn. In the centre of the lawn stands a cairn of stone, surmounted by a perfect, if slightly shallow, slab of Scone Granite. Near the base of this edifice are engraved the words:

'This cairn was erected and trees planted in memory of Hurlstone boys who offered their services in the two World Wars, 1914-1918 and 1939-1945."

The dedication ceremony was attended by three of the school's headmasters, the school chaplain, and guest speaker Mr G. Ross Thomas.

In 1953 the Hurlstone Old Boys Union called for funds for the maintenance of the Memorial Forest.⁷⁹ The union reminded members that:

"Of the 137 Old Hurlstonians who enlisted, ten died on active service... Several Old/ Hurlstonians were ecorated: R Buckingham winning the Military Cross and Crux de Guerre; H Langford winning the Military Cross; J McNamara the Military Medal; and C Blumer the Distinguished Conduct Medal.

Again in the second World War Hurlstonians were playing their part... Corporal John H Edmonson, who won the first Australian V C was one of the 500 Hurlstonians who served in the Second World War."

Honour Rolls at the school recognise the service of former pupils. The school continues to hold its ANZAC Day services at the Memorial Forest, hosting returned Old Boys and representatives from the local RSL.

⁷⁸ The Harvester, 1950, p.7.8.

⁷⁹ 1953 Hurls/one Old Boys- Union Newsletter, sourced from Hurlstone Agricultural School Archives

5.1.3.7. Historical Aerial Imagery 1956-2017: Hurlstone Agricultural High School Site

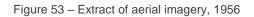




Figure 54 – Extract of aerial imagery, 1965

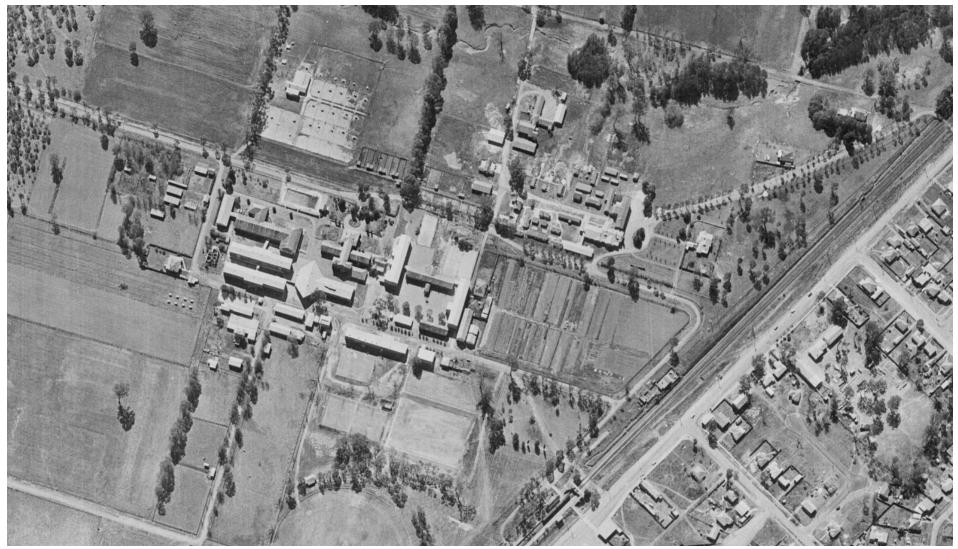


Figure 55 – Extract of aerial imagery, 1970



Figure 56 – Extract of aerial imagery, 1975



Source: NSW Land and Property Information

Figure 57 – Extract of aerial imagery, 1982



Figure 58 – Extract of aerial imagery, 1991



Figure 59 – Extract of aerial imagery, 1998



Figure 60 – Extract of aerial imagery, 2005



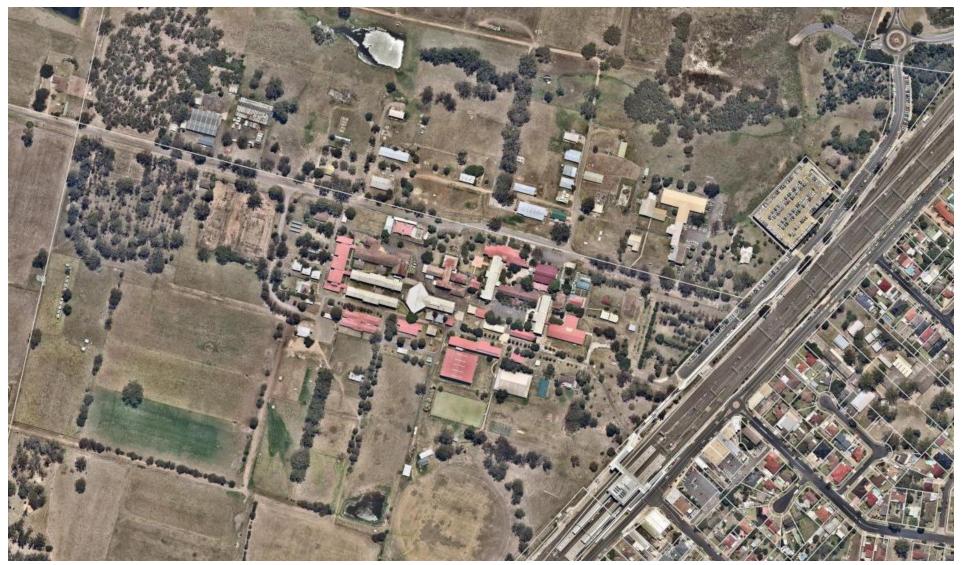
Figure 61 – Extract of aerial imagery, 2010



Source: NSW Land and Property Information

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Figure 62 – Extract of aerial imagery, 2017



5.1.4. Glenfield Special School

5.1.4.1. The Historical Context

The history of the field of learning disabilities to date comprised three main phases of development. During the foundations phase (c.1800-c1930) doctors sought to classify and categorise specific types of learning disorders. The transition phase (c.1930 to c.1960), saw psychologists and educators use theories formulated by their predecessors to develop diagnostic procedures and remedial programming. The integration phase began in the 1960s, and is still a continuing process.⁸⁰

Developments in special education that were taking place in Australia in the late nineteenth and early twentieth centuries paralleled developments in other countries, principally following the lead of Britain and the United States.⁸¹ In New South Wales, the first provision for special needs education was in 1861, with the establishment of segregated schools catering for deaf, blind and dumb children.⁸²

Like many other western governments, the New South Wales government passed compulsory education legislation in the late nineteenth century with a non-specific clause which exempted the 'infirm' - a term that was not defined so it could be loosely applied as needed - from compulsory school attendance. In contrast with many other countries and other Australian states, though, the government did not embark on any sustained programme of creating special segregated facilities for mentally and physically 'infirm' students who were not attending any school.

Of the two state government departments directly concerned with providing schooling for children, it was the State Children's Relief Board (S.C.R.B.) which was more active in this regard than the Education Department. In 1908 the first Cottage Home for the 'feeble-minded' was established to care for (but not educate or otherwise empower) children within the welfare sphere; this was followed by several others by 1920.⁸³

The policy of segregated education had emerged from medical and scientific advances of the nineteenth century, and ultimately resulted in a negative effect on society in the twentieth century context. With new ideas of heredity, genetics and environment, disabilities came to be associated with genetic flaws; effectively, people with disabilities were considered impervious to the benefits of education and were genetically incapable of self-improvement.

The rise of the mental hygiene movement and eugenics, with its emphasis on heredity as the only key factor in human development, had a dramatic and detrimental effect. The 'mentally infirm' were linked at a genetic level with crime, pauperism, vice, prostitution, alcoholism and delinquency.⁸⁴ Both professionals and politicians concurred that 'defective' people should be isolated from mainstream society and discouraged from passing on their flawed genes to the next generation.⁸⁵

While the eugenics movement had originated in Europe, the British did not embrace its principles as enthusiastically as did the Americans, stopping short of translating eugenic principles into practice.⁸⁶

In New South Wales, the government initially appeared reluctant to establish a network of segregated special education facilities, during a period when this was occurring with greater vigour elsewhere. While a 1903-4 Royal Commission recommended the establishment of special schools for students viewed as 'feebleminded,'⁸⁷ no concrete attempt to establish such an institution was made for more than twenty years.

There was, however, a great deal of internal change underway during the early twentieth century, much of which was directly influenced by the American eugenic movement. The concept of intelligence had become concrete, something that was genetically transmitted.⁸⁸

The lacklustre manner in which policies were implemented in New South Wales, however, indicated a counterbalancing influence by the more moderate British eugenic front.

⁸⁰ M.A. Winzer, The History of Special Education: From Isolation to Integration, p.356

⁸¹ M.M. De Lemos, Schooling for Students with Disabilities, p.15

⁸² S. Doenau, Edging lo Integration: The Australian Experience, p. 27

⁸³ D. Snow, "Historicising the Integration Debate," in The Australasian Journal of Special Education, Vol.13, No.2, 1990, p.29

⁸⁴ Winzer. The History of Special Education, p.292.

⁸⁵ Winzer, The History of Special Education, p.280-281.

⁸⁶ Winzer. The History of Special Education, p.287

⁸⁷ V. Harwood, Diagnosing 'Disorderly' Children: A critique of behaviour disorder discourses, p.88.

⁸⁸ Winzer, The History of Special Education, p.291

In the existing nineteenth education system, attendance was only required for a proportion of each year, allowing children to combine work and other activities with schooling. The regulated and highly structured school system where students routinely attended every day at the age of 6 and progressed annually did not exist, which meant that many students, particularly those of working class upbringing who attended school irregularly, and migrating from school to school as families relocated for employment opportunities, remained in one grade for two or more years.⁸⁹

In New South Wales, the two government departments concerned with education were managed by senior staff who belonged to powerful pro-eugenic Australasian organizations. Medical officers from both the S.C.R.B. and the Education Department belonged to the Australian Medical Association (AMA), while both the Director of Education, Peter Board, and the President of the S.C.R.B., Charles Mackellar, joined the Australasian Association for the Advancement of Science (AAAS).

Mackellar claimed in the early 1900s that Britain, Canada and America was giving 'grave consideration' to the effects of the 'feeble-minded on the community' and felt that New South Wales was doing nothing to arrest the spread of the unfit. He advocated that the New South Wales government should undertake their compulsory detection and segregation. Schools were considered the best place for detection of the unfit, through testing of reading, mathematical and school-oriented knowledge bases. Effectively, Mackeller proposed that educational conditions were a way to judge mental deficiency - an inability to cope with schooling thereby provided sufficient evidence to label students as 'feeble-minded.'⁹⁰

Peter Board, the first Director of Education in New South Wales, had initially displayed the biologicaldeterminist leanings as the AMA and AAAS. by associating physical unfitness with mental unfitness. However, despite ample school testing which could be interpreted to the eugenicists' advantage, Board made no recommendations advocating the segregation of the 'mentally unfit.'

Further, Board refused to release AMA test results on students' mental ability during 1912, on the grounds that these results were potentially misleading.

One reason for his refusal was that this would have sabotaged his newly launched post-primary education system. Influenced by his time abroad, Board had introduced a new school syllabus in 1906, followed in 1911 by the introduction of a complete system of post-primary schooling, consisting of the academically-oriented Continuation School (Commercial, Junior Technical and Domestic Continuation Schools) As this massive reorganization of New South Wales schooling was being justified on the grounds of providing an avenue of social mobility for the working class, and as it was well known that the physically (and hence mentally) unfit were most likely to come from the 'poorer classes, 'Board would have been unwise to release such results at the same time that his new post primary Continuation schools had begun operating.

By 1919 the reorganization of government schooling had resulted in a syllabus which had begun to define the 'normal' student as one who complied with the age-grade-content policy, progressing annually through each grade at an appropriate age. 'Backward' students were those who, for whatever reason, did not meet the expectations of the revised educational system. To the Department of Public Instruction, which now judged student intelligence through academic testing, the low achievement of such students was interpreted as mentally defective.

Although 'backward' students were typically the result of various life/work issues, the term 'backward' was quickly imbued with eugenic meaning. The shift in its definition was aided by the establishment of a New South Wales School Clinic in 1919. Staffed by doctors (one being a psychologist) the Clinic was intended to establish psychological norms for Australian students, to diagnose and treat students with 'special disabilities in their schoolwork' and interpret data gathered on mental deficiency and abnormal behaviours.

This had emerged from both the policy changes of the period, and as a result of physical inspections of school children. In 1907, the first medical inspection of students had been carried out, albeit only on those who appeared to be physically or mentally deficient. This was followed over the next two years by the School Medical Service's anthropometric survey in Sydney and a number of country districts.

 ⁸⁹ Snow, Historicising the Integration Debate, p.31.
 ⁹⁰ Ibid, p.30.

By 1913 Board had begun arguing for the appointment of permanent medical staff for the inspection of school children.⁹¹

Soon after the Clinic had been established, experimental classes were introduced to cater for the large number of purportedly 'retarded' students within state schools. The public primary schools in working class suburbs of Newtown, Blackfriars and Rozelle acquired a special class under the supervision of school medical officers, for students "who are definitely sub-normal in intelligence but still educable". The methods used in these classes varied with the nature of the children and the ingenuity of the teacher. In general, the main purpose in the special class was the elimination of the subnormal children from the normal class, so that the latter could get more of the teacher's time and attention, and that the teacher could be relived from the undoubted strain of trying to teach normal and subnormal children in the same class. This was followed by further Clinic recommendations, which advised that a special segregated school was necessary for such students.⁹²

These initiatives were supplemented by the schools established by the S.C.R.B, which were partially staffed by Department of Public Instruction officials. "May Villa" at Carlingford, was a residential school for feeble-minded male of the State. In 1925 there were 27 boys in attendance with one teacher. "Brush Farm" at Eastwood was the corresponding home for girls, where 59 girls were in residence of whom 41 attended school.⁹³

This interwar period of education differed from pre-war educational policies by adoption of a more proeugenic stance. These reflected broader intellectual views emanating principally from America, where the "socially inefficient" and "less intelligent" were the subject of institutionalisation and sterilisation programmes. In the Australian context, however, whilst numerous attempts were made in both Victoria and New South Wales to introduce legislation permitting both institutionalisation and sterilisation, none were successful. The fact that attempts were made to introduce such legislation, however, reflected the extent to which eugenic principles were endorsed by influential parties within the government.⁹⁴

In 1926, it was estimated that about 1.5 percent of school children had learning difficulties in ordinary schools. In the early 1920s, classes were adapted in many metropolitan schools to provide individual care for these students, by applying alternate learning methods and restricting pupil numbers to about 15 per class.⁹⁵

By the mid-1920s a backlash had begun from geneticists, educators and psychologists. Criticism of eugenic policy emphasized dubious methods of student evaluation and subsequent subjective interpretation. This was supported by the rise of behaviourism theory, which focused exclusively on the impact of the environment on behaviours. In education, behaviourism spread rapidly, with conventional academic skills considered less important, and with emotional training becoming an integral part of the new educational movement.⁹⁶

The mental hygiene movement severed its connections with hard-line eugenics, and gradually adopted a stance that focused on children's mental health, designating schools as providing the most likely opportunities for successful intervention.⁹⁷

The Department of Public Instruction first provided an educational facility for children with mild intellectual disabilities,⁹⁸ who were unable to be educated in the ordinary public schools with the opening of the residential Macquarie Fields Home for Subnormal Children in 1927 (later known as Glenfield Special School). This was the first Government institution where the main purpose was the 'complete education' of the 'subnormal' children.

⁹¹ Crane and Walker, Peter Board, p.275.

⁹² Snow, Historicising the Integration Debate. p. 32.

⁹³ Report on Classes for Mentally Defective Children for the information of the Commonwealth J Statistician, December 1925, State Records NSW

⁹⁴ G. Rodwell, "Eugenics and Australian State Education, 1900-1960," Phd thesis University of Newcastle, p.4

⁹⁵ 1926 'SUB-NORMALS.', The Sydney Morning Herald (NSW: 1842 - 1954), 3 May, p. 10, viewed 01 Mar 2017,

http://nla.gov.au/nla.news-article16289747

⁹⁶ Winzer, The History of Special Education, pp.307-309.

⁹⁷ Ibid, p.349

⁹⁸ M. Clear, Promises, Promises: Disability and Terms of Inclusion, Disability Council of NSW, p.16.

By the close of the 1920s, the New South Wales Department of Public Instruction had made initial efforts to addressing the issue of children with disabilities, with Glenfield Special School and an additional eight special classes in mainstream schools.

This achievement was comparable to developments in other Australian states: for Melbourne's 'feebleminded', there were two overcrowded state special schools (one at Fitzroy, established in 1913, and the other at Montague in 1915) and a residential school still in the early stages of planning. South Australia had had its residential school for 'weak-minded' children since 1898: Minda Home, independently owned and partly funded by the government. Queensland had no special school as such, but there were ten special classes catering for 375 'backward ' and 'subnormal' children. Similarly, Western Australia had no special school, with the only provision for students with intellectual disabilities being the Salvation Army home for delinquents and the 'feeble-minded.' Tasmania had a total of two special classes, one established in Hobart in 1922 and the other at Launceston, plus one special school for 20 students at Newtown.⁹⁹

The decade of the 1930s yielded very few improvements for the education of the 'mentally defective.¹⁰⁰ During the 1930s the financial burdens of the Great Depression, followed by the mass financial investment into the determination to win World War II, led to a resultant lack of advancement in the field of education.¹⁰¹

Wide-scale intelligence testing was adopted by the Department of Education to identify talents and abilities of individual students and stream them 'with a view towards directing them into occupations for which they are best suited.' This was accompanied from 1935 by a thorough investigation of school children with disabilities; carried out by Harold Wyndham (later the N.S.W Director-General of Education 1952-1968), recommendations arising from his study resulted in a guidance service for students in 1936 and promotion of special schools and classes for 'atypical' students.¹⁰²

With state secondary schooling offered as a means of social mobility, testing was carried out around the transition period between finishing primary and commencing post-primary studies. The ultimate aim was to ensure that the remainder would be sent to the Continuation Schools for which they were better suited.

Until the post-World War II period, Glenfield remained the only school available for students with a disability; as late as 1938, New South Wales was the only Australian state where school attendance for the deaf and blind was not compulsory, while some states such as Victoria and South Australia had also made provisions for intellectually disabled children.

Legislation which compelled the New South Wales Government to assume responsibility for educating children with 'infirmities' was passed in 1944. While the Public Instruction (Blind and Infirm Children) Act of 1944 made education for blind and deaf children compulsory in New South Wales the Act was not effected until after the war. In the interim, 'Opportunity' classes were offered, with special education classes made available at four public schools for mentally and intellectually disabled children, and partially deaf children.¹⁰³

By 1949, New South Wales had caught up with other states, particularly Victoria, in the provision of education for children with disabilities.¹⁰⁴

The end of World War II had signalled the beginning of many changes in Australian education.¹⁰⁵ Both directly and indirectly, the war encouraged important advances in special education, in social perceptions, and in the care and treatment of people with disabilities. New techniques were developed, while in medical fields much was gained in the prevention, intervention and care of disabling conditions. Technological advances dramatically improved the functioning and quality of life of intellectually and physically disabled people.¹⁰⁶ Public perception had also changed through a greater visibility of the

⁹⁹ Doenau, Edging lo Integration, p.27.

¹⁰⁰ Ibid, p.27.

¹⁰¹ Winzer, The History of Special Education, p.364.

¹⁰² This excluded deaf students. B. Crickmore, "An Historical Perspective on the academic education of deaf children in New South Wales, 1860s-1990s." PhD thesis, University of Newcastle, p. 91.

¹⁰³ Opportunity 'D' classes were necessary given a large number of partially deaf children born following the rubella epidemic of 1940-1941 and who had reached school age. A. Barcan, Two Centuries of Education in New SouthJ Wales, p.228.

¹⁰⁴ Barcan, Two Centuries of Education, p.229.

¹⁰⁵ Doenau, Edging to Integration, p.31.

¹⁰⁶ Winzer. The History of Special Education, p.364.

disabled within the general community, with the war forcing people with disabilities in to the mainstream work force to replace those who had joined the defence forces.¹⁰⁷

By the 1950s a more optimistic view of the potential of disabled persons had developed.¹⁰⁸ During the 1940s and 1950s there was an increase in the number of special schools and special classes provided by the government, with most catering mainly for students with mild intellectual disability.¹⁰⁹ The first New South Wales school for moderately intellectually disabled children was opened at Stockton Mental Hospital in 1949 and the first day school, Chalmers Road School, in 1951. Severely intellectually disabled children continued to be educated by voluntary associations.¹¹⁰

In New South Wales, the first school for severely intellectually disabled children was established in 1970 at Marsden Hospital and by 1975 the Department assumed responsibility for a large number of similar schools, previously conducted by voluntary associations.

In the mid-1970s the New South Wales government sought to implement a policy of siting its new special schools close to regular schools.¹¹¹ By this time the concept of integration had achieved national visibility.¹¹² While the numbers of segregated schools continued to rise, there was also a definite growth in the numbers of disabled students in regular schools.¹¹³

Three characteristics defined education for children with disabilities after 1975: the extension of state provision and the decline of voluntary schools; a steady growth in the number of pupils identified as 'handicapped', with a follow-on escalation in costs; and greater interest in integrating such children into mainstream schools.¹¹⁴ From November 1985 the number of children with special needs being educated in mainstream schools was increasing, with emphasis on the provision of special teachers, support staff, facilities and equipment in the ordinary schools.¹¹⁵

5.1.4.2. Establishment of Glenfield Special School

The establishment of Glenfield Special School, for the education of students with mild intellectual disabilities, was the direct result of interwar government policy, with the school clinics strongly advising the urgent need for such an institution. It took a committee of Departmental representatives and 'recognised experts on mental problems' two years to find a suitable location for the school, largely due to the opposition of people who objected to the establishment of an asylum for 'mentally defective' children in their own backyards.

Organised on a residential basis, Glenfield Special School (originally known as the Macquarie Fields Home for Subnormal Children) was to have a three-fold aim: to relieve teachers 'from the worry and responsibility of teaching both normal and subnormal children in the class'; to provide efficient training for those students who were 'too backward to properly benefit from education in an ordinary school, but who, nevertheless, are educable'; and ultimately, to 'enable children of such a character to take their place in society.'¹¹⁶

Glenfield was intended to provide education and training that would be:

... sensory, utilitarian and ethical, leading to farm work and the teaming of simple trades, the object being to make the "ament" self-supporting, and assist him to conform to the demands of society.¹¹⁷

The social aspect of student education was not to be neglected in favour of practical skills. Indicating this very clearly in decisive eugenic terms was the manner in which Department authorities perceived the

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¹⁰⁷ Ibid., p.372.

¹⁰⁸ Ibid., p.375.

¹⁰⁹ De Lemos. Schooling for Students with Disabilities, p.15.

¹¹⁰ Barcan, Two Centuries of Education, p.293.

¹¹¹ Doenau, Edging to Integration, p,54.

¹¹² Ibid., p.39.

¹¹³ Ibid., p.54.

¹¹⁴ Barcan, Two Centuries of Education, p.293.

 $^{^{115}\} http://www.governmenlschools.det.nsw.edu.au/cli/govl_schools/special_education.shlm$

¹¹⁶ Snow, Historicising the integration Debate, p.32.

¹¹⁷ S.H. Smith and G.T. Spaull, History of Education in New South Wales 1788-1925, p.266.

social function of Glenfield: If such children are not trained both on the educational and social sides, we are letting loose on the community, as we have done in the past, potential criminals and paupers.¹¹⁸

The very existence of an institution such as Glenfield, however, effectively contradicted N.S.W. Director-General for Education Peter Board's goal to provide equal opportunity schooling and the potential for working class mobility through a post-primary system.

Glenfield, in contrast with Board's Continuation Schools, had no mechanism for re-admission into the regular school system, which belied his argument that everyone had equal access to schooling and therefore the opportunity for social mobility. This conflict was considered resolved by the contention that Glenfield offered opportunities suited to the needs of its students; opportunities which were not available in what had now become the 'ordinary' classroom.¹¹⁹

5.1.4.3. Design Development for the site

Preliminary sketches for the 'Macquarie Field Home for Subnormal Children' were drafted by the Architect of the Department of Public Instruction in September 1923. Sketch plans for cottage homes, comprising dormitory, dining room, kitchen, bath and a two-bedroom teacher's accommodation in each cottage were drawn out. The Architect's calculation was that a brick cottage would cost £2,430, while a timber cottage could be constructed for £1,914.¹²⁰

In December of that year, the NSW Minister for Public Instruction, Albert Bruntnell (1866-1929), announced that "New South Wales was on the verge of an important development in the education of this unfortunate type" [children with special needs]. The Department of Education had acquired: 110 acres of land at Macquarie Fields, near Glenbrook would build, at first, six schools. Three would be for boys and three for girls. In each 20-children would be accommodated. They would be placed in the care of experts."¹²¹

In August 1924, a site of 106 acres 2 roods and 8 perches (approximately 40 hectares), located on the ridge to the west of the Hurlstone Agricultural High School complex - itself an example of Board's Continuation School policy-was reserved for the special residential school.

Figure 63 - Preliminary sketch of the site of the "Home for subnormal children", 1923

Purchass and Flanteel Railway Stanton

Source: School Administration Files, State Records NSW

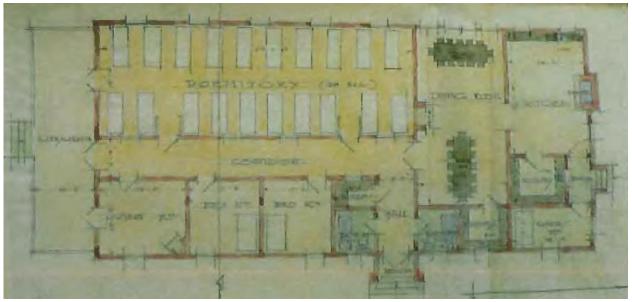
¹¹⁸ Under Secretary to the Superintendent, Glenfield Special School, 13 November 1929. 'Glenfield Special School File, 5/1604, Archives Office of New South Wales.

¹¹⁹ Crane and Walker, Peter Board, p.?

¹²⁰ Glenfield Special School Administrative Files, State Record NSW

¹²¹ Melbourne Argus, 18 December 1923.

Figure 64 - Sketch floor plan of cottage home for subnormal children, 1923



Source: School Administration Files, State Record NSW

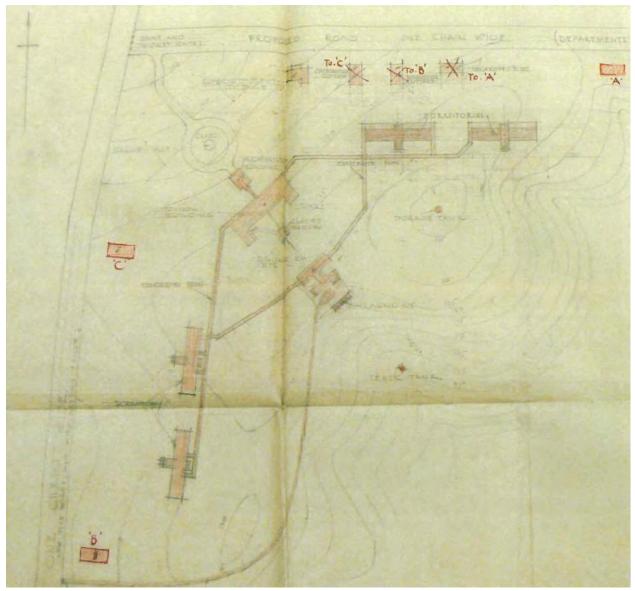
Figure 65 - Sketch elevation of cottage home for subnormal children, 1923



Source: School Administration Files, State Record NSW

In December 1923, the Architect of the Department of Education, Richard McDonald Seymour Wells prepared a sketch ground plan for the erection of a series of buildings for the "Home for subnormal children at Macquarie Fields". The plan provided for six cottage homes, capable of accommodating 20 children each, three for boys and three for girl s, together with a common room and administrative block. It was requested that the plan should indicate the site for a school building to accommodate these children, and the whole scheme to be so designed as to be capable of future extension.

Figure 66 - Site plan of the "Home for subnormal children at Macquarie Fields"



Source: School Administration Files, State Record NSW

The first version of site plan and comprehensive set of floor plans were completed in April 1924. The estimation was that the construction of the school in accordance with the proposed scheme would cost £40,000. In May, the Director of Education sent the plans to the Sydney Technical College for review and comment. The Superintendent had the following comments:¹²²

"The layout of the whole scheme and the details of planning the various buildings are excellent, and it is a matter for regret that building construction is so expensive at present as to make it difficult to carry the proposal into effect.

I understand from what you have told me that the sum of £40,000 is much more than you will be able to expend. In seems in the face of this position that a re-cast of the whole scheme will be advisable. At present the buildings are more of pavilion type and much separated. On the other hand, the school could be smaller and the administrative and residential buildings less pretentious. The dormitories in the proposed scheme are so well planned that it would be difficult to reduce them.

¹²² Correspondence held in the Glenfield Special School Administrative Files, State Record NSW

What I would propose is that a scheme be prepared having the dormitories in two buildings only (each of two stories) - one for girls and one for boys. That one building be planned to provide school accommodation, and connected with it a very much smaller allotment of space for administrative work. A much smaller residence of the bungalow type should do for the Superintendent. One adjoining room together with a kitchen in a separate building placed midway between and about twenty feet from each of the dormitory buildings would save much expenditure in covered ways, and would make a much less expensive scheme.

I suggest that the departmental architect might be asked to make a plan for a scheme somewhat on the lines which I have suggested with instructions that the total cost should not quite reach £30,000. If he fails to do this, you might then consider the matter of employing a private architect".

To illustrate his comments and suggestions, the Superintendent attached rough sketches to his letter.

Figure 67 - Sketch by the Superintendent of the Sydney technical College, proposing smaller and less pretentious buildings for the school



Source: School Administration Files, State Record NSW

5.1.4.4. Construction and Operation of Glenfield Special School

Revised architectural plans and specifications for the Macquarie Field home for 'subnormal children' were completed in January 1925. The 1925 plans held by the Department of Commerce indicate that the Department of Public Instruction decided to retain the original planning concept and pavilion-type arrangement of building components on the site. However, to reduce cost, the design for the superintendent's house was reviewed and the stables and garage deferred.

In March 1925, the tender of Mr W. Jemison of Dulwich Hill for £39,000 was accepted and work soon began. In the same time a new name, "Glenfield Special School", was adopted for the project.¹²³

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¹²³ Glenfield Special School Administrative Files, State Record NSW

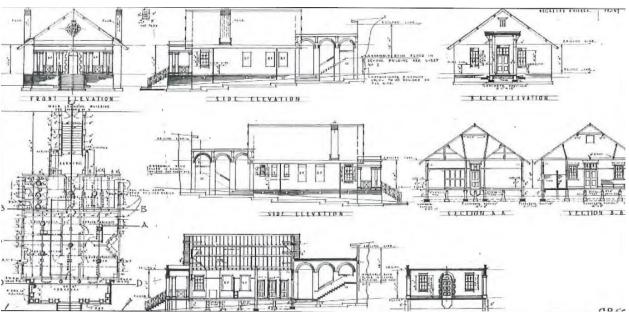
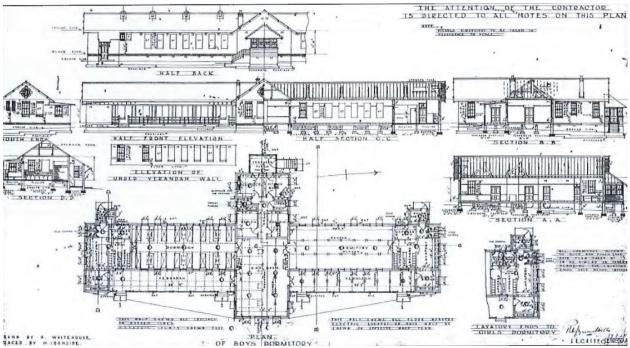


Figure 68 - Front elevation of the administrative block, 1925

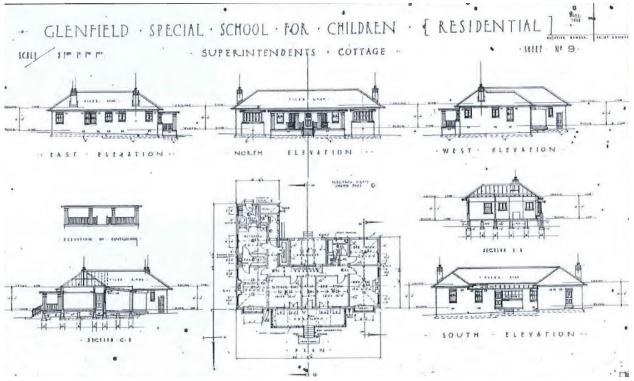
Source: Department of Commerce, Plan Room, SB 609-2

Figure 69 - Plan of the dormitory block by architect of the Department of Education, Richard McDonald Seymour Wells, 1925



Source: Department of Commerce, Plan Room, SB 609-4

Figure 70 - Plan of the superintendent's cottage. North elevation and floor plan



Source: Department of Commerce, Plan Room, SB 609-6

Inquiries concerning the proposed school for sub-normal children and applications for admission began to arrive to the Department of Education as early as February 1926, although the buildings were not yet completed.

For the request of the Inspector General of the Insane of the Lunacy Department of Victoria, in August 1926 copies of the plans of the Glenfield residential school were sent to Melbourne to help with regard to the establishment of a similar institution in Victoria.

Throughout 1926 enquiries continued to arrive from school headmasters and concerned parents with respect to possible admission from all around New South Wales and interstate, though the school was only about 90% completed. Expectations of the special school were high; shortly before its opening in 1927, leading Australian education Percival Cole was ecstatic at its potential to improve the life of students with intellectual disabilities:

"The more carefully the needs of mental defectives are examined, the more shall we see reason to rejoice at the establishment of a large residential school for mental defectives... It is being organised on the cottage system; its influence will radiate throughout the whole State... the State has undertaken the responsibility of its conduct and maintenance.... The new institution ... shall bring happiness into their afflicted lives".¹²⁴

Students were selected for placement in Glenfield through a dual process of physical examination and an intelligence test. Teachers in regular schools were also asked to nominate students who might well qualify for admission to Glenfield and who may have been overlooked by the medical officers. Given the stated intention of Glenfield to relieve teachers of difficult students, it is not difficult to gauge the particular behavioural characteristics teachers would have seen as key in defining a student 'abnormal'.¹²⁵

While enrolment at Glenfield was voluntary, the Education Department anticipated that some parents would not take kindly to their children being labelled as 'mentally defective.' Consequently, teachers were

¹²⁴ P. Cole, "New South Wales" in G. S. Browne (Ed) Education in Australia, p.53-54.

¹²⁵ Snow, Historicising the Integration Debate", p.34.

issued with strict instructions to be discreet and to avoid using terms like 'idiot,' 'imbecile'. 'feeble-minded' and 'mentally defective' when discussing potential placement with parents.¹²⁶

The school opened with 40 pupils initially. The school upon opening comprised four dormitories, dining rooms, school rooms and a lecture hall, and residential quarters for the staff.¹²⁷

The school was officially opened in March 1927. Under the direction of the newly-appointed Superintendent, Dr Gilbert Phillips, the "special staff" to teach up to 100 students¹²⁸ consisted of a Matron, four Nurses and four Assistant Nurses, one Caretaker, one Cook and one Assistant Cook, three Housemaids, two Mistresses, five female and one male Assistant, a Manual Training Teacher, one Teacher of Needlework, one Teacher of Cookery and two cleaners.

The teachers on the staff relied on the guidance offered by government officers, and taught students in accordance with the endorsed school curriculum. This included domestic cleaning duties, sewing, cooking, woodwork and handicrafts, growing fruit and vegetable gardens, together with mainstream curriculum agendas such as reading and broad literacy skills.¹²⁹

Glenfield Special School, however, differed from the previous schools for the 'deaf' and 'dumb' with its special classes for 'state wards' and 'defective boys.'¹³⁰ Glenfield specialised in students "markedly below the normal mental capacity of their fellows." When evaluating Glenfield's student population in 1935, the future Director-General of N.S.W. Education, Harold Wyndham, considered that:

"The pupils in this school are too backward to be taught in the ordinary school by the usual group methods, but they are not so defective as to be unable to be taught at Glenfield to read and write; their IQs vary from below 50 to above 70."¹³¹

By the end of its first year in 1927, the Glenfield Special School already had a reputation for being responsible for marked improvements in the children it housed. In particular, instruction at the school had resulted in students showing "an aptitude for manual work". The school was also praised for other accomplishments including the increased training it provided teachers in tackling the problems of abnormal psychology.¹³²

The school performed so well that informed visitors who knew of other such institutions praised it as being "one of the most notable schools of its type in the world".¹³³ Schools like these were praised as institutions where "backward children are not only being educated, but are also taught to win success in some useful occupation".¹³⁴

In 1928, the Glenfield Special School was described as being set "amidst acres of undulating country...set well-back from the road" with "park-like grounds". The significance of its location from an historic perspective was also noted, as the school drive "adjoins the crumbling brick gateway of the old Macquarie Fields School, the first secondary school to be opened in Australia".¹³⁵ This refers to the school building formerly located on the adjoining Macquarie Field House property.

By 1929, the school had reached 125 pupils. Only children under the age of 12 were admitted to the school at this point, as older children were seen to be too difficult to train.

The school buildings were constructed in the north-west corner of the property. In the early years an orchard and garden was cultivated, south east of the building, which was accessed by an internal road or pathway.

¹³¹ H.S. Wyndham, Class Grouping in tile Primary School, p.119.

¹³⁴ Ibid. ¹³⁵ Ibid.

¹²⁶ Report of the Minister of Public Institution for the Year 1925, p.6.

¹²⁷ 1929 'BACKWARD CHILDREN.', The Sydney Morning Herald (NSW: 1842 - 1954), 27 December, p. 9., viewed 01 Mar 2017, http://nla.gov.au/nla.news-article16613216

¹²⁸ C. Turney, "Continuity and Change in the Public Primary Schools 1914-1932" in J. Cleverley and J. Lawry (eds), Australian Education in the Twentieth Century, pp.32.

¹²⁹ Clear, Promises, Promises. p.18.

¹³⁰ V, Harwood, Diagnosing Disorderly C/1ildren: a critique of behaviour disorders discourses, p. 88.

¹³² 1927 'CHILDREN'S HEALTH.', The Sydney Morning Herald (NSW: 1842 - 1954), 31 December, p. 14., viewed 01 Mar 2017, http://nla.gov.au/nla.news-article16430656

¹³³ 1928 'BACKWARD CHILDREN.', The Sydney Morning Herald (NSW: 1842 - 1954), 5 December, p. 18., viewed 01 Mar 2017, http://nla.gov.au/nla.news-article16514361

Much of the architecture and site layout of Glenfield derived from historical institutional influences, with varying degrees of design between early twentieth century asylums and gaol design. The semi-circular style with connecting, radiating buildings was typical for the period, as was the cruciform arrangement used at Glenfield for dormitories and the central circulation space and muster ground. The disposition of the building function was influenced by the favoured form in Victorian asylums, with the Block Plan for Glenfield showing the administration, school, dining room, and laundry constructed along an axis and accommodation extended symmetrically, with females to one side and males to the other.¹³⁶

While these structures were more informally arranged and simplified compared to most institutions of the period, the symmetrical site design had an architectural affinity with institutions for the purposes of incarceration, such as Melbourne's Kew Asylum and Goulburn's Kenmore Psychiatric Hospital. Similarly, the circular drive and approach to the main, formalized administration building bore vestiges of landscaping used for nineteenth century asylums such as Callan Park Hospital. This tapped into the view that a pleasant outdoor environment and agricultural pasturage,¹³⁷ with fresh air and healthful living was soothing to an unstable or 'defective' constitution.¹³⁸

Early aerial photographs of the site clearly show this formal planning arrangement of the six school buildings and the internal road layout within the park-like setting, on a triangular shaped portion of the site. The main building was sited to address the corner of Quarter Sessions Road (an access road to Macquarie Fields House from Campbelltown Road) and the informal road, later named Roy Watts Road, that lead down to the High School and Research Station.

Late 1920s and early 1930s school administration files record the setting up of fowl pens and forming vegetable gardens (November 1927), request for the replacement of fruit trees for the orchard (July 1931) and setting out of an oval on the playing field (1932).

Also during the 1930s was the commissioning of a stone figure for Glenfield Special School by prominent sculptor Eleonore Lange (1936).¹³⁹



Picture 68 – Glenfield Special School, 1936 showing central administration & classroom building

Source: NSW State Records, Item 6527



Picture 69 – Glenfield Special School, 1936 Source: NSW State Records, Item 6527

¹³⁶ J. S. Kerr, Out of Sight, Out of Mind: Australia's Places of Confinement, 1788-1988, p.124

 ¹³⁷ D. Wright and A. Digby, From idiocy to Mental Deficiency: Historical Perspectives on people with learning disabilities, p.142.
 ¹³⁸ Kerr, Out of Sight, Out of Mind, p.126.

¹³⁹ Its present whereabouts is unknown. M. Germaine, Dictionary of Women A1tists of Australia, p.255.



Picture 70 – Glenfield Special School, 1936 Source: NSW State Records, Item 6527



Picture 71 – Glenfield Special School, 1936, view from central administration & classroom building Source: NSW State Records, Item 6527



Picture 72 – Glenfield Special School, 1936, view of the dam behind the buildings (in background) Source: NSW State Records, Item 6527



Picture 73 – Glenfield Special School, 1936 Source: NSW State Records, Item 6527



Picture 74 – Glenfield Special School, 1936 Source: NSW State Records, Item 6527



Picture 75 – Glenfield Special School, 1936 Source: NSW State Records, Item 6527



Picture 76 – Glenfield Special School, 1936, with view of Macquarie Field House in left background (two hoop pine marker trees visible on knoll)

Source: NSW State Records, Item 6527

The pressure to accommodate more children in the special school remained evident through the 1930s. This can be illustrated by the following excerpt from a letter by the Director of Education (NSW) in response to an admission inquiry from an Anglican Mission Priest from Samarai, Papua:¹⁴⁰

"... It has been necessary to lay down certain rules governing the enrolment of pupils at this School, and the first and most definite of these is that the applicant must be a resident of this State. This rule has been forced upon us by the fact that the School is the only one of its type in Australia and applications for enrolment have been received from the States of the Commonwealth as well as the Dominion of New Zealand. We have a continuous waiting list of boys and girls, as the school is designed to accommodate only 128 pupils, you will see the position is somewhat difficult. In view of these circumstances, I am afraid I cannot hold out any hope that application for the boy's enrolment at the Special School would be successful."

Up until at least 1950, the Glenfield Special School remained the only one of its kind in New South Wales.¹⁴¹ Notwithstanding calls for additional institutions, none were forthcoming. Glenfield Special School was held as the "model on which other schools should be founded", confirming its continued success into the mid-twentieth century.

Apart from the general curriculum, Glenfield Special School provided training in cooking, domestic science and sewing for girls, and gardening, orchard and farm work for boys. In 1936, over 650 cases of fruit, as well as large supplies of vegetables, were produced from the orchards and gardens of Glenfield Special School.¹⁴²

By the mid-twentieth century, the school was still regarded as an institution that not only educated these children, but provided the "right tuition and treatment that will transform them into men and women capable to take their place in a community".¹⁴³ In 1954, the school was noted as "the foremost school in

¹⁴⁰ Glenfield Special School Administrative Files. State Record NSW

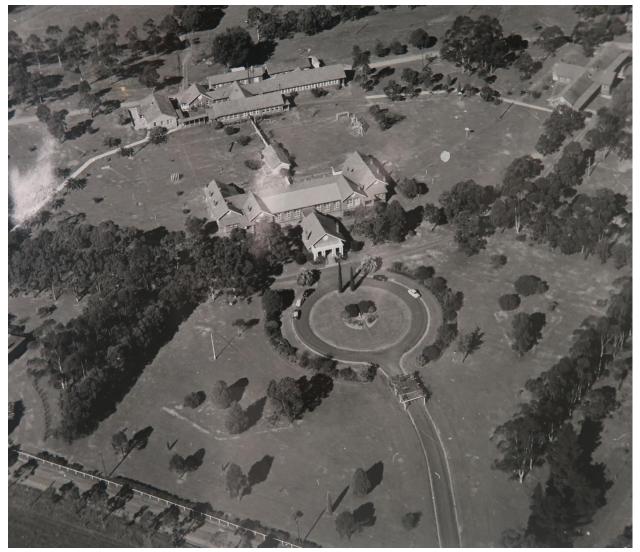
¹⁴¹ 1950 'Something Really Can Be Done With Subnormal Children', The Sydney Morning Herald (NSW: 1842 - 1954), 30 May, p. 2. , viewed 01 Mar 2017, http://nla.gov.au/nla.news-article18161259

¹⁴² 1936 'School Notes', The Newcastle Sun (NSW: 1918 - 1954), 11 April, p. 4., viewed 01 Mar 2017, http://nla.gov.au/nla.newsarticle166565297

¹⁴³ 1947 'Countrywomen's Interests', The Farmer and Settler (Sydney, NSW: 1906 - 1955), 13 June, p. 15. , viewed 01 Mar 2017, http://nla.gov.au/nla.news-article117330668

New South Wales" for children with special needs by the Clarence Sub-Normal Children's Association.¹⁴⁴ Further schools providing this service were not constructed, and the Glenfield Special School remained the only residential school for children with special needs into the 1960s. By this time, the name had been changed to Glenfield Park School.¹⁴⁵

Figure 71 – 1960's aerial of the Glenfield Park School



Source: NSW State Records, Item [783]

^{144 1954 &#}x27;Expert Invited To Sub-Normal School', Daily Examiner (Grafton, NSW : 1915 - 1954), 30 January, p. 3., viewed 01 Mar 2017, http://nla.gov.au/nla.news-article195508337 ¹⁴⁵ 1965 'Festival of Carols at Warragamba dam', The Biz (Fairfield, NSW : 1928 - 1972), 8 December, p. 2., viewed 01 Mar 2017,

http://nla.gov.au/nla.news-article189521707



Source: NSW State Records, Item [783]



Picture 77 – Glenfield Special School, 1960s Source: NSW State Records, Item [783]



Picture 78 – Glenfield Special School, 1960s Source: NSW State Records, Item [783]



Picture 79 – Glenfield Special School, 1960s Source: NSW State Records, Item [783]



Picture 80 – Glenfield Special School, 1960s Source: NSW State Records, Item [783]

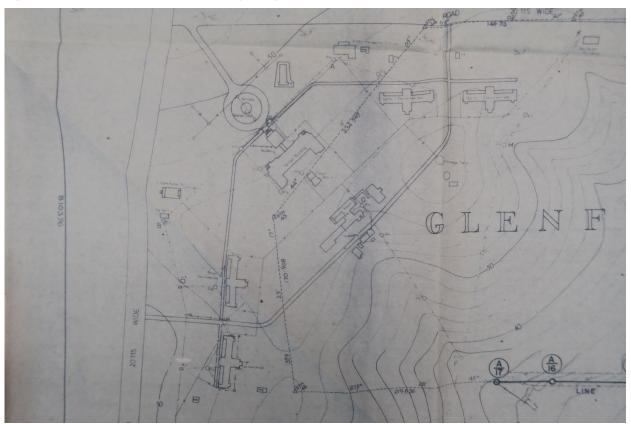


Picture 81 – Glenfield Special School, 1960s Source: NSW State Records, Item [783]



Picture 82 – Glenfield Special School, 1960s Source: NSW State Records, Item [783]

Figure 73 – 1970's water board plan showing configuration of Glenfield Special School



Source: NSW State Records, Drawing M75045/6

5.1.4.5. Additions and Alterations to Glenfield Park School

An analysis of historic aerial photographs and a perusal of relevant plans held by the Department of Commerce indicate that the following alterations and additions to the site were undertaken during its 80 years of operation:

1927

Matrons Quarters added to the kitchen/dining room block

1932

Conversion of the original Isolation Block to Cottage

1935

Store rooms added

1945

Plans for isolation ward to be added to each dormitory wing (not constructed)

Plans for Manual Teacher's Cottage (not constructed)

1955

Sick Bay constructed adjacent to the kitchen/dining room block

Hobby Shed

Early 1960s

Original Domestic Cottage removed

1969

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Provision of Fire Services

1974

Renovation of dormitory wings, including the refurbishment of ablution facilities and provision of fixed dormitory partitions and wardrobes

1975

New Cool Room

Original Isolation Block (later Cottage) removed

Construction of swimming pool

1979 to 1980

Kitchen and dining room renovation

1**990**

Renovations of Administration and Residential School Blocks

Campbell House opens in the two former girls' dormitory (blocks fronting Roy Watts Road)

Demountable buildings added to the area used by Campbell House School

1992

Dormitory Block renovation

Ajuga School opens in the two former boys' dormitory (blocks fronting Quarter Sessions Road)

2000s

Covered basketball court on the former double tennis court

New tennis court on the Ajuga site

Store adjacent to the kitchen/dining room block

5.1.4.6. The Current Use of the Site

The site is currently used by three New South Wales Department of Education and Training schools for specific purposes: Glenfield Park School occupies the main building and the former superintendent's cottage, Campbell House School, the two blocks fronting Roy Watts Road; and Ajuga School the two blocks facing Quarter Sessions Road.

The current definition of a School for Special Purposes (SSP) is: (SSP is) a school for children with special needs including the hospitalized, the physically and intellectually disabled and the emotionally disturbed. Some of these schools have no regular enrolment, /he children being regarded as temporarily absent from their school. There have been many variations in the naming and classification of these schools, especially those conducted by voluntary organizations. Older titles included "School for Crippled Children" and "School for Sub-Normal Children".

Schools for Specific Purposes or SSPs are for students from Preschool to Year 12 who require intensive levels of support. These schools provide a specialised educational setting in which learning support plans are collaboratively developed, implemented and monitored.¹⁴⁶

The Department of Education and Training currently has 114 schools for specific purposes in New South Wales. The following information on the schools at Glenfield Park has been sourced from the Department's website.¹⁴⁷

¹⁴⁶ Government Schools of NSW 1848-2003, sixth edition, NSW Department of Education

¹⁴⁷ http://www.schools.nsw.edu.au/schoolfind/tocator/?section=showRegion®ion=532

Ajuga School

Ajuga School provides an integrated program for K-12 students with a severe emotional disturbance. The school aims to provide a safe and caring environment in which students develop educationally and emotionally. Students are provided with structured individual academic and behavioural programs to develop skills which enable them to participate in an educational context. The school's motto is "Together we achieve".

Glenfield Park School

Glenfield Park School provides an educational alternative for forty-two students from the ages of seven to sixteen years who have a mild level of intellectual deficit together with high support needs due to severe emotional or behavioural disorders and learning difficulties.

The academic and behaviour program offered at Glenfield Park School for the primary school years is in conjunction with the local home school the student attends. Students attend Glenfield Park School four days and their home school one day per week on initial enrolment. Over a four to six semester period, students gradually increase their attendance at their local home school. High school aged students at Glenfield Park School attend five days per week.

Campbell House School

The co-educational school caters for adolescent students (Yr 7-12) with behavioural disorders and/or who have disengaged from learning due to chronic non-attendance. The school is staffed to cater for 49 students. Currently 43 students are enrolled with many of those requiring one to one management. These one-to-one individual students have a planned pathway to either employment, a certified course of interest or integration into one of our classes as soon as possible. Our other students are in 6 classes with a teacher and an aide in each room.

The curriculum consists of literacy, numeracy, key learning areas delivered through Distance Education mode on an individualised basis and specialist classes which include visual arts, music and physical education. Students have access to tennis and basketball courts, bikes, swimming pools, gymnasium and a lunch program.

As Campbell House is situated in a semi-rural setting, with extensive open spaced grounds, there is an opportunity to engage students in learning through horticulture, landscape design and animal husbandry. In 2008, students have successfully grown and harvested a variety of vegetable crops, built an extensive lily-pond using local stone and also features of a large water feature. Students have also engaged in the care of poultry, raring young chicks to adulthood.

Through these activities students develop an understanding of basic agriculture, engage with the school in general and develop a sense of achievement and belonging.

Attendance and engagement are encouraged through a flexible timetable and curriculum. Individual, personalised learning and behaviour management plans and pathways are developed, monitored and evaluated in a consultation with the teacher, student, parent/caregiver and team leader. All students attending Campbell House School have an exit outcome goal.

Students are referred to Campbell House through school counsellor channels and all students must have a disability confirmation. A regional panel decides placement offers depending on vacancies.

The Principal meets with all potential candidates, their caregivers and a support person from the referring school or agency as an important element of the referral process. The school opened in January 1990.

5.1.4.7. Historical Aerial Imagery 1956-2017: Former Glenfield Special School Area

Figure 74 – Extract of aerial imagery, 1956

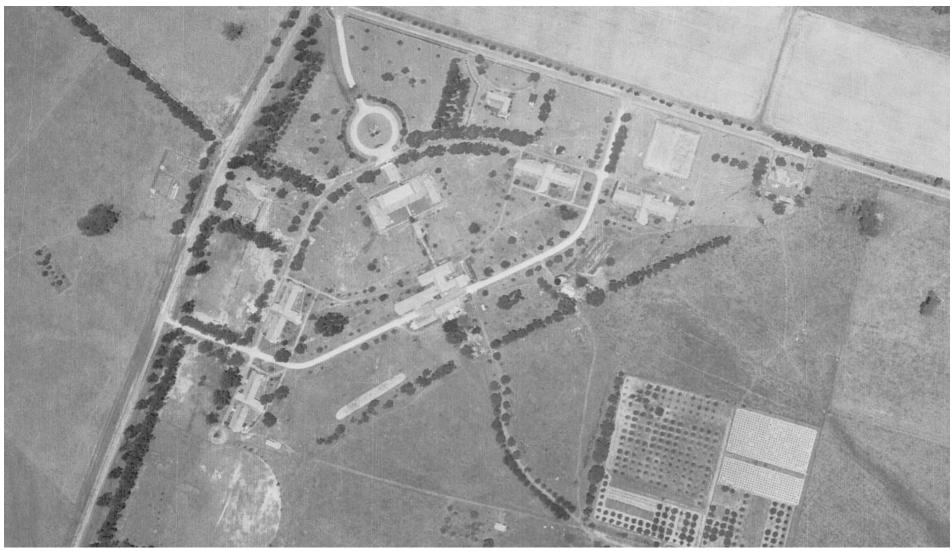
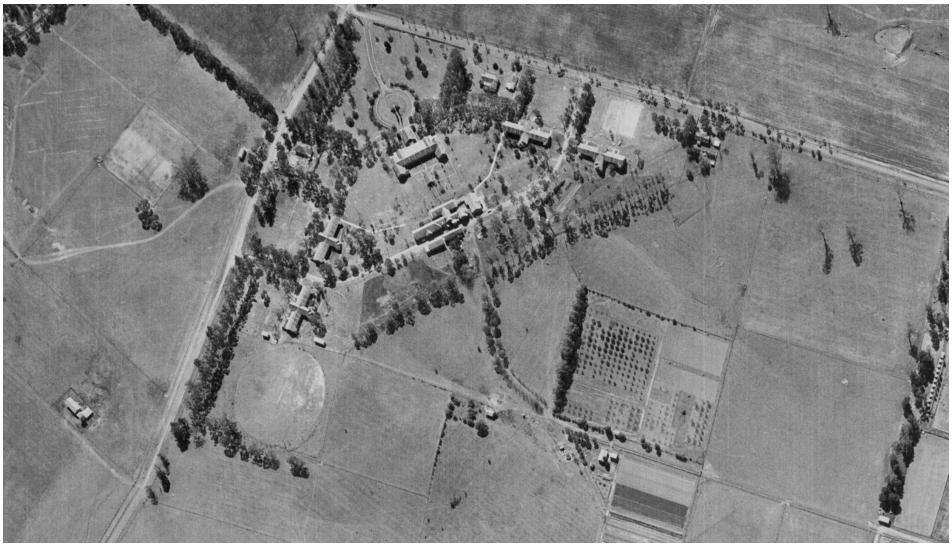


Figure 75 – Extract of aerial imagery, 1965



Source: NSW Land and Property Information

Figure 76 – Extract of aerial imagery, 1970



Figure 77 – Extract of aerial imagery, 1975



Figure 78 – Extract of aerial imagery, 1982



Source: NSW Land and Property Information

Figure 79 – Extract of aerial imagery, 1991



Figure 80 – Extract of aerial imagery, 1998



Figure 81 – Extract of aerial imagery, 2005



Figure 82 – Extract of aerial imagery, 2010



Figure 83 – Extract of aerial imagery, 2017



5.1.5. Office of Strategic Lands Area

The Office of Strategic Lands (OSL) land originally formed part of James Meehan's grant, and the Macquarie Field House estate. The land was subdivided and sold as a 150-acre parcel from Percy Hipsley to the Crown in 1937 for 22 pounds ten shillings per acre.¹⁴⁸ The site was then used by the Hurlstone Agricultural High School for agriculture, grazing and crop-growing purposes.

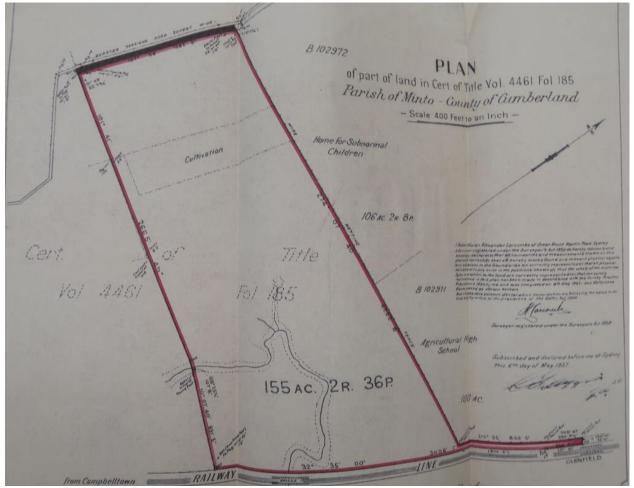
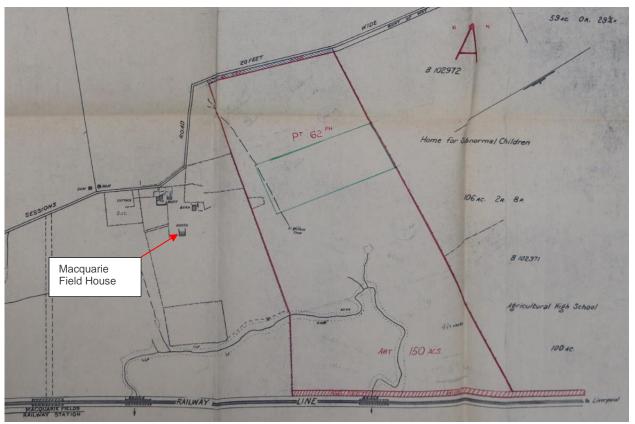


Figure 84 – Plan of OSL Land (outlined in red) in Survey, 1929

Source: NSW State Records

¹⁴⁸ NSW State Records X36/14-2469 Contract of Sale

Figure 85 - Plan of OSL Land (outlined in red) in Survey, 1937



Source: NSW State Records

The south-eastern corner of the OSL land was severed by a drainage channel in the early 1980s as part of the management of Bunbury Curran Creek.

The land was later acquired by the Office of Strategic Lands for the intended South West Rail Link Extension Corridor (SWRLEC). Construction of the SWRLEC began in 2011, with major earthworks occurring across the whole of the OSL area. Construction of the SWRLEC from Glenfield Railway Station to Leppington was completed in early 2015, with the new line opened formally on 9 February 2015.

5.1.5.1. Historical Aerial Imagery 1956-2017: Office of Strategic Lands Area

Figure 86 – Extract of aerial imagery, 1956



Figure 87 – Extract of aerial imagery, 1965



Figure 88 – Extract of aerial imagery, 1970



Source: NSW Land and Property Information

Figure 89 – Extract of aerial imagery, 1975

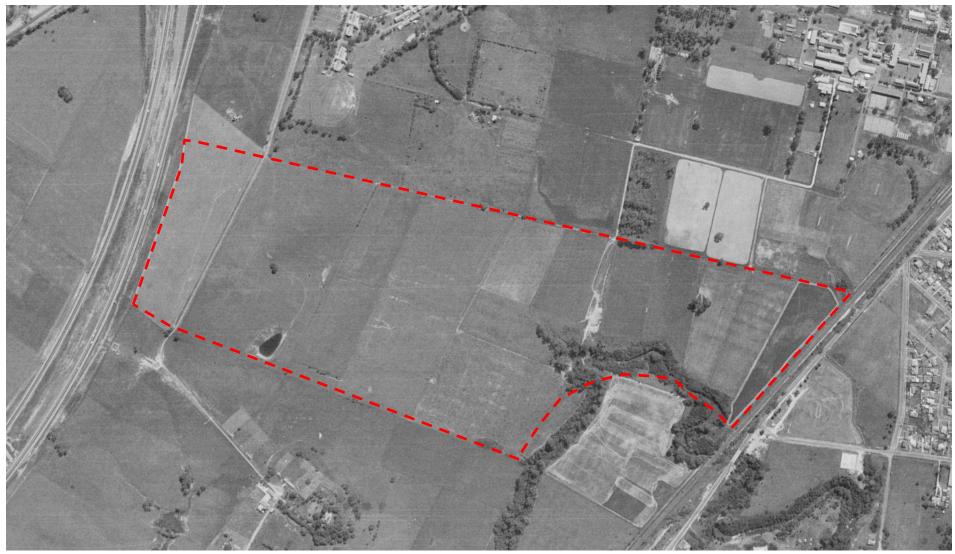


Figure 90 – Extract of aerial imagery, 1982



Figure 91 – Extract of aerial imagery, 1991



Source: NSW Land and Property Information

Figure 92 – Extract of aerial imagery, 1998



Source: NSW Land and Property Information

Figure 93 – Extract of aerial imagery, 2005



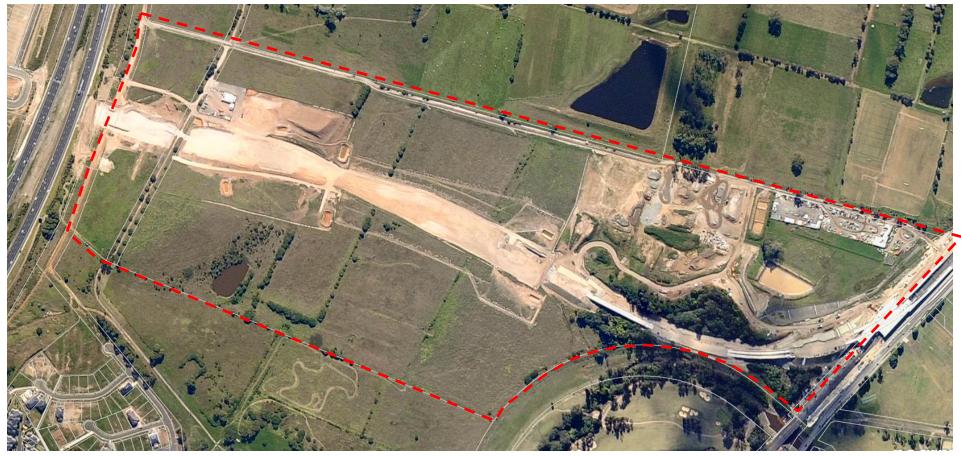
Source: NSW Land and Property Information

Figure 94 – Extract of aerial imagery, 2010



Source: Nearmaps 2017

Figure 95 – Extract of aerial imagery, 2012



Source: Nearmaps 2017

Figure 96 – Extract of aerial imagery, 2013



Source: Nearmaps 2017

Figure 97 – Extract of aerial imagery, 2015



Source: Nearmaps 2017

Figure 98 – Extract of aerial imagery, 2017



Source: SIX Maps 2017

6. ENVIRONMENTAL CONTEXT

An understanding of environmental context is important for the predictive modelling of Aboriginal sites, as well as for their interpretation. The local environment provided natural resources for Aboriginal people, such as stone (for manufacturing stone tools), food and medicines, wood and bark (for implements such as shields, spears, canoes, bowls, shelters, amongst others), in addition to areas for camping and other activities. The nature of Aboriginal occupation and resource procurement is related to the local environment; the local environment therefore needs to be considered as part of any Aboriginal archaeological assessment.

6.1. **DISTURBANCE**

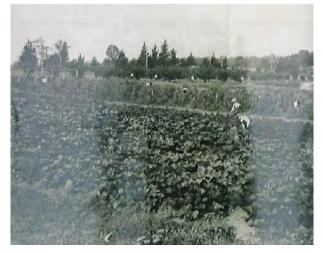
As discussed in Section 5, above, the Study Area has been subject to disturbance over time. This was initiated during Throsby and Meehan's initial land ownership from the first decades of the 1800s, at which time the land was cleared for orchards and the production of barley, maize, potatoes, beans, etc. By 1926 Meehan's land held over 500 cattle, over 1,800 sheep, as well as horses and pigs.

Under the ownership of Samuel Terry in the 1870s, the land began to be subdivided and sold. Large portions were sold to James Ashcroft c. 1877, who used the land for the purposes of grazing. This use was continued by the Ross Brothers.

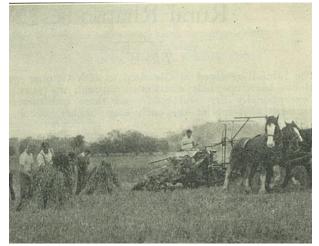
In 1917 and 1926 the land was used as the Glenfield Experimental Farm (northern portion) and as the Hurlstone Agricultural School, respectively. In association with these uses, the land was subject to planting, grazing, and crop cultivation on a rotating basis. Sub-surface services, including sewerage, have also been installed to facilitate these uses.

The Study Area has therefore been subject to land clearing, sustained and intense agricultural uses, and general development over time. This is likely to have resulted in a degree of sub-surface disturbance, particularly to topsoil layers. Examples of disturbance are shown in the below figures.

Figure 99 - Examples of disturbance that has occurred within the Study Area

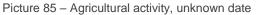


Picture 83 – Hurlstone Agricultural High School's vegetable garden, 1927 (State Library of NSW)



Picture 84 – 'Harvesting at Hurlstone', 1938 (State Records NSW)





Picture 86 - Agricultural activity, 1938



Picture 87 - Map showing sewerage system (darker lines) installation at the Study Area

As shown in the below figure, the configuration and alignment of Bunbury Curran Creek, which forms the southeast boundary of the Study Area, has been subject to extensive modification in more recent times.

Further, the construction of the South West Railway, which runs east – west through the Study Area, has resulting in *extensive* disturbance to the surrounding area. Similarly, the expansion and redevelopment of the Main Southern Railway line, which form the eastern boundary of the Study Area, has resulted in a similar degree of disturbance.



Picture 88 – Agricultural uses and cultivation in the Study Area, 1956 (approximate Study Area boundaries indicated in red)

6.2. TOPOGRAPHY AND HYDROLOGY

Topography in and around the Study Area is generally gently undulating. Within the Study Area, the northwest corner has the highest elevation, at 50-60 metres above sea level (ASL). The topography of the site slopes gently down to southeast and towards Bunbury Curran Creek, with a height of around 10-20 metres ASL. The surrounding landscape is relatively consistent with this in terms of topography; it is predominately low-lying with narrow ridges, hillcrests and valleys.

In terms of hydrology, there are several watercourses that run within or directly adjacent to the Study Area. Several small tributaries of Bunbury Curran Creek run east to west through the Study Area, and are managed via a number of dams.

These minor water courses are ephemeral, meaning that they would typically only be active during periods of particularly high rainfall; generally, they have been disturbed in association with the sustained use of the Study Area for the purposes of farming and grazing from the 1810s onwards (refer to Section 5, above) as well as the introduction of dams noted above. The higher order Bunbury Curran Creek, from which these tributaries are derived, forms the southwest boundary of the site.

The closest major watercourse to the Study Area is the Georges River, located approximately 1.5 kilometres to the east of the site at its closest point. The Georges River is a major watercourse that is permanently active, meaning that it was likely a significant resource to Aboriginal people who used the local area in the past. This is supported by the relatively high frequency of Aboriginal sites that have been registered in its proximity (refer to Section 7, below).

The topography and hydrology of the Study Area, and particularly the proximity of Bunbury Curran Creek and the Georges River, demonstrate that the surrounding landscape would have provided sufficient water resources and been accessible and navigable enough to sustain human occupation and use.

However, the absence of substantial watercourses within and in closer proximity to the Study Area suggests that it may not have been subject to particularly intensive use or occupation, with campsites and resource procurement sites more likely to have been located closer to the nearby and more substantial watercourses discussed above.

6.3. GEOLOGY AND SOILS

6.3.1. Geology

Aboriginal people often made stone tools using siliceous, metamorphic or igneous rocks, as such, understanding the local geology can provide important information regarding resources in a project area. The nature of stone exploitation by Aboriginal people depends on the characteristics of the source, for example, whether it outcrops on the surface (a primary source), or whether it occurs as gravels (a secondary source).¹⁴⁹

As already mentioned, the Study Area is underlain by the Wiannamatta group of sedimentary rocks in the Sydney Basin, and more specifically the Ashfield Shale and Minchinbury Shall formations; the western side of the Study Area is predominately located on Minchinbury Shale while the eastern side is predominately located on Ashfield Shale. These rock types were formed in the Triassic Period, and are characterised by shale with sporadic thin lithic sandstone (Wianamatta Group), fine to medium grained quartz-lithic sandstone (Minchinbury Shale), and dark grey to black claystone-siltstone and fine sandstone-siltstone laminate (Ashfield Shale). The area around Bunbury Curran Creek, being the south-eastern corner of the Study Area, is underlain by Quaternary sands that are characterised by quartz and silty sands, and silt and clay.

In association with this geology and prior to disturbance, the Study Area may have contained a limited amount of raw stone material, particularly sandstone, which is known to have been used by Aboriginal people in the past. For example, sandstone sheets were often used for sharpening hatchets; this process results in depressions in the sandstone identified as 'grinding grooves'.¹⁵⁰ Grinding grooves are typically located on suitable sandstone platforms in proximity to watercourses.

However, materials such as shale and ironstone, also present in these areas, were not generally used as a resource by Aboriginal people in the past due to their relative fragility; preferred raw stone materials, such as quartz, silcrete, chert, and mudstone, are generally fine-grained and siliceous.¹⁵¹ This relative absence of preferred geological resources means that the Study Area is unlikely to have been subject to particularly intensive or long-term habitation or use by Aboriginal people in the past for the purposes of raw stone material procurement and processing. However, it is still likely that the Study Area and surrounding landscape were subject to transient occupation or use, as the immediate availability of raw stone materials is not a strong predictor of the presence/absence of artefact sites.

6.3.2. Soils

The soil landscapes that underlie the Study Area reflect the underlying geology discussed above, as well as associated landforms/landscape features. In association with Bunbury Curran Creek and Quaternary sands, the southeast corner of the Study Area is situated on the South Creek soil landscape.

The South Creek soil landscape is typified by floodplain on Quaternary Alluvium (alluvium, shale, sand and silt) in the Cumberland Plain, which is relatively flat and consists of extensively cleared open forest. South Creek soils consist of grey, yellow and brown chromosols (grey, red, brown podzolic soils), black and brown dermosols (prairie soils) and tenosols (alluvial soils). Constraints within this soil landscape include localised seasonal and permanent waterlogging, salinity hazards, foundation hazards, low fertility and widespread flood hazards. Erosion hazards include localised sheet and gully erosion, and widespread streambank erosion.¹⁵²

¹⁴⁹ Doelman, Torrence et al. 2008

¹⁵⁰ Attenbrow 2003: 120-122

¹⁵¹ Attenbrow 2003: 120

¹⁵² GHD, 2010, *Camden Valley Way upgrade between Cobbitty Road and Cowpasture Road: Review of Environmental Factors*, prepared for the NSW Roads and Traffic Authority: 67.

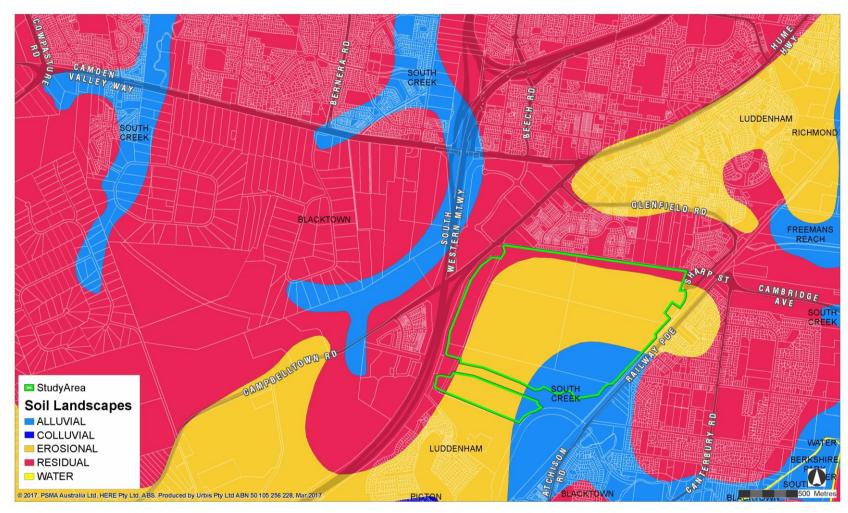


Figure 100 – Soil landscapes within the Study Area (indicated in green) and surrounds

URBIS SHI003 - HURLSTONE DEVELOPMENT PROJECT AT GLENFIELD SOIL LANDSCAPES

Source: Urbis 2017

The Luddenham soil landscape, which comprises the majority of the Study Area, is typified by red kurosols and chromosols (red podzolic soils) on crests and slopes, red kandosols (red earths) on sandstone members, brown sodosols (yellow solodic soils) on foot slopes and lower slopes and brown dermosols on siltstone/mudstone members. Constraints include localised steep slopes, mass movement hazards, seasonal and permanent waterlogging, flood hazards, salinity hazards, low fertility and widespread foundation hazards. Erosion hazards are widespread sheet erosion and localised gully erosion.153

The Blacktown Soil Landscape, which underlies the western and northern portions of the Study Area, is typified by a friable brownish-black loam or a hardsetting brown clay loam topsoil (A1 horizon and A2 horizon, respectively), and a strongly pedal, mottled brown light clay or light grey plastic mottled clay subsoil (B horizon).

On crests and ridges, up to 30 centimetres or A2 horizon soil overlies 10-20 centimetres of A2 horizon soil. This in turn is underlain by up to 100 centimetres of subsoil. On upper slopes and midslopes, topsoil depth is around 40-50 centimetres deep, with up to 100 centimetres of subsoil below. On lower sideslopes, 40-60 centimetres of topsoil overlies 40-100 centimetres of subsoil.¹⁵⁴ Constraints of this soil group include localised seasonal waterlogging, salinity hazards, foundation hazards and low fertility. Erosion hazards include localised sheet and gully erosion.¹⁵⁵

As subsoil (B horizon) layers are typically archaeologically sterile, it is not anticipated that any archaeological material would be present within these soil layers. This means that archaeological deposits, if present, are likely to be limited to the upper 30-60 centimetres of soil across the Study Area. based on the known characteristics of the above described soil landscapes.

The historic removal of vegetation in the area, as well as the use of the Study Area generally for the purposes of sustained farming and grazing since the early 1800s strongly suggests that the topsoil layers within the Study Area have been disturbed. This further limits the potential for in situ archaeological deposits to be present within the Study Area.

This is supported by the findings of archaeological assessments undertaken in the general vicinity of the Study Area, in which land has been found to be largely disturbed and to contain a relatively limited amount of in situ archaeological material (i.e. artefact deposits are typically low density. Refer Section 7.2. below).

6.4. **FLORA AND FAUNA**

As has been discussed, the majority of the Study Area has been subject to vegetation clearance in association with its previous use as farmland, as well as its development as an agricultural school site. Remnant vegetation does, however, appear to have been retained within the Study Area in sparse stands. Vegetation found in the local area before settlement would certainly have related to its geology.

Within the Study Area, vegetation communities include Cumberland Plain Woodland and River Flat Eucalypt Forest in association with watercourses such as Bunbury Curran Creek. The Cumberland Plain Woodland is the name for the distinct groupings of plants that occur on the clay soils derived from shale on the undulating Cumberland Plain. The most commonly found trees in the woodland are grey box eucalypts, forest red gums, narrow-leaved ironbarks and spotted gum. A variety of other lesser-known eucalypts as well as shrubs, grasses and herbs are also found including blackthorn, kangaroo grass, and weeping meadow grass. It is the dominance of grey box and forest red gum that makes the community distinctive.156

The River Flat Eucalypt Forest is found on the river flats of the coastal floodplains. It has a tall open tree layer of eucalypts, and while the composition of the tree stratum varies considerably, the most widespread and abundant dominant trees include forest red gum, cabbage gum, rough-barked apple and broad-leaved apple. A layer of small trees may be present, including prickly-leaved teatree, grey myrtle,

¹⁵³ GHD, 2010, Camden Valley Way upgrade between Cobbitty Road and Cowpasture Road: Review of Environmental Factors, prepared for the NSW Roads and Traffic Authority: 68.

¹⁵⁴ http://www.environment.nsw.gov.au/Salisapp/resources/spade/reports/9130bt.pdf

¹⁵⁵ GHD, 2010, Camden Valley Way upgrade between Cobbitty Road and Cowpasture Road: Review of Environmental Factors, prepared for the NSW Roads and Traffic Authority: 69. ¹⁵⁶ http://www.environment.gov.au/resource/cumberland-plain-woodland

white cedar, river oak and swamp oak. Scattered shrubs include forest nightshade, Japanese bramble, coffee bush, rice flower, and tree violet.¹⁵⁷

Prior to European settlement and the subsequent clearance of vegetation, this vegetation community would have provided habitats for a variety of animals, as well as potential food and raw material sources for Aboriginal people. Eucalyptus trees, which area dominant in this area, were a particularly important resource; leaves were crushed and soaked for medicinal purposes, bowls, dishes, and canoes were made from the bark, and spears, boomerangs and shields were crafted from the hard wood.¹⁵⁸

Typical animals which may have been harvested by Aboriginal people include kangaroos, wallabies, sugar gliders, possums, echidnas, a variety of lizards and snakes, birds, as well as rats and mice. The bones of such animals have been recovered from Aboriginal sites excavated in the Sydney region suggesting that they were sources of food,¹⁵⁹ although the hides, bones and teeth of some of the larger mammals may have been used for Aboriginal clothing, ornamentation, or other implements.

6.5. SYNTHESIS OF ENVIRONMENTAL CONTEXT

The geology of the Study Area suggests that it is unlikely to have been specifically targeted or frequented for resource procurement. The absence of rock shelters and rock outcrops (and therefore a lack of shelter) supports this, and further suggests that the immediate area may not have been suitable for sustained/intensive habitation or use.

However, it is still likely that the landscape would have been subject to transient use and/or occupation by Aboriginal people in the past, particularly due to the relative proximity of major watercourses, availability of flora resources such as eucalyptus trees, and the gentle topography. The topography of the landscape means that it would have been easily accessible and navigable, while the presence of a number of watercourses in the general vicinity, including Bunbury Curran Creek and the major Georges River to the east, would have provided sufficient resources for subsistence.

It is reiterated, however, that archaeological material is generally more likely to have been deposited in closer proximity to these watercourses and on relatively flat land in association with campsites and resource procurement sites; this is clearly demonstrated by the results of the AHIMS search.

A review of the environmental context of the Study Area suggests that, prior to European settlement and associated land disturbance, the surrounding landscape would have been suitable for transient occupation and use. However, general disturbance, modification of the landscape, the absence of suitable rockshelters and the disturbance of topsoil layers throughout the Study Area is likely to have reduced the potential for *in situ* Aboriginal archaeological deposits to be present within the Study Area.

¹⁵⁷ http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10787

¹⁵⁸ Nash 2004: 4-8

¹⁵⁹ Attenbrow 2003:70-76

¹⁵⁸ ENVIRONMENTAL CONTEXT

7. ABORIGINAL ARCHAEOLOGICAL CONTEXT

The purpose of reviewing the relevant heritage information is to assist in identifying whether Aboriginal objects or places are present within the Study Area. An understanding and review of the relevant archaeological context is critical in formulating predictive models and assessing the archaeological potential area.

7.1. ETHNOHISTORICAL CONTEXT

At the time of European settlement, the Aboriginal people of the Sydney region were organised into named territorial groups. The groups local to the study area would most likely have belonged to the Darug (Dharug), Gundundurra and the Dharawal (Thurrawal) language groups.¹⁶⁰

Aboriginal occupation of the Sydney region is likely to have spanned at least 20,000 years, although dates of more than 40,000 years have been claimed for artefacts found in gravels of the Cranebrook Terrace on the Nepean River. Late Pleistocene occupation sites have been identified on the fringes of the Sydney basin and from rock shelter sites in adjoining areas. Dates obtained from these sites were 14,700 BP at Shaws Creek in the Blue Mountain foothills. c.11,000 BP at Loggers Shelter in Mangrove Creek, and c.20,000 BP at Burrill Lake on the South Coast.

The majority of sites in the Sydney region, however, date to within the last 3,000 to 5,000 years, with many researchers proposing that occupation intensity increased from this period. This increase in sites may reflect an intensity of occupation which was influenced by rising sea levels, which stabilised approximately 6,500 years ago. Older occupation sites along the now submerged coastline would have been flooded, with subsequent occupation concentrating on and utilising resources along the current coastlines and in the changing ecological systems of the hinterland.

7.2. ARCHAEOLOGICAL CONTEXT

The Study Area is located within the Cumberland Plain, which over the last few decades and in association with the increasing spread of urban development, has become the most intensively investigated archaeological landscape in Australia.

Through previous archaeological studies a number of predictive models relating to Aboriginal occupation patterns and site locations across the Cumberland Plain have been formulated, and more recent works have contributed to refining these models.¹⁶¹

The most common site types found on the Cumberland Plain are open artefact scatters/open camp sites, followed by scarred trees and isolated finds. Shelter sites and grinding grooves are also found, although mainly around the periphery of the Plain in sandstone geology. Key trends are summarised below:

- Site frequency and density are directly related to the location of sites within the landscape;
- Complex sites are usually located close to permanent water sources, with major confluences being a key requirement for occupation sites, and would have been used intensively by larger groups, or used repeatedly by smaller groups over a longer period of time;
- Sites with large numbers of artefacts can occur on ridge tops and hill crests;
- Sites situated in alluvial soils retain the potential for stratified deposits;
- Potential Archaeological Deposits (PADs) are most likely to be located along valley floors and low slopes in well-drained areas; and surface artefact distribution does not accurately reflect the composition or density of subsurface archaeological deposits. Some areas with few or no surface manifestations have often been shown to contain subsurface archaeological deposits;

¹⁶⁰ Attenbrow 2010: 221-222

¹⁶¹ AMBS 2013: 27

- Artefact scatters are most commonly linked to the close proximity of permanent water sources in areas such as creek and river banks and alluvial flats. The majority of these sites are located within 100 metres of permanent fresh water;
- Artefact assemblages generally comprise a small proportion of formal tool types with the majority
 of assemblages dominated by unretouched flakes and debitage;
- High concentrations of artefacts are more likely to be located within resource rich areas;
- Silcrete is the dominant raw material used for tool manufacture, followed by chert (also known as tuff). Silcrete sources are located in the north-western Cumberland Plain at places such as St Marys, Plumpton Ridge, Marsden Park, Schofields, Riverstone, Deans Park, Llandilo and Ropes Creek. Other raw materials include indurated mudstone from Nepean River gravels, quartz, porphyry and hornfels which may be derived from Rickaby's Creek gravels, and basalt;
- Stands of remnant old growth vegetation retain the potential for scarred trees to be present; however, large scale land clearance of the plain in general means that such stands of vegetation are rare; and
- Evidence of post-contact camp sites may be located in close proximity to early European houses and farms, or official buildings.

7.2.1. Clarification of the Cumberland Plan Predictive Model

More recent archaeological studies across the Cumberland Plain have resulted in a refinement of the above described model, and a move away from the strict assumption that Aboriginal sites will only be found in close proximity to permanent water courses; on creek banks and alluvial flats, or on high ground, and within range of food resources and the raw materials for tool making.¹⁶²

More recent studies at Mungerie Park and Parklea Leisure Centre have proven that large artefact scatters may also be found up to 250 metres away from major watercourses, and it has been suggested that the more traditional predictive model may reflect surface visibility and site formation processes, rather than the actual ways in which Aboriginal people used the landscape in the past.

A recognition of this clarification of the traditional predictive model is now commonly considered as part of Aboriginal archaeological assessments within the Cumberland Plain, and has been considered as part of this assessment.

It is also stressed that data for site distribution across a landscape, particularly that derived from AHIMS, is often representative of where archaeological assessments have been required/undertaken rather than how Aboriginal people actual used and moved across the landscape in the past. As such, the available dataset is not a comprehensive regional study of site distribution within the landscape, and this should also be considered when assessing the archaeological potential of a specific Study Area.

7.3. RELEVANT ARCHAEOLOGICAL STUDIES/LITERATURE REVIEW

A review of previous archaeological and heritage reports is required as part of the desktop assessment and has been undertaken in accordance with the Due Diligence Code and to provide a better understanding of the archaeological potential of the Study Area.¹⁶³ The most relevant publications are outlined below.

Mary Dallas Consulting Archaeologist, 1988, Archaeological Survey of the Department of Housing Project 12257 Kiawaka Estate, Casula, NSW, report to Department of Housing

In 1988 Mary Dallas Consulting Archaeologist was engaged to undertake an archaeological study of the (then) proposed Kiawaka Housing Estate at Casula, NSW. The purpose of the study was to identify and record sites of Aboriginal significance that would be impacted by the proposed housing development.

Through a comprehensive ground survey, five archaeological sites were identified within the study area, being two artefact scatters and three scarred trees. The artefact scatter sites contained between 5 and 21 artefacts of chert, silcrete, quartz and indurated mudstone. These sites were described as:

¹⁶² AMBS 2011: 14

¹⁶³ DECCW 2010:13

¹⁶⁰ ABORIGINAL ARCHAEOLOGICAL CONTEXT

'small disturbed sites on the ground of spurs... these sites are distinguished by surface scatters of artefacts in exposed, denuded and damaged contexts. It is highly unlikely substantial or significant undisturbed potentially artefact bearing deposit is present at their locations.'

With regards to the scarred trees, these were found on eucalypt species trees that are identified in the reporting as being over 100 years old.

Overall, the report recommended that further archaeological survey, site recording or investigation was not warranted for the study area or sites contained therein. This was based on the disturbed context in which artefacts were identified, as well as the assessed limited potential for substantial sub-surface deposits to be present. However, it was recommended that consent to destroy permit be obtained for Kiawaka 1 (open camp site), including surface artefact collection, prior to development of the site's location. As the location of Kiawaka 2 (open camp site) was to be maintained as open space as part of the development, it was recommended that a layer of soil/turf be placed over the site to prevent further damage.

It was further recommended that the three scarred trees be preserved *in situ* due to their relatively rarity within the regional landscape.

Navin Officer, 1993, Further Archaeological Investigation of the M5 Casula Link Corridor at Prestons, <u>NSW</u>

Navin Officer undertook test excavations on the banks and flats of Maxwell's Creek, near the intersection of the M5/M7 and Camden Valley Way to the immediate north of the current Study Area, in accordance with recommendations made by Haglund & Associates in 1992. Although no artefacts were recovered in the 57 pits excavated by spade, it is estimated that only 0.016% of the three testing areas was excavated.

Further, the excavated soil was not completely sieved in order to recover artefacts, with Navin Officer noting that 'soil was hand-crumbled into a five millimetre mesh but, in most localities, was too damp to sieve'. Navin Officer found that the areas had been affected by considerable disturbance and regular flooding in the past, and considered that the potential for significant, in situ sites was low; instead, they postulated that a background scatter of artefacts was likely to be present in this location, which was unlikely to be discovered by test pit sampling.

Therefore, although the tested areas were in close proximity to the reliable water of Maxwell's Creek, no large sites were found; however, this result may have been affected by the limited excavation area and, limitations in the excavation methodology.

Navin Officer, 1998, Archaeological Subsurface Testing Program: Proposed Industrial Development Area, The Crossroads, Liverpool NSW

Following their survey of The Crossroads in 1997, Navin Officer undertook test excavations on the banks and flats of Maxwell's Creek, approximately 200 metres south of the 1993 Navin Officer excavations (see above). While no artefacts had been recovered from the 1993 excavations, Navin Officer considered this area to be relatively undisturbed, and identified it as having archaeological potential, although ground visibility was too low to identify any surface artefacts.

Therefore, mechanical excavation of the area by backhoe was undertaken. Although only 0.12% of the area of archaeological potential was excavated (of which only a sample was sieved), 92 artefacts were recovered (an average of almost two artefacts per square metre of the excavated area). Navin Officer interpreted the site as representing background scatter. Although the tested area was in close proximity to the reliable water of Maxwell's Creek, no large sites were found; however, this result may have been affected by the limited excavation area and, limitations in the excavation methodology.

AMBS, 2000, Maxwell's Creek Archaeological Salvage and Monitoring, Prestons, NSW

AMBS undertook salvage excavations in an area of PAD near site MC-1, on the bank of Maxwell's Creek in a relatively undisturbed area of Cumberland Plain Woodland (approximately 2.9 kilometres to the north of the current Study Area). Three areas of the PAD were excavated, by hand and mechanically, resulting in the recovery of 151 artefacts from 78m² (an average of almost two artefacts per square metre that was excavated).

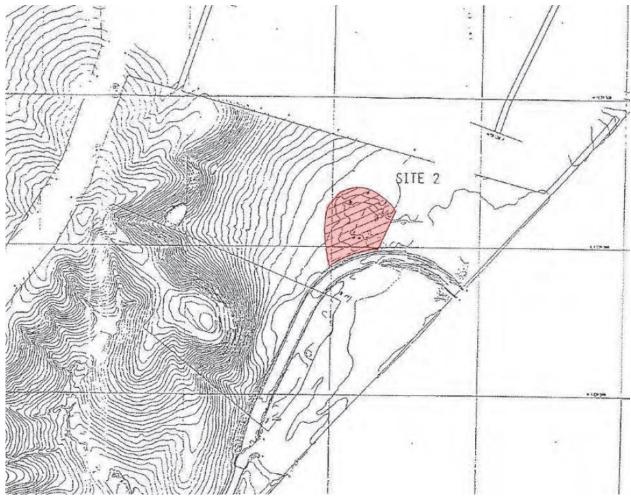
The site was interpreted as evidence of low-density/background artefact scatter throughout the area. It was noted that undisturbed Aboriginal sites are thought to be rare on Maxwell's Creek, due to extensive development along the creek line.

Dallas, M., 2000, Aboriginal Archaeological Test Excavation Report: Macquarie Fields House

Dallas undertook test excavation of an area of PAD that had been identified as potentially representing Aboriginal occupation focused around a bend of Bunbury Curran Creek, near Macquarie Fields House; this PAD was located within the current Study Area and at the registered location of AHIMS site #45-5-2495.

The test excavations consisted of 17 1m² backhoe trenches in an area proposed to be impacted by a perimeter road and house blocks, and four backhoe trenches in landfill within the PAD. The excavations revealed a low density background scatter of stone artefacts, of types common in the region, and hence considered to be of low archaeological significance.

Figure 101 - Location of MFH#2 and area of PAD (cross-hatching, red) excavated by Dallas in 2000



Source: Dallas 2000

Central West Archaeological & Heritage Services, 2002, Western Sydney Orbital Motorway: Aboriginal Archaeological Investigations, Government Road Detention Basin Site, Hoxton Park: A Supplementary Report, a report to NSW Roads & Traffic Authority RTA Client Services Directorate Motorway Services Branch

In 2002 the RTA were proposing to construct a stormwater run-off detention basin on the northern side of Government Road, adjacent to and west of Hinchinbrook Creek, Hoxton Park. The required earthworks were to occur over an area of approximately 57 hectares. Central West were engaged to undertake an archaeological survey of the proposed detention basin and to build on an earlier archaeological study of the site undertaken by Brayshaw and White in 1999.

Despite the survey occurring on a landform generally assessed to be highly archaeologically sensitive (i.e. alluvial floodplain), the archaeologist determined that the highly flood prone nature and highly disturbed state of the survey area make it very unlikely for the site to contain any areas of PAD. Overall, no areas of PAD were identified, nor were any Aboriginal objects or sites.

It was determined that the proposed detention basin could proceed without further investigation of the potential Aboriginal archaeological resource.

<u>Central West Archaeological & Heritage Services, 2002, Western Sydney Orbital Motorway: Aboriginal</u> <u>Archaeological Investigations, Illaroo Road Detention Basin Site #22: A Supplementary Report, a report</u> to NSW Roads & Traffic Authority RTA Client Services Directorate Motorway Services Branch

In 2002 the RTA were proposing to construct three stormwater run-off detention basins in the vicinity of Illaroo Road, Hoxton Park, adjacent to Cabramatta and Hinchinbrook Creeks. The required earthworks were to occur over an area of approximately 9 hectares. Central West were engaged to undertake an archaeological survey of the proposed detention basin and to build on an earlier archaeological study of the site undertaken by Brayshaw and White in 1999.

Despite the survey occurring on a landform generally assessed to be highly archaeologically sensitive (i.e. alluvial floodplain), the archaeologist determined that the highly flood prone nature and highly disturbed state of the survey area make it very unlikely for the site to contain any areas of PAD. Overall, no areas of PAD were identified, nor were any Aboriginal objects or sites. This was the same finding as that made for the Government Road detention basin site, referred to above.

A previously registered Aboriginal site, being an isolated find (AHIMS #45-5-2471), had been recorded in 1999 at the northeast corner of the Illaroo Road survey area, on privately owned land. This artefact, which was originally recorded in a highly disturbed context, was unable to be relocated as part of the 2002 survey. Irrespective of this, it was recommended that if harm to the registered site could not be avoided then a consent to destroy permit would be required.

No further investigation of the potential Aboriginal archaeological resource in the form of test or salvage excavation was recommended.

<u>Central West Archaeological & Heritage Services, 2002, An Aboriginal Archaeological Study of the</u> <u>Proposed Hoxton Park Partial Sewerage Transfer via Liverpool Submain, report to Robynne Mills</u> <u>Archaeological & Heritage Services & Sydney Water</u>

In 2002 Sydney Water were proposing to transfer a portion of the sewage from the Hoxton Park Release Area in southwestern Sydney to Liverpool Sewage Treatment Plan, which was to require approximately seven kilometres of new pipeline to be laid between the two locations. Pipe laying was to consist of both trenching and under boring (tunnelling) methods. To assess the potential archaeological impacts of the proposal, Central West were engaged to undertake an archaeological assessment and field survey, which was undertaken on foot.

The field survey determined that the entire survey area occurred on a generally highly disturbed Cumberland Plain landscape, and passed through areas of disturbed creek banks, alluvial floodplains and adjacent plans, predominately within highly disturbed road corridors and within areas of dense urban housing development.

Again, despite the survey occurring on a landform generally assessed to be highly archaeologically sensitive (i.e. alluvial floodplain), the archaeologist determined that the highly flood prone nature and highly disturbed state of the survey area make it very unlikely for the site to contain any areas of PAD.

Two disturbed creek bank locations and adjacent creek banks were identified during the field survey as areas which, had they not been considerably disturbed by past pipeline construction and other archaeologically deleterious impacts, would have been recommended for sub-surface testing prior to development.

Although no PAD areas were identified within the survey area due to the above disturbance, a precautionary measure of archaeological monitoring during submain excavation was recommended for the northern and southern banks of Cabramatta Creek, Hoxton Park (adjacent to the Hinchinbrook Creek junction) and for the northern bank and adjacent alluvial terrace of the second crossing of Cabramatta Creek, approximately 400 meters to the east of the Hinchinbrook Creek junction.

No further investigation of the potential Aboriginal archaeological resource in the form of test or salvage excavation was recommended.

Jim Kelton, Central West Archaeological & Heritage Services, 2003, Report on the Archaeological Subsurface Testing Program at the Western Sydney Orbital Motorway Detention Basin #18, PAD 6 Location, report commissioned by Abigroup Leighton Joint Venture

In 2003 sub-surface testing of PAD 6, situated on the western banks of Maxwells Creek, Prestons, was undertaken. This PAD was identified as an area of potential archaeological deposit in 1999, and again in 2002.

At the time, the RTA indicated that due to engineering constraints it was not practical to avoid impact to PAD 6 as part of the Western Sydney Orbital Motorway Project (WSO). As such, a preliminary research permit was applied for in order to further investigate the archaeological potential of the PAD.

A total of 21 test auger pits were excavated from the PAD 6 location. Four stone artefacts were recovered from three separate augered test pits. Artefact type, density and distribution patterning was limited and relatively even at the three test pit locations. Based on the low density of artefacts, it was determined that no further archaeological investigation of the site was warranted.

The consistent low density and distribution of artefacts was assessed to indicate either an extremely low level of past Aboriginal occupation at the site, or to indicate a lack of integrity of the material as intact archaeological deposits.

A consent to destroy permit was applied for to enable the WSO to proceed as planned, with no permit conditions recommended by the consulting archaeologist.

Biosis Research, 2003, An Archaeological Assessment of a Proposed School Site, Horningsea Park, New South Wales, final report for St Hilliers

In 2003 Biosis undertook an Aboriginal archaeological assessment of a proposed school site at Horningsea Park. No Aboriginal archaeological material was located during the course of the survey. Background research undertaken for the study suggested that Aboriginal objects and sites were likely to occur in the study area; however, survey results were limited by ground surface visibility conditions, which greatly reduced survey effectiveness. The report determined that further work in the form of test excavations would determine whether sub-surface archaeological deposits were present.

Based on the above, the report recommended that an application for a preliminary research permit be made to the NPWS with an accompanying research design also provided. Machine testing was recommended as the most suitable methodology in this instance, given the prior disturbance and soil type within the study area. A series of grader or backhoe scrapes were recommended to remove vegetation and any disturbed topsoil, with the aim of revealing any sub-surface deposit within the area. It was finally recommended that this mechanical excavation be monitored by an archaeologist and Indigenous community representative, and that if material located is extensive or appears to have the potential to be stratified, that further excavation by hand in the area may be required.

Total Earth Care, 2007, Aboriginal Cultural Heritage and Archaeological Assessment, Proposed YOTS Centre, Macquarie Fields, prepared for Youth Off the Streets, Multiplex

In 2007, Youth off the Streets and Campbelltown City Council collaborated in the development of a youth and community centre in Bunbury Curran Park in Macquarie Fields, NSW. Total Earth Care (TEC) Archaeology were engaged to provide Aboriginal cultural heritage consultancy services for the project.

TEC had previously completed a Plan of Management for Bunbury Curran Park that included recommendations in relation to Aboriginal cultural heritage management, which were made collaboratively with Aboriginal stakeholder groups (Tharawal Local Aboriginal Land Council and Cubbitch Barta Native Title Claimants Aboriginal Corporation). These included a requirement for assessment in the event of proposed impact is some parts of the park. The Youth Centre proposal triggered this requirement.

TEC Archaeology conducted a background study and an archaeological survey and assessment of the site jointly with Aboriginal stakeholders. The main outcomes of this assessment were:

No items or places of Aboriginal cultural heritage significance were located in the area in which impact was proposed;

- On the basis of the results of the survey, previous disturbance to the area and a predictive assessment, it was not expected that significant subsurface Aboriginal cultural heritage material exists in the area to be impacted;
- One isolated find (stone artefact), being a red silcrete flake with potential worked edges, was located in an area well outside of the potential impact area, to the north near to Bunbury Curran Creek. This item was subsequently registered with the NSW Aboriginal Sites Registrar (AHIMS);
- No constraints were therefore identified to the proposed development of the YOTS centre in Bunbury Curran Park, and no further Aboriginal cultural heritage or archaeological assessment was recommended.

Australian Museum Business Services, 2011, Proposed Edmondson Park Servicing Scheme: Aboriginal Heritage Impact Assessment, prepared for Parsons Brinckerhoff, on behalf of Sydney Water

This Aboriginal Heritage Impact Assessment was prepared for Parsons Brinkerhoff (PB), on behalf of Sydney Water, for the proposed Edmondson Park Water Servicing Scheme to extend existing trunk infrastructure (water, wastewater and recycled water pipelines) to the Edmondson Park precinct. The study area was located within the Edmondson Park Development Area, one of the Government's initial release areas within the South West Growth Centre.

An archaeological survey of the study area was undertaken by AMBS staff, Sydney Water staff, and Aboriginal stakeholders on 21-22 June and 12-13 July, 2010. The locations of five previously recorded Aboriginal sites were verified during the survey of the proposed project route. Five new Aboriginal sites were also identified and recorded, including one isolated find and four artefact scatters. Based on the results of the survey and the level of disturbance and landform types in the vicinity of the study area, thirty-four areas within the proposed impact area were also identified as having varying degrees of archaeological sensitivity.

In order to mitigate impacts on identified Aboriginal sites, it was recommended that an application for an AHIP be lodged with DECCW for the study area. To avoid duplication in the outcomes, it was also recommended that Sydney Water should consult with other organisations such as the TCA and Landcom to determine their plans regarding archaeological excavations within the project area.

7.4. ABORIGINAL HERITAGE INFORMATION MANAGEMENT SYSTEM (AHIMS)

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken on 13 February 2017. The search was conducted for the following area, which comprises the entirety of the Study Area:

Latitude, Longitude From: -33.9863, 150.8738 - Latitude, Longitude To: -33.9599, 151.8957

The search included a buffer of 1000 metres around this search area.

The results of this AHIMS search showed that a total of 53 Aboriginal archaeological sites are registered as being located within the search area. Of these 53 sites, 11 are listed on AHIMS as being either 'not a site' or 'destroyed'. As such, the actual total number of sites registered within the search area is 42.

Of these 42 sites, three are registered as being located in or within the immediate proximity of the Study Area. All three of these sites are registered as artefact sites (also known as surface artefact scatters).

Although these sites are currently identified as 'valid' in the AHIMS database, the visual inspection undertaken of the Study Area, as well as a review of relevant archaeological reports, suggests that these sites have either been destroyed by later development (e.g. reconfiguration of Bunbury Curran Creek, and construction of the South West Railway), or subject to sufficient further investigation by way of test excavation (refer to Dallas, 2000).

Through enquiries made with the AHIMS registrar directly, it has been determined that there are no permits or other records of impact and/or destruction listed on their internal systems in association with site #45-5-2495. However, enquiries made with Mary Dallas Consulting Archaeologists confirm that the site was sufficiently investigated in 2000. It is therefore a recommendation of this report that an Aboriginal Site Impact Recording Form (ASIRF) is lodged to OEH to have the status of this site formally changed to 'destroyed' or 'not a site' on AHIMS.

Through enquiries made directly to the AHIMS registrar, it has been determined that site #45-5-4253 has been recorded as having been destroyed in association with the South West Railway development; however, this had not been formally updated on AHIMS at the time the enquiry was made. It is understood that the AHIMS registrar was to commence the process of updating the site's status to 'destroyed' following these enquiries.

The AHIMS registrar confirmed that site #45-5-2744 does not have any permits or other records of impact and/or destruction listed on their internal systems in association with this site. As such, OEH/NPWS have directly advised that this site must be treated as valid for the purposes of further assessments/investigations, permit requirements and statutory requirements. It is reiterated, however, that this site is located outside of the current subject property.

More generally, registered sites within the search area include artefact sites (including both surface artefact scatters and isolated finds), potential archaeological deposits (PADs), and modified (carved or scarred) trees. The relative frequency of these site types is shown in the below table. As the table demonstrates, artefact sites are by far the most common site type, collectively accounting for almost 90% (88%) of site types in the search area.

It should be noted that the site frequencies shown in the below table still include site #45-5-2495 as its status as 'destroyed' or 'not valid' requires formal information to be submitted to the AHIMS registrar. The total number of valid sites is therefore 41.

The results of the AHIMS search undertaken are shown in Figure 102, overleaf.

Table 7 – Frequency of site types registered in the wider search area

Site Type	Number	Frequency (%)
Artefacts (Unspecified)	23	56.1
Isolated Artefact	13	31.7
Modified Tree (Carved or Scarred)	3	7.3
Potential Archaeological Deposit	2	4.9
Total	41	100.0%





SH1003 - HURLSTONE DEVELOPMENT PROJECT AT GLENFIELD AHIMS SEARCH RESULTS

Source: Urbis 2017

7.5. PREDICTIVE MODEL

In terms of archaeology, predictive modelling is used to present a model, or series of testable statements, about the nature and distribution of evidence of Aboriginal land use in the study area, based on the historical, environment and archaeological context (refer to above). To achieve this, a predictive model must characterise the patterning of material traces across the local and/or regional area, consider the distribution of natural resources and probable land-use strategies employed by Aboriginal people in the past, and consider the spatial and temporal relationships of sites.

Based on this, an identification of the material traces that are likely to be present in the Study Area can be made, along with inferences as to the nature of Aboriginal occupation of the landscape in the past.

7.5.1. Site Types

The following descriptions of Aboriginal site types is not exhaustive, but does include the most commonly encountered/recording site types, as they appear on the AHIMS.

Artefact Scatters/Deposits

Artefact scatters are defined by the presence of two or more stone artefacts in close association (i.e. within fifty metres of each other). An artefact scatter may consist solely of surface material exposed by erosion, or may contain sub-surface deposit of varying depth. Associated features may include hearths or stone-lined fireplaces and heat treatment pits.

Artefact scatters may represent:

- Camp sites involving short or long-term habitation, manufacture and maintenance of stone or wooden tools, raw material management, tool storage and food preparation and consumption;
- Hunting or gathering activities;
- Activities spatially separated from camp sites (e.g. tool manufacture or maintenance); or
- Transient movement through the landscape.

The detection of artefact scatters depends upon conditions of surface visibility, including vegetation cover, ground disturbance and recent sediment deposition. Factors such as poor light, vegetation, and leaf litter may obscure artefact scatters and prevent their detection during surface surveys. In addition, because artefact scatters are located on the ground surface, and are not fixed to the ground or any other surface, they can be easily disturbed and/or moved from their original contexts, or damaged. The likelihood of identifying artefact scatters in highly disturbed and intensively used areas is generally very low.

Bora/Ceremonial Sites

Bora grounds are a type of ceremonial site associated with initiation ceremonies. They are usually made of two circular depressions in the earth, sometimes edged with stone. Bora grounds can occur on soft sediments in river valleys and elsewhere, although occasionally they are located on high, rocky ground where they may be associated with stone arrangements.

Burials

Human remains tended to be placed in hollow trees, caves or sand deposits. Usually burials are only identified when eroding out of sand deposits or creek banks, or when disturbed by development. Aboriginal communities are strongly opposed to the disturbance of burial sites. The probability of detecting burials during archaeological fieldwork is typically extremely low.

Carved/Scarred Trees

Scarred trees contain scars caused by the removal of bark for use in manufacturing canoes, containers, shields or shelters. Ethnographic records suggest that carved trees were still relatively common in NSW in the early 20th century. They were commonly used as markers for ceremonial or symbolic areas, including burials.

Grinding Grooves

Grinding groove are elongated, narrow depressions in soft rocks (particularly sedimentary), generally associated with watercourses. They are most often found in association with sandstone. The depressions are created by the shaping and sharpening of ground-edge hatchets.

Lithic Quarries

A lithic quarry is the location of an exploited stone source. Sites will only be located where exposures of a stone type suitable for use in artefact manufacture occur; this includes chert, quartz, mudstone, and silcrete. Reduction sites, where the early stages of stone artefact manufacture occur, are often associated with quarries.

Rock Shelters with Art/Engravings and/or Occupational Deposits

Rock shelters include rock overhangs, shelters or caves, which were used by Aboriginal people for shelter, temporary occupation, and resource processing and/or preparation. Rock shelter site may contain artefacts, midden deposits and/or rock art/engravings. These sites will only occur where suitable geological formations are present.

Stone Arrangements

Stone arrangements include circles, mounds, lines or other patterns of stone arranged by Aboriginal people. Some were associated with bora grounds or ceremonial sites, and others with mythological or sacred sites. Hill tops and ridge crests which contain stone outcrops or surface stone, and have been subject to minimal impacts from recent land use practices, are potential locations for stone arrangements. Stone arrangements are also typically located on relatively flat, open land.

7.5.2. Predictive Model

The potential for each of the above identified site types to be present within the Study Area is assessed in Table 8, below. This assessment has been informed by the historical, archaeological and environmental context of the Study Area, the development and current and past uses of the Study Area, and the results of the AHIMS search.

Site Type	Discussion	Potential
Artefact Scatters/Deposits	Within the Study Area, there is potential for stone artefacts to occur in a widespread distribution of variable density across virtually all landform units, apart from in areas which have been substantially impacted by recent land-use/known disturbance.	Low - Moderate
	A higher density of evidence is expected to occur where more focused and/or repeated Aboriginal occupation has occurred (e.g. along higher order watercourses and on adjacent low gradient simple slopes or spur crests).	
	There is a low to moderate potential for artefact scatters to be identified in less disturbed areas of the Study Area. However, if present, surface artefact scatters in these areas are unlikely to be readily visible due to vegetation or general ground cover, and may not be found <i>in situ</i> due to sustained agricultural activities. This is supported by the results of the visual inspection undertaken as part of the current assessment.	
	Studies undertaken in the area, as well as the details of registered Aboriginal sites within and in the vicinity of the Study Area, strongly	

Table 8 - Predictive model for archaeological sites within the Study Area

Site Type	Discussion	Potential
	suggest that, if present, artefact scatters and/or deposits will be low density.	
	Additionally, the geology of the Study Area does not suggest that raw stone materials preferred for working were readily available within the immediate vicinity. Though stone material is likely to have been sourced from other areas, the absence of readily available sources within the Study Area may further reduce the likelihood for artefact scatters to be present, and particularly for artefact scatters/deposits of high density to be present.	
Bora/Ceremonial Sites	The majority of the Study Area has previously been subject to disturbance due to farming, development and continuous land use. Additionally, sites of a similar nature have not previously been identified in proximity to the Study Area or in the local area generally, and the Study Area was not identified as having any particular or specific spiritual or cultural significance for the Aboriginal community as part of previous investigations. ¹⁶⁴	Very Low- Nil
	The potential for bora/ceremonial sites to be present within the Study Area is therefore assessed as very low to nil.	
Burials	Based on previous/current land uses and the associated disturbance, as well as the general absence of substantial sandy creek beds, suitable hollow trees, and suitable caves, the potential for burial sites to occur within the Study Area is considered to be very low.	Very Low - Nil
	There is no historical or cultural information to suggest that burials are likely to be present in the area, however the potential presence of burials cannot be completely discounted.	
Carved/Scarred Trees	Carved/scarred trees are typically found in association with stands of original vegetation. Land use impacts over time, which have involved the extensive clearance of vegetation across NSW generally, has resulted in this site type becoming extremely rare.	Very Low - Nil
	Given both the extended time between when this practice was more common, and the extent to which vegetation has been cleared and/or disturbed within the Study Area, it is considered that the potential for carved/scarred trees is very low to nil.	
Grinding Grooves	Grinding grooves are most likely to be located in sedimentary bedrock (sandstone) along watercourses.	Low
	As there are watercourses located within and in proximity to the Study Area, and the underlying geological formations feature sandstone, the potential for these sites to be present within is	

¹⁶⁴ Note: information regarding the spiritual and/or cultural significance of any area may be sensitive information. Sharing this information for the purposes of archaeological investigation/reporting is entirely at the discretion of the community, and an absence of documentation should not be assumed to equate to non-significance

Site Type	Discussion	Potential
	assessed as low. It is noted that no sandstone was identified during the visual inspethrfction of the Study Area.	
Lithic Quarries	Lithic quarries occur in association with outcrops of suitable stone material. The underlying geology of the Study Area, which is not characterised by an abundance of any of the preferred raw stone materials, suggests that such outcrops are unlikely to be present in the Study Area. None were observed during the visual inspection and none have ever previously been recorded as being present within the immediate landscape.	Nil
	The potential for lithic quarries to be present is therefore considered to be nil.	
Rock shelters with Art/Engravings and/or Occupation Deposit	Previous assessments of the Study Area, as well as a review of the topography and landscape, suggests that geological formations associated with the presence of rock shelter sites are not common within the Study Area. This is confirmed by the visual inspection undertaken as part of this assessment.	Nil
	The potential for this site type to occur within the Study Area is therefore assessed as nil.	
Stone Arrangements	Stone arrangements are typically situated on hill tops, or along ridge crests that contain stone outcrops and/or surface stone, and are more likely to be located on relatively flat, open land.	Very Low - Nil
	Given the extent to which the Study Area has been disturbed due to continuous use, as well as the scarcity of the abovementioned landforms within the Study Area, the potential for stone arrangements to be present within the Study Area is considered to be very low to nil.	

7.5.3. Summary

The predictive model presented in Table 8, above, demonstrates there the potential for Aboriginal archaeological sites within the Study Area is highly dependent upon the presence/absence of particular landscape features, the extent to which the area has previously been disturbed, and the current condition (including ground surface visibility) of the Study Area.

Based on a review of these factors, it has been determined that the low density artefact scatters/deposits have the highest potential to be present within the Study Area. This is based on a review of relevant investigations that have been undertaken in the vicinity of the Study Area, the nature of registered sites located within/in proximity to the Study Area (i.e. the frequency of this site type across the wider landscape), and a review of the environmental context.

All other site types, including rock shelter sites, grinding grooves, carved/scarred trees, bora/ceremonial sites and stone arrangements are considered to have a low to very low level of potential to occur within the Study Area. This is based on a number of factors, including the relatively low number of such site types having been previously identified in the area generally, the geology and topography of the Study Area, and the extent to which the Study Area has been disturbed (including vegetation clearance).

8. HISTORICAL ARCHAEOLOGICAL CONTEXT

As outlined at Section 5, above, the Study Area was initially granted to Throsby and Meehan in the early 1800s, and was generally used for agricultural and grazing purposes until the early 1900s/1920s, from which time onwards it was owned and occupied by the Department of Education.

There is no evidence to suggest that the Study Area contained any buildings or structures of significance that pre-date the use of the site for educational purposes. Historical mapping does not indicate that any buildings of particular note, being either civic buildings (schools, police stations, rail stations, asylums, council chambers) or notable private residences (such as Macquarie Fields House to the south) were previously located within the Study Area.

Of buildings and ancillary structures constructed after the turn of the century (early 1900s) and in association with the use of the site for educational purposes, the most significant are extant. This includes the former Glenfield Special School buildings, and the main Hurlstone Agricultural School buildings, as identified in Section 11, below.

Based on a review of historical aerial imagery from 1956 onwards, it appears that the Study Area has been maintained in its general use as land associated with Hurlstone Agricultural School and former Glenfield Special School from the 1920s onwards. Though a number of buildings and ancillary structures associated with this use have since been demolished (such as the Laboratory Building associated with use of part of the site as a Veterinary Research Station/Glenfield Experimental Farm), it is unlikely that the archaeological remains of any of these buildings would reveal information about the site and its history that is not readily available through extant buildings and/or the historical record.

8.1. ASSESSMENT OF HISTORICAL ARCHAEOLOGICAL POTENTIAL

Archaeological potential is defined as:

The degree of physical evidence present on an archaeological site, usually assessed on the basis of physical evaluation and historical research. ¹⁶⁵

Archaeological research potential of a site is the extent to which further study of relics likely to be found is expected to contribute to improved knowledge about NSW History which is not demonstrated by other sites, archaeological resources or available historical evidence. The archaeological potential of the study area will be presented using the following grades:

Low Potential: land use history suggests limited development or use, or there is likely to be quite high impacts in these areas, however deeper sub-surface features such as wells, cesspits and their artefact-bearing deposits may survive.

Moderate Potential: land use history suggests limited phases of low-moderate development intensity, or that there are impacts in this area. A range of archaeological remains are likely to survive, including building footings and shallower remains as well as deeper sub-surface features.

High Potential: substantially intact archaeological remains could survive in these areas.

The following table details the potential for archaeological features or deposits to survive in the study area.

¹⁶⁵ Department of Urban Affairs and Planning, 1996

Phase	Activity	Potential Archaeological Remains	Likely Survival
Pre-1810s Meehan and Throsby's Land Grant	Vacant land	Tree roots, charcoal deposits, artefact scatters, soil deposits, palaeobotanical evidence.	Nil - low due to ephemeral nature of remains and extensive construction works and reworking of the built and natural landscape in following phases. Such remains are unlikely to provide information that would significantly contribute to the understanding of the local area's history, or provide information that is unavailable elsewhere.
c. 1810s – 1910s	Land predominately used for cultivation and farming. Associated with various owners, being predominately Meehan, and later Samuel Terry, James Ashcroft, and the Ross Brothers. Potential development of ancillary structures.	Fence posts, connecting paths/tracks, cutting of bedrock, drainage, dirt or gravel surfaces. Occupational deposits. Building remains (foundations, surfaces), paths, underground services and artefacts associated with potentially undocumented former buildings, ancillary structures, drainage, deep features such as rubbish pits, cesspits and wells.	 Nil – low in developed areas due to demolition of the buildings and later construction works/reworking of the natural landscape, and low-moderate in generally undeveloped areas. There is also a limited degree of potential for occupational deposits associated with use of the Study Area as farmland to be present in the less developed areas of the site. It is noted, however, that any such remains, if present, are likely to have been disturbed by subsequent phases of use and development. As already noted, no significant civic or public buildings are known to have been present within the Study Area, with Meehan's residence(s) and buildings associated with his estate located to the south and within the current Macquarie Fields House property. The historical record strongly suggests that the Study Area was maintained as undeveloped, agricultural land throughout this phase. As such, the potential for any substantial or aesthetically distinctive buildings to have been present in the

Phase	Activity	Potential Archaeological Remains	Likely Survival
			Study Area during this phase is assessed as very low.
			Small scale ancillary structures (such as sheds, shelter, etc), potentially associated with the use of the land for agricultural purposes, may have been present within the Study Area. However, by their nature any such structures are unlikely to have been particularly substantial. The likelihood for any remains associated with such structures to be recovered intact, or to contribute any new or valuable information to an understanding of the site or wider local area's history, is assessed to be severely limited.
			Archaeological remains from this period, if present, if found relatively intact, and if able to be conclusively associated with this period, have the potential to be of local significance by way of their association with notable historical figures. However, the anticipated nature and condition of such remains means that they are highly unlikely to be of state significance.
present	Veterinary Research Station/Glenfield Experimental Farm, former Glenfield Special School, Hurlstone Agricultural School	and general buildings since demolished. Agricultural equipment and occupational deposits. As noted above, st associated with for structures from this present on site. Ho evidence to sugge buildings or structu greater significanc which are extant. I considered unlikely remains to contribu	The potential for archaeological remains from this phase to be present on site is assessed as low to moderate.
			As noted above, structural remains associated with former buildings or structures from this phase may be present on site. However, there is no evidence to suggest that any former buildings or structures were of greater significance than those which are extant. It is therefore considered unlikely for any such remains to contribute new or significant information about this phase of use that is not available

Phase	Activity	Potential Archaeological Remains	Likely Survival
			either via extant buildings or within the historical record. Similarly, occupational deposits that date from this phase, including agricultural equipment, are unlikely to contribute information that is not already readily available in the historical record.

9. VISUAL INSPECTION AND FIELD RESULTS

A visual inspection of the Study Area was undertaken to identify whether Aboriginal objects were present on the ground surface or were likely to be present below the ground surface. In accordance with the relevant legislations and codes, a qualified archaeologist undertook the visual inspection.¹⁶⁶

A visual inspection of the Study Area was undertaken on 15 February 2017 by Urbis Senior Heritage Consultant/Archaeologist Karyn Virgin and Heritage Consultant Ashleigh Roddan. This inspection was undertaken on foot (pedestrian survey).

9.1. BUILT HERITAGE

During the visual inspection, a number of built structures were identified and catalogued. These built structures included buildings of heritage significance, later buildings of no heritage significance, and ancillary farming structures. These structures are identified in detail in Section 2 of this report, and their conservation value (significance) is ranked in Section 11 of this report hereunder.

9.2. HISTORICAL ARCHAEOLOGY

During the visual inspection, no evidence of any historical archaeological sites or relics were identified, and no areas considered likely to contain historical archaeological remains or relics were identified.

However, sub-surface remains or deposits do not often have a discernible surface presentation, and so the results of the visual inspection are not considered to preclude the presence of sub-surface historical archaeological material or remains within the Study Area.

9.3. ABORIGINAL CULTURAL HERITAGE

As discussed in Section 6.4, above, remnant vegetation appears to have been retained within the Study Area in sparse stands, and this is predominately concentrated around watercourses. The precise age of this vegetation is not known, though historical aerial imagery shows that the majority of existing vegetation was present during the 1950s. This vegetation primarily comprises mature eucalypt trees.

Remnant vegetation within the Study Area was inspected, and was not observed to demonstrate any evidence of cultural scarring and/or engraving. All other vegetation present in the Study Area is regrowth vegetation.

Drainage channels within the Study Area were also inspected. Generally, these drainage channels and the surrounding landscape was observed to be disturbed by way of landscaping works, development in the vicinity, modification of the waterways for the purposes of drainage management, and agricultural/grazing activities. No exposed sandstone sheets/beds were observed in association with the drainage channels/watercourses located within the Study Area.

Throughout the Study Area, ground surface visibility was very low (<5%) due to the density of grass cover present. Ground surface exposures were limited (<5%) and were almost exclusively located in areas that had been clearly impacted by erosion and/or disturbance associated with development and/or landscape modification (e.g. construction of dams).

Where visible, soils were observed to predominately be tightly packed and dry, orange or brown, clayey subsoils. However, this is likely to be a result of exposed soils being most visible in disturbed areas, as noted above. In less disturbed areas, soils were observed to be loose brown loamy soils.

A substantial amount of ironstone gravels and shale was also observed throughout the Study Area, and particularly in association with disturbed areas and areas of greater exposure. However, no raw stone material observed within the Study Area was identified as suitable in terms of materiality, composition of size for use in the manufacture of stone tools. As already mentioned, no sandstone sheets or beds of an appropriate quality for grinding grooves, rock art or cultural engravings were identified and no outcrops or overhangs were present within the Study Area.

¹⁶⁶ DECCW 2010:12-13

Photographs of vegetation in the Study Area:



Picture 89 – Vegetation (mature eucalypts) within the northeast portion of the Study Area and in proximity to the Hurlstone Agricultural School site



Picture 90 – Vegetation (mature eucalypts) within the northeast portion of the Study Area and in proximity to the Hurlstone Agricultural School site

Photographs of the Study Area showing watercourses/drainage channels:



Picture 91 – General view of one of the dams in the northern portion of the site, facing east



Picture 92 – Drainage channel located in the northeast portion of the site, facing east



Picture 93 – Modified drainage channel in northern portion of Study Area



Picture 94 – Drainage channel located in the northern portion of the Study Area (centre), facing north

Soils observed in the Study Area:



Picture 95 – Detail view of dry, tightly packed clay subsoil with in an exposure



Picture 96 – Exposed, disturbed clayey subsoils with ironstone gravels within the northern portion of the Study Area and along a vehicle access track



Picture 97 – Looser, brown loamy topsoil in the western portion of the Study Area



Picture 98 – Looser, brown loamy topsoil in the northern portion of the Study Area



Picture 99 – Exposed, disturbed clayey subsoils in the approximate centre of the Study Area



Picture 100 – View of typical ground cover in the Study Area

Examples of disturbance within the Study Area:



Picture 101 – Buildings and structures associated with the Hurlstone Agricultural School



Picture 102 – Generally disturbed terrain in the northern portion of the Study Area



Picture 103 – Highly modified terrain in the southern portion of the Study Area, in proximity to the South West Railway



Picture 104 – Highly disturbed terrain in the vicinity of the South West Railway (shown)

Overall, no Aboriginal archaeological sites or objects were identified. The Study Area in its entirety, including undeveloped areas, was generally observed to be disturbed to varying degrees due to sustained agricultural use since the early 1800s, as well as due to general development, particularly from the early 1900s onwards.

In addition to no new Aboriginal sites or objects being located during the visual survey of the Study Area, the three registered sites located within or in immediate proximity to the Study Area were unable to be relocated. The registered locations of these three sites were observed to be *highly* disturbed, and to comprise obviously modified terrain.

AHIMS site #45-5-2495 is located in an area that has clearly been modified in association with the construction of the South West Railway, and modifications to the alignment of Bunbury Curran Creek. The area was observed to comprise highly modified and disturbed terrain generally, though the precise registered location of #45-5-2495 does not appear to have been subject to direct impact. The surrounding area, previously identified as an area of PAD, was also subject to test excavation by Dallas, as reported in 2000 (refer Figure 101, above).

Figure 103 – Disturbance in the general area in which AHIMS #45-5-2495 is registered (approximate location of AHIMS #45-5-2495, May 2012). This status of this site should be updated in AHIMS to 'destroyed' or 'not a site



Source: http://maps.au.nearmap.com/

Figure 104 – Approximate location of AHIMS #45-5-2495, June 2011. This status of this site should be updated in AHIMS to 'destroyed' or 'not a site'



Source: http://maps.au.nearmap.com/

Through enquiries made with the AHIMS registrar directly, it has been determined that there are no permits or other records of impact and/or destruction listed on their internal systems in association with site #45-5-2495. However, enquiries made with Mary Dallas Consulting Archaeologists confirm that the site was sufficiently investigated in 2000. It is therefore a recommendation of this report that an Aboriginal Site Impact

Recording Form (ASIRF) is lodged to OEH to have the status of this site formally changed to 'destroyed' or 'not a site' on AHIMS.

This is similarly the case with regards to AHIMS sites #45-5-2744 (located in proximity to but outside of the subject property) and #45-5-4253 (located within the subject property); the registered locations of both of these sites were observed to comprise highly disturbed and modified terrain.

Through enquiries made directly to OEH/NPWS regarding these sites, it has been determined that #45-5-4253 has been recorded as having been destroyed in association with the South West Railway development; however, this had not been formally updated on AHIMS at the time the enquiry was made. It is understood that the AHIMS registrar was to commence the process of updating the site's status to 'Destroyed' following these enquiries.

The AHIMS registrar confirmed that site #45-5-2744 does not have any permits or other records of impact and/or destruction listed on their internal systems in association with this site. As such, OEH/NPWS have directly advised that this site must be treated as valid for the purposes of further assessments/investigations, permit requirements and statutory requirements. It is reiterated, however, that this site is located outside of the current subject property.

Figure 105 – Location of registered sites within/in proximity to the Study Area showing extent to which they have been disturbed (approximate location of AHIMS #45-5-4253, known to be destroyed), October 2012)



Source: http://maps.au.nearmap.com/

Figure 106 – Location of registered sites within/in proximity to the Study Area showing extent to which they have been disturbed (approximate location of AHIMS #45-5-2744, October 2012)



Source: http://maps.au.nearmap.com/

Figure 107 – Aerial view of registered locations of AHIMS #45-5-4253 (known to have been destroyed) and #45-5-2744 (indicated generally by red circle), May 2013



Source: http://maps.au.nearmap.com/

Figure 108 - Photographs of the registered site #45-5-4253 (known to have been destroyed)



Picture 105 – Registered location of #45-5-4253 (known to have been destroyed), facing north

Source: Urbis 2017



Picture 106 – Registered location of #45-5-4253 (known to have been destroyed), facing south Source: Urbis 2017

10. ARCHAEOLOGICAL SIGNIFICANCE

The following section assesses the potential archaeological significance of the Study Area, including historical archaeology and Aboriginal archaeology/cultural heritage.

10.1. HISTORICAL ARCHAEOLOGY

Archaeological significance has long been accepted as linked directly to archaeological (or scientific) research potential:

A site or resource is said to be scientifically significant when its further study may be expected to help answer questions. That is, scientific significance is defined as research potential.¹⁶⁷

Assessing the research potential of an archaeological site stresses the importance of the need for archaeological research to add to the knowledge of the past in an important way, rather than merely duplicating known information or information that might be more readily available from other sources such as documentary records or oral history.¹⁶⁸

The Heritage Division of the Office of Environment and Heritage (OEH) issued a new set of guidelines in 2009: Assessing Significance for Historical Archaeological Sites and 'Relics'. These guidelines call for broader consideration of multiple values of archaeological sites beyond their research potential. There are two levels of heritage significance used in NSW: state and local.

The following significance assessment overleaf provides a broad consideration of the potential heritage significance of archaeological remains that may be present on site.

 ¹⁶⁷ Bickford and Sullivan, 1984 p: 23–24, as quoted in the Heritage Branch, 2009, Assessing Significance for Historical Archaeological Sites and Relics.p:8
 ¹⁶⁸ As above.

Table 10 - Assessment of historical archaeological significance

Table TO – Assessment of historical archaeological signif	icance
Criteria	Significance As
Associations with individuals, events or groups of historical importance (NSW Heritage Criteria A, B & D). Archaeological remains may have particular associations with individuals, groups and events which may transform mundane places or objects into significant items through the association with important historical occurrences.	Archaeological represent, if found massociated with the significance by war figures such as Janature and condition relatively low potenthat they are highly and the significance of the second
Does the archaeological site link to any NSW Historic Themes? Will the site contain 'relics' and remains which may illustrate a significant pattern in State or local history? Is the site widely recognised?	Extant buildings a information regard significance for the readily available a archival material a School and Hurlst
Does the site have symbolic value? Is there a community of interest (past or present) which identifies with, and values the specific site?	As such, it is cons remains dating fro basis of historical
Is the site likely to provide material expression of a particular event or cultural identity?	or groups. Such m established assoc and more intact re
Is the site associated with an important person? (the role of the person in State or local history must be demonstrated/known)	
What is the strength of association between the person and the site?	
Did the person live or work at the site? During the phase of their career for which they are most recognised? Is that likely to be evident in the archaeology /physical evidence of the site?	
Did a significant event or discovery take place at the site? Is that evident/or likely to be evident in the	

ssessment

emains from the phase 1810s-1910s, if relatively intact, and if able to be conclusively his period, have the potential to be of local ay of their association with notable historical ames Meehan. However, the anticipated tion of such remains means, as well as the ential for them to be recovered intact, means nly unlikely to be of state significance.

and the historical record provide sufficient ding the phase 1910s - present. Associative his phase is primarily derived from extant and and accessible built heritage elements and associated with the former Glenfield Special tone Agricultural School.

sidered highly unlikely for any archaeological om this phase to have significance on the association with any notable figures, events, material is unlikely to contribute to the already ciative significance of other, more available esources.

archaeology/physical evidence of the site?

Criteria

Significance Assessment

Aesthetic or technical significance (NSW Heritage Criterion C)

Whilst the technical value of archaeology is usually considered as 'research potential' aesthetic values are not usually considered to be relevant to archaeological sites. This is often because until a site has been excavated, its actual features and attributes may remain unknown. It is also because aesthetic is often interpreted to mean attractive, as opposed to the broader sense of sensory perception or 'feeling' as expressed in the Burra Charter.

Nevertheless, archaeological excavations which reveal highly intact and legible remains in the form of aesthetically attractive artefacts, aged and worn fabric and remnant structures, may allow both professionals and the community to connect with the past through tangible physical evidence.

Does the site/is the site likely to have aesthetic value?

Does the site/is the site likely to embody distinctive characteristics?

Does the site/is the site likely to embody a distinctive architectural or engineering style or pattern/layout?

Does the site demonstrate a technology which is the first or last of its kind?

Does the site demonstrate a range of, or change in, technology?

Potential historical archaeological remains associated with previous phases of occupation are most likely to be limited to structural remnants, such as footings, though there is also a limited degree of potential for occupational deposits to be present.

There is no historical evidence to suggest that any buildings previously present on site would have been particularly aesthetically distinctive or representative of a high degree of creative or technical achievement. Rather, any former buildings from the phase 1810s – 1910s are likely to have been ancillary structures or buildings associated with the agricultural use of the site.

Similarly, any undocumented former buildings from the phase 1910s – present are also likely to have been ancillary structures or buildings, and there is no evidence to suggest that any documented former buildings or structures from this phase were of greater significance than those which are extant. This is confirmed by a review of available historical aerials as well as the historical record.

Based on their nature and relatively low potential to be recovered intact, any structural remains of these less substantial buildings, if present, are unlikely to have aesthetic value, or provide information that is unavailable elsewhere. Such remains are also unlikely to demonstrate creative or technical excellence, innovation or achievement or distinctive aesthetic attributes.

Extant examples of significant buildings from both phases are available both within the Study Area as well as at the adjacent Macquarie Fields House property.

Based on the above, potential archaeological remains at the Study Area are not considered to meet the criterion of aesthetic significance.

Criteria

Archaeological Research Potential (current NSW Heritage Criterion E)

Archaeological research potential is the ability of archaeological evidence, through analysis and interpretation, 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 and its 'relics'.

The integrity of the site, the state of preservation of archaeological material and deposits will also be relevant.

To which contexts (historical, archaeological and research-based) is it anticipated that the site will yield important information?

Is the site likely to contain the mixed remains of several occupations and eras, or is it expected that the site has the remains of a single occupation or a short time-period?

Is the site rare or representative in terms of the extent, nature, integrity and preservation of the deposits (if known)?

Are there a large number of similar sites?

Is this type of site already well-documented I the historical record?

Has this site type already been previously investigated with results available?

Is the excavation of this site likely to enhance or duplicate the data set?

Significance Assessment

It is acknowledged that there is a low to moderate degree of potential for the site to contain archaeological remains from the previous phase of occupation (c. 1810s-1910s). It is noted, however, that any such remains (whether structural or occupational), if present, are likely to have been disturbed by subsequent phases of use and development.

As already noted, no significant civic or public buildings are known to have been present within the Study Area, with Meehan's residence(s) and buildings associated with his estate located to the south and within the current Macquarie Fields House property. The historical record strongly suggests that the Study Area was maintained as undeveloped, agricultural land throughout this phase.

As such, the potential for any substantial or aesthetically distinctive but undocumented structures or buildings to have been present in the Study Area during this phase is assessed as very low.

Small scale ancillary structures (such as sheds, shelter, etc), potentially associated with the use of the land for agricultural purposes, may have been present within the Study Area. However, by their nature any such structures are unlikely to have been particularly substantial. The likelihood for any remains associated with such structures to be recovered intact, or to contribute any new or valuable information to an understanding of the site or wider local area's history, is assessed to be severely limited.

The potential for archaeological remains from c. 1910s – present, associated with the Veterinary Research Station/Glenfield Experimental Farm, former Glenfield Special School, and Hurlstone Agricultural School, to be present on site is assessed as low to moderate.

However, there is no evidence to suggest that any former buildings or structures were of greater significance than those which are extant. It is therefore considered unlikely for any such remains to contribute new or significant information about this phase of use that is not available either via extant buildings or within the historical record.

Similarly, occupational deposits that date from this phase, including agricultural equipment, are unlikely to contribute information that is not already readily available in the historical record.

Criteria

Ability to Demonstrate the Past Through Archaeological Remains (NSW Heritage Criteria A, C, F & G).

Archaeological remains have an ability to demonstrate how a site was used, what processes occurred, how work was undertaken and the scale of an industrial practice or other historic occupation. They can demonstrate the principal characteristics of a place or process that may be rare or common.

A site may best demonstrate these aspects at the time of excavation. It may also be possible to explain the nature of the site and demonstrate past practices via public interpretation either before, during, or after excavation.

Does the site contain well-preserved or rare examples of technologies or occupations which are typical of particular historic periods or eras of particular significance?

Does the site demonstrate a short period of occupation and therefore represents only a limited phase of the operations of a site or technology or site? Or does the site reflect occupation over a long period?

Does the site demonstrate continuity or change?

Significance Assessment

Refer to discussion above.

10.2. ABORIGINAL ARCHAEOLOGY

Cultural significance is a concept that assists appraisal of the value of places. The places that are likely to be of significance are those that help us understand the past, enrich the present, and may be of value to future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.¹⁶⁹

10.2.1. Cultural Heritage Significance and Values

The cultural heritage significance and values of an area and of any Aboriginal archaeological sites within that area can be assessed using the four criteria outlined in the *Burra Charter*, aesthetic, historic, scientific and social/ spiritual. These criteria are described below.

Social/Spiritual Value

Social/spiritual value concerns the spiritual, traditional, historical or contemporary associations and attachments which the place or area has for the present-day Aboriginal community. Places of social significance have associations with contemporary community identity. These aspects of heritage significance can only be determined through consultative processes with one or more Aboriginal communities. As such, they are archaeologically invisible and can only be identified with the aid of Aboriginal interpretation. If such sites are known, they hold particular cultural significance to contemporary Aboriginal people. Furthermore, sites of significance are not restricted to the period prior to contact with Europeans. Often events related to the contact period, and at times to the period since European settlement, may be important to the local Aboriginal communities.

Historic Value

Historic value refers to the associations of a place with a person, event, phase or activity of importance to the history of an Aboriginal community. Historic places may or may not have physical evidence of their historical importance, however the significance will be generally greater where evidence of the association or event survives in situ, or where the settings are substantially intact. Some events or associations may be so important that the place retains significance regardless of subsequent treatment. In relation to Aboriginal cultural heritage, many post-contact places and sites have historic value.

Aesthetic Value

Aesthetic value refers to aspects of sensory and may include consideration of form, scale, colour, texture, and material of the fabric or landscape, as well as the smell and sounds associated with the place and its use. With regard to pre-contact Aboriginal cultural heritage sites, the placement within the landscape would be considered under this criterion. Individual artefacts, sites and site features may also have aesthetic significance.

Scientific (Archaeological) Value

Scientific (archaeological) value refers to the importance of a landscape, area, place or object because of its archaeological and/or other technical aspects. Assessment of scientific value is often based on the likely research potential of the area, place or object and will consider the importance of the data involved, its rarity, quality or representativeness, and the degree to which it may contribute further substantial information. Scientific or archaeological significance may be assessed by placing a site, feature or landscape in a broader regional context and by assessing its individual merits in the context of current archaeological discourse.

10.2.1.1. Assessment of Cultural Heritage Significance and Values

An assessment of cultural heritage significance and values incorporates a range of values which may vary for different individual groups and may relate to both the natural and cultural characteristics of places or sites. Cultural significance and Aboriginal cultural views can only be determined by the Aboriginal community using their own knowledge of the area and any sites present, and their own value system.

All Aboriginal heritage evidence tends to have some contemporary significance to Aboriginal people, because it represents an important tangible link to their past and to the landscape. As such, this report does not comment on the cultural heritage significance or values of the Study Area; such significance and values

¹⁶⁹ Australia ICOMOS, 1999

Based on the findings of this assessment, it is a recommended that full consultation with the relevant Aboriginal stakeholders be commenced in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH 2010).

10.2.2. Scientific (Archaeological) Significance

Scientific significance, also referred to as archaeological significance, is determined by assessing an Aboriginal heritage site or area according to archaeological criteria. The assessment of archaeological significance is used to develop appropriate heritage management and impact mitigation strategies. Criteria for archaeological significance have been developed in accordance OEH guidelines, as shown in Table 11, below.

$Table \ 11-Scientific \ (archaeological) \ significance \ criteria$	
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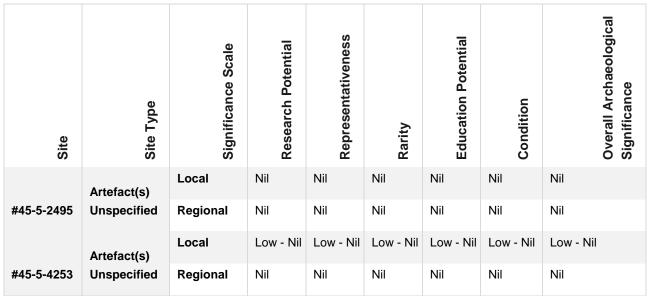
Significance Criteria	Description
Research Potential	Does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
Representativeness	How much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?
Rarity	Is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?
Education Potential	Does the subject area contain teaching sites or sites that might have teaching potential?
Condition	What is the condition of the site? Does it appear to have been impacted/altered?

10.2.2.1. Assessment of Scientific (Archaeological) Significance

In accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*, and in consultation with representatives of the local Aboriginal community, the following assessment of the scientific (archaeological) significance of identified sites within the Study Area has been prepared. Also in accordance with *The Guide*, this assessment employs gradings of significance, being high, medium, and low, which allow significance to be described and compared.

This assessment is presented in Table 12, below.





Overall, the two registered sites are considered to have little to no remaining scientific (archaeological) significance in terms of research potential, representativeness, rarity, education potential and condition due to both sites having been sufficiently investigated and/or destroyed.

More generally, such low-density artefact sites are common in the local area, and are relatively unlikely to make a significant contribution to an understanding of the local area or region's natural or cultural history.

11. BUILT HERITAGE SIGNIFICANCE

11.1. WHAT IS HERITAGE SIGNIFICANCE?

Before making decisions to change a heritage item, an item within a heritage conservation area, or an item located in proximity to a heritage listed item, it is important to understand its values and the values of its context. This leads to decisions that will retain these values in the future. Statements of heritage significance summarise the heritage values of a place; why it is important, why a statutory listing was made to protect these values.

11.2. BUILT HERITAGE SIGNIFICANCE ASSESSMENT

The Heritage Council of NSW has developed a set of seven criteria for assessing heritage significance, which can be used to make decisions about the heritage value of a place or item. There are two levels of heritage significance used in NSW: state and local.

The following assessment of heritage significance has been prepared in accordance with the 'Assessing Heritage Significance' (2001) guides.

Criteria	Significance Assessment
A – Historical Significance An item is important in the course or pattern of the local area's cultural or natural history.	The Study Area originally formed part of the wider agricultural land of the Macquarie Field House estate. The Study Area contains significant rural landscape features including vegetated escarpments, which are important historical visual links between Macquarie Field House and its rural setting.
	The Study Area has been developed with three (3) significant education and research institutions, each of which were the first of their kind in New South Wales, being;
	• The first veterinary research station (1923) with only the Director's residence surviving from this period;
	• The first agricultural boarding school Hurlstone Agricultural High School (1926), which has continued in this use to-date; and,
	• The first established boarding school dedicated to the education of special needs children (1927), which has also continued in this use to-date.
	The memorial forest within the Hurlstone Agricultural High School site was the first of its kind in New South Wales.
	It is considered that the original and early parts of the Hurlstone Agricultural High School collectively meet the threshold for this criterion at a local level. It is further considered that the original group of buildings forming the former Glenfield Special School meet the threshold for this criterion at a state level.

Criteria	Si	ignificance Assessment
Guidelines for Inclusionshows evidence of a significant human activity	_	uidelines for Exclusion has incidental or unsubstantiated connections with historically important activities or processes
 is associated with a significant activity or historical phase maintains or shows the continuity of a historical process or activity 		provides evidence of activities or processes that are of dubious historical importance
B – Associative Significance An item has strong or special associations with the laworks of a person, or group of persons, of important the local area's cultural or natural history.	ife or re in Se in St St St St St St St St St St St St St	he Study Area has historical associations with mancipated convict and surveyor and original owner of acquarie Field House estate (prior to the construction of acquarie Field House), James Meehan. Similarly, the tudy Area has later historical associations with absequent owners of the estate, including Samuel Terry he Botany Bay Rothschild" and John Hosking, the first ord Mayor of Sydney. The former Veterinary Research Station and Hurlstone gricultural High School have associations with various irectors / Ministers for Agriculture and Education in NSW. ost notably, the Study Area is associated with Roy fatts, who attended Hurlstone Agricultural High School, acame a Director of the Veterinary Research Station and ter being Director-General of the Department of griculture. The main road dissecting the Study Area is amed in his honour and his ashes are interred in the ose Garden in the Clarke House forecourt. is considered that the original / early elements of urlstone Agricultural High School, in particular the rose arden and Clarke House, collectively interpret the above ssociation and together meet the threshold for this iterion at a local level. Roy Watts Road name and ignment remain an important interpretative element for is association. the former Director's residence on the northern alignment Roy Watts Road is associated with the former Directors the Veterinary Research Station. However, this sidence does not in itself demonstrate well this ssociation, as it was an ancillary building only associated e Veterinary Research Station period of use, and cannot self interpret the function and use of the site at this eriod. The deterioration of other buildings from this period is well as the redundant use have diminished the gnificance of the dwelling and as such it does not meet e threshold for listing.

Criteria		Significance Assessment	
Guidelines for Inclusion		Guidelines for Exclusion	
• shows evidence of a significant human occupation		has incidental or unsubstantiated connections with historically important people or events	
 is associated with a significant event, person, or group of persons 	\boxtimes	 provides evidence of people or events that are of dubious historical importance 	
		 has been so altered that it can no longer provide evidence of a particular association 	
C – Aesthetic Significance An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.		The Study Area overall retains a number of rural attribute and landscape features, including an overall agricultural aesthetic, vegetated ridge lines and groves of Cumberla wood-plain, that enhance the wider rural setting, and contribute to the understanding of Study Area's relationship with the adjoining Macquarie Field House a former part of the estate.	
	Clarke House and the ot that form part of Hurlston collectively considered to architectural attributes, p and presentation to Roy early buildings are gener Clarke House and the or number of intact internal period. It is considered to Agricultural High School local heritage listing und		
		The rural setting, institutional-based configuration, purposeful architectural design and high-level of intactne of the original former Glenfield Special School buildings contribute to their collective aesthetic value. In particular the five-main buildings (former dormitories and central administration/classroom building) are of high aesthetic value for their arced alignment, internal building relationship, and their striking presentation to the corner Roy Watts Road and Quarter Sessions Road. It is considered that the former Glenfield Special School meet the requisite threshold for state heritage listing under this criterion.	
		The former Director's Residence from the Veterinary Research Station phase of development is an interwar bungalow design with features typical of this typology. T loss of other buildings from this phase of development h diminished the setting and understanding of the former Director's Residence, as accordingly this building does n reach the requisite threshold for heritage listing.	

Criteria	Significance Assessment
Guidelines for Inclusion	Guidelines for Exclusion
 shows or is associated with, creative or technical innovation or achievement 	 is not a major work by an important designer or artist
 is the inspiration for a creative or technical innovation or achievement is aesthetically distinctive has landmark qualities exemplifies a particular taste, style or technology D - Social Significance An item has strong or special association with a particul community or cultural group in the local area for social, cultural or spiritual reasons. 	 has lost its design or technical integrity its positive visual or sensory appeal or landmark and scenic qualities have been more than temporarily degraded has only a loose association with a creative or technical achievement The Study Area has strong social associations through its long-established links with the scientific and educational communities. In particular, there is a strong community association between Hurlstone Agricultural High School and its alumni community of former staff and students and their families. This association is expressed throughout the Hurlstone Agricultural High School area through interpretation panels identifying built and landscaped contributions made to the school from former students, and a large collection of memorabilia donated to the school over time from former students. There is also a strong community association with the memorial forest planted by Hurlstone Agricultural School. The former Glenfield Special School has strong associations with special needs students and their families. It is considered that parts of the Study Area comprising the memorial forest, particular areas and buildings of the Hurlstone Agricultural High School, and the former Glenfield Special School, meet the requisite threshold for heritage listing at a local level under this criterion.
 Guidelines for Inclusion is important for its associations with an identifiable group is important to a community's sense of place 	 Guidelines for Exclusion is only important to the community for amenity reasons is retained only in preference to a proposed
 is important to a community's sense of place 	Is retained only in preference to a proposed alternative

Criteria	Significance Assessment		
E – Research Potential An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.	The original and early education buildings at the former Glenfield Special School and Hurlstone Agricultural High School are highly intact and provide the opportunity for further research regarding construction methodologies for different school types from the interwar period. In particular, the differences between the agricultural boarding school and the special needs boarding school, which were built around the same time, are evident in the buildings' architectural detailing, configuration and presentation. The archaeological potential of the site is discussed in detail within this report, and the significance assessment regarding archaeology is included at Section 10.		
Guidelines for Inclusion	Guidelines for Exclusion		
 has the potential to yield new or further substantial scientific and/or archaeological information is an important benchmark or reference site or type provides evidence of past human cultures that is unavailable elsewhere 	 the knowledge gained would be irrelevant to research on science, human history or culture has little archaeological or research potential only contains information that is readily available from other resources or archaeological sites 		

Criteria	Significance Assessment
F – Rarity An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history.	The Study Area has rarity value for its historical and visual relationship with the adjoining Macquarie Field House estate, one of the few remaining colonial estates set within a rural landscape. However, this value has been substantially diminished through the continued subdivision and severing of the estate pastures over time, the development of the Study Area with new uses, and the recent development of the South West Rail Link. While some visual links between ridge lines remain, the contribution of the Study Area to the rural colonial value of the Macquarie Field House estate has been substantially lost.
	 The former Director's Residence is the only remaining building from the Veterinary Research Station phase of development, being the first purpose built agriculture research station in NSW. However, this residence does not in itself demonstrate well this rarity value, as it was an ancillary building only associated the Veterinary Research Station period of use, and cannot itself interpret the function and use of the site at this period. The Hurlstone Agricultural High School was the first agricultural based school established in NSW, although the Study Area at Glenfield was the school's second location (after Ashfield). This form of educational facility with specific agricultural based curriculum is rare in the context of education throughout Australia. It has operated in this capacity continually since its commencement in 1926.
	The former Glenfield Special School was the first educational facility to be developed addressing the specific special needs of children. It has operated in this capacity continually since its commencement in 1927. It is considered that the rarity values of the Study Area associated with Hurlstone Agricultural High School and the former Glenfield Special School meet the requisite threshold for heritage listing at local and state levels respectively.

Criteria		Significance Assessment		
Guidelines for Inclusion		Guidelines for Exclusion		
 provides evidence of a defunct custom, way of life or process 		 is not rare is numerous but under threat		
 demonstrates a process, custom or other human activity that is in danger of being lost 				
 shows unusually accurate evidence of a significant human activity 	\boxtimes			
• is the only example of its type	\boxtimes			
demonstrates designs or techniques of exceptional interest	\boxtimes			
 shows rare evidence of a significant human activity important to a community 				
G – Representative		The former Director's Residence has features typic		
An item is important in demonstrating the principal characteristics of a class of NSW's (or the local area's):		typology and is a good example externally of an interwar bungalow residence. The internal integrity of the building is unknown.		
• cultural or natural places; or		The original classroom and dormitory buildings of		
cultural or natural environments		Hurlstone Agricultural High School, as well as the s buildings which make up the former Glenfield Speci School, are architecturally representative of educati facilities of the period.	ial	
Guidelines for Inclusion		Guidelines for Exclusion		
• is a fine example of its type	\boxtimes	• is a poor example of its type		
 has the principal characteristics of an important class or group of items 		does not include or has lost the range of characteristics of a type		
 has attributes typical of a particular way of life, philosophy, custom, significant process, design, technique or activity 		• does not represent well the characteristics that make up a significant variation of a type		
• is a significant variation to a class of items				
 is part of a group which collectively illustrates a representative type 				
• is outstanding because of its setting, condition or size	\boxtimes			
 is outstanding because of its integrity or the esteem in which it is held 				

11.3. SCHEDULE OF SIGNIFICANT BUILT ELEMENTS

The significance of the existing structures and buildings on the site has been evaluated according to the following gradings:

- <u>High Conservation Value</u>: The place is critical to the understanding of the historical development and cultural significance of the site. The place was one of the first buildings constructed on the property. The place is an early / intact example. The place is a fine / the only example of its type.
- <u>Medium Conservation Value</u>: The place contributes to an understanding of the historical development and cultural significance of the site, however is not one of the primary buildings or structures.
- <u>Low Conservation Value</u>: The place contributes to the understanding and functionality of the site, but has no heritage significance (ancillary development which does not detract from the site's significance), or the place detracts from the heritage significance of the site.

These high-level grading assessments are based on a review of available historical documentation detailed within this report, and our on-site inspection. The gradings do not constitute a full and thorough significance review of each place or building throughout the site. The majority of later buildings were only inspected externally.

11.3.1. Hurlstone Agricultural High School Buildings

Table 13 – High level significance gradings of buildings

Bui	ding	DateGrading ofConstructedSignificance	
1	Brick and tiled caretaker's dwelling	1975-82	Low Conservation Value
2	Metal storage / farm shed	1970-75	Low Conservation Value
3	Metal storage / farm shed	1970-75	Low Conservation Value
4	Brick and tiled caretaker's dwelling	1970-75	Low Conservation Value
5	Metal hay shed	1982-91	Low Conservation Value
6	Metal farm shed	1965-70	Low Conservation Value
7	Farm shed	1965-70	Low Conservation Value
8	Farm shed	1975-82	Low Conservation Value
9	Metal framed and clad farm shed / pig stalls	1975-82	Low Conservation Value
10	Metal farm shed	1970-75	Low Conservation Value
11	Metal framed and clad farm shed and silos	1991-98	Low Conservation Value
12	Metal framed and clad farm shed	1970-75	Low Conservation Value
13	Brick and metal sheet roof farm building / shed	1956-67	Low Conservation Value
14	Brick and metal sheet roof farm building / shed	1967-70	Low Conservation Value
15	Brick and metal sheet roof piglet pens (former goat pens)	By 1956	Low Conservation Value
16	Green metal clad and roofed farm shed	By 1956	Low Conservation Value
17	Metal framed and roofed storage canopy	1956-67	Low Conservation Value

Build	ling	Date Constructed	Grading of Significance
18	Metal storage farm shed	1956-65	Low Conservation Value
19	Metal framed and clad shed	1991-98	Low Conservation Value
20 building	Brick walled and metal roofed research / administration g	In stages 1975-91	Low Conservation Value
21 building	Brick walled and metal roofed research / administration	1970-75	Low Conservation Value
22 buildin	Brick walled and metal roofed research / administration g	Central part by 1956, northern extension 1967-70, southern extension 1970-75	Low Conservation Value
23 Reside develo	Brick and metal sheet roofed residence / former Director's ence from Veterinary Research Station phase of pment	c.1923	Medium Conservation Value
24	Brick and tiled caretaker's dwelling	1970-75	Low Conservation Value
25	Brick and tiled caretaker's dwelling	1965-70	Low Conservation Value
26	Brick and tiled caretaker/staff residence	1975-82	Low Conservation Value
27	Timber and metal dwelling for staff / visitors	1982-91	Low Conservation Value
28	Brick and tiled caretaker/staff residence	By 1956	Low Conservation Value
29	Metal framed and clad garage / shed	1982-91	Low Conservation Value
30	Metal framed carport	1982-91	Low Conservation Value
31	Metal framed and clad dairy building	1982-91	Low Conservation Value
32	Two-storey brick classroom building with metal roof	1982-91	Low Conservation Value
33 Dressir	Brick and metal amenities block for pool – Hindmarsh ng Pavilion	1957	Low Conservation Value
34	Inground pool (not functional) – Longmuir Swimming Pool	1954/55	Low Conservation Value
35 southe	Original dormitory block (with extension to north west and rn toilet blocks in 1970-75)	1926	High Conservation Value
36 used)	Two-storey brick dormitory building with metal roof (not	1963	Low Conservation Value
37 used)	Two-storey brick dormitory building with metal roof (not	1963	Low Conservation Value
38	One-storey brick dormitory building with metal roof	c.2005	Low Conservation Value

Building		Date Constructed	Grading of Significance
39	Metal shed	1982-91	Low Conservation Value
40 hall, kr	Original principal's residence, dormitory block and dining nown as Clarke House	1926 (with 1956-65 extension)	High Conservation Value
41 pitcheo	Current dining hall and kitchen building, brick walls with I metal roof	1963	Low Conservation Value
42	One-storey brick sick-bay building with metal roof	1982-91	Low Conservation Value
43	Metal carport structure	1991-98	Low Conservation Value
44	Metal storage shed	1998-2005	Low Conservation Value
45	Metal storage shed	1970-75	Low Conservation Value
cottage	Timber framed, timber clad and metal roofed building. sted to pre-date HAHS use of the land. Possible former e / classroom but only moved to its existing location 5-82 from unknown location.	c.1911 (?) Moved to its current location 1975-82	Low Conservation Value
47	Brick and metal roof building.	1963	Low Conservation Value
48 cottage	The English Cottage, formerly the school isolation hospital e. Timber cottage with metal roof.	1941	Low Conservation Value
49 buildin	Brick and metal roofed front administration and classroom g.	1988/89	Low Conservation Value
50 to front	Brick and metal roofed classroom building perpendicular administration building	1963	Low Conservation Value
51	Demountable classroom building	1998-2005	Low Conservation Value
52	Demountable classroom building	1998-2005	Low Conservation Value
53 metal r	Single level brick amenities / bathrooms building with flat roof	1963 extended later in 1975-82	Low Conservation Value
54 buildin	Single level brick and metal roofed classroom / workshop g	1963	Low Conservation Value
55	Canopy structure over basketball courts	2010	Low Conservation Value
56	Original brick classroom block	1926	High Conservation Value
57 buildin	Two-storey brick and metal roofed library and classroom g	1970-75	Low Conservation Value
58 buildin	Two-storey brick and metal roofed science classroom g	1967	Low Conservation Value
59	Original / early brick classroom block	1926	Medium Conservation Value

Building		Date Constructed	Grading of Significance
60	Single-storey brick classroom building for dance	1963	Low Conservation Value
61 Edmo	Brick and metal roofed hall / gymnasium known as ndson Hall	1981	Low Conservation Value
62	Brick and tiled dwelling	By 1956	Low Conservation Value
63	Metal shed	1982-91	Low Conservation Value
64	Single-storey brick and metal roofed classroom building	1982-91	Low Conservation Value
65	Brick and tile dwelling	1982-91	Low Conservation Value
66	Metal shed	Early 2000s	Low Conservation Value
67	Brick pavilion	c.1956	Low Conservation Value
68	Metal shed	Early 2000s	Low Conservation Value



Figure 109 – Aerial image identifying buildings across the Hurlstone Agricultural High School Site

Source: Nearmap 2017

11.3.2. Former Glenfield Special School

Table 14 – High level significance gradings of buildings

Building		Date Constructed	Grading of Significance
1	Caretaker / staff cottage	1927	Low Conservation Value
2	Pool and ancillary structures	1975	Low Conservation Value
3	Original Superintendent's brick and tile dwelling	1926	Medium Conservation Value
4 classi	Brick and tile original dormitory building / current room building for Ajuga School	1926	High Conservation Value
5 classi	Brick and tile original dormitory building / current room building for Ajuga School	1926 (extended 2010)	High Conservation Value
6	Demountable classroom building	2011	Low Conservation Value
	Brick and tile former school / classroom / nistration building / current administration and classroom ng for Glenfield Park School	1926	High Conservation Value
8 classi	Brick and tile original dormitory building / current room building for Campbell House School	1926	High Conservation Value
9 classi	Brick and tile original dormitory building / current room building for Campbell House School	1926	High Conservation Value
10	Lightweight shade structure	1998-2005	Low Conservation Value
11	Metal shed	1991-1998	Low Conservation Value
12	Metal clad classroom building	2010	Low Conservation Value
13	Brick toilet block	2005-2009	Low Conservation Value
14	Demountable classroom building	1990	Low Conservation Value
15 with 1	Brick and tile, original dining hall and kitchen block 927 extension providing Matrons Quarters	1926 extended 1927	Medium Conservation Value
16	Brick and tile sick bay building	c.1956	Low Conservation Value
17	Metal shed	1991-1998	Low Conservation Value
18	Brick and tile laundry / workshop building	1935	Low Conservation Value
19	Brick and tile laundry / workshop building	1935	Low Conservation Value
	Potential former water tower, now structure for ommunication devices, and ancillary telecommunication quipment	By 1956 (water tower) Telco equipment more recent	Low Conservation Value



Figure 110 – Aerial image identifying buildings across the Former Glenfield Special School Site

Source: Nearmap 2017

11.4. STATEMENT OF SIGNIFICANCE

The whole of the Study Area has historical associations as a former part of the larger Macquarie Field House estate prior to subdivision in the early twentieth century. The rural character of the land together with the remaining visual corridors between ridgelines on the Study Area and Macquarie Field House, contribute significantly to this historical association. The agricultural use of the Study Area has been maintained overtime, initially associated with grazing uses for the estate then developing into a Veterinary Research Station and later Hurlstone Agricultural High School.

The Study Area has historical associations with the former Veterinary Research Station which operated on the site between c.1923 and c.1989, and was the first of its kind in New South Wales. However, the majority of buildings and operational structures associated with the phase of development have been demolished as other agricultural buildings for Hurlstone Agricultural High School were required. The only remaining building from this phase of development, the former Director's Residence, is a representative example of an interwar bungalow and does not meet the threshold for individual listing. Notwithstanding that this building is the last remaining from the earliest phase of development, it does not in itself represent well the former use and occupation of the site by the Veterinary Research Station.

Hurlstone Agricultural High School has operated within the Study Area from 1926 continually, as the first agriculture-curriculum based boarding school to be established in New South Wales (after relocating from Ashfield where it originally commenced operations in c.1907). The main built core of the Hurlstone Agricultural High School Glenfield campus is extant, and includes the highly significant Clarke House (central administration building), original dormitory building and original classroom building. These three (3) buildings are good representative examples of educational facilities of their period and typology. Clarke House in particular is highly intact and retains a number of intricate architectural features of its period. Additional early buildings throughout the site are also extant, however these other buildings have an ancillary, contributory value compared with the principal three original buildings aligned to Roy Watts Road.

There is a strong social significance associated with Hurlstone Agricultural High School. This significance is expressed throughout the Study Area through both moveable and landscaped interpretative displays and installations created by the school and former students and staff members. This social association is more strongly linked to the Hurlstone Agricultural High School institution rather than the Study Area's specific location. There is also a strong community association with the memorial forest planted by Hurlstone Agricultural School to represent former students and staff who died in war. This memorial forest was the first of its kind in New South Wales.

Elements within the wider Hurlstone Agricultural High School site are considered to be of heritage significance at the local level for historical, aesthetic, associative, rarity, representative and social value reasons.

The former Glenfield Special School portion of the Study Area currently comprises three (3) individual schools dedicated to the education of children with special needs. The Glenfield Special School was the first educational facility established in New South Wales that was dedicated wholly to the education of special needs children. This group of buildings has continually operated as a special needs educational facility (in varying capacities) since its establishment in c.1927, and is historically highly significant as it was regarded the model institution for later special needs facilities to be based on.

The rural setting, institutional-based configuration, architectural design and high-level of intactness of the original former Glenfield Special School buildings contribute to their collective aesthetic value. In particular, the five-main buildings (former dormitories and central administration/classroom building) are of high aesthetic value for their arced alignment, internal building relationship, and their striking presentation to the corner of Roy Watts Road and Quarter Sessions Road.

The former Glenfield Special School portion of the Study Area is considered to be of heritage significance at the state level for historical, aesthetic, associative, rarity, representative and social value reasons.

12. OPPORTUNITIES AND CONSTRAINTS ANALYSIS

Based on the historical research presented in Section 5, as well as the assessments of significance presented in Sections 11 and 10, the following opportunities and constraints for have been prepared for the Study Area with regards to built heritage and archaeology (both historical and Aboriginal).

12.1. BUILT HERITAGE

As discussed within this report and identified in Section 11.3, there are a number of significant built heritage elements present throughout the Study Area. These built heritage elements are also integrated with significant landscape and visual settings across the site.

The majority of built elements associated with the earliest Veterinary Research Station use of the site have been removed. The significance of this historical use and association is substantially diminished through the removal of key built elements which represented this phase of development, including all original laboratory and research buildings. The only remaining built element from this period, the original Director's Residence dating from c.1923, is a representative example of an interwar bungalow residence, and its existence provides only a tenuous link to the former Veterinary Research Station use of the site.

The former Director's Residence has been identified within this report as having Medium Conservation Value only, given its diminished contextual significance. Its retention within any future development of the Study Area is preferred but not considered necessary in the broader context. Options for archival recording and interpretation should be explored as part of any proposed redevelopment of this area, and only undertaken in consultation with a qualified heritage consultant.

Elements within the wider Hurlstone Agricultural High School site are considered to be of heritage significance at the local level for historical, aesthetic, associative, rarity, representative and social value reasons (see Section 11.2). Any proposed redevelopment of this portion of the Study Area will have to have regard to the schedule of significant buildings included in Section 11.3.1 of this report, and the recommendations included in Section 14.1). There are a number of built elements which have been identified as High Conservation Value and which should be retained. Proposed redevelopment of these areas should only be undertaken in consultation with a qualified heritage consultant to provide ongoing advice regarding appropriate curtilage area for High Conservation Value elements, appropriate use and likely impact of proposed works on the element's significance.

There remain opportunities to redevelop the majority of the Hurlstone Agriculture High School portion of the Study Area, having regard to the various significant levels of each of the built elements located throughout the site. Consideration of significant internal road networks, landscapes, settings, visual curtilages and existing moveable heritage and interpretation installations should also form part of any proposed redevelopment.

We are aware that it is intended to re-develop the Hurlstone Agricultural High School site to establish new educational facilities. This continuation of an educational use is a positive outcome however the detailed redevelopment of the site will need to be carefully managed to ensure that impacts to the existing significant elements are mitigated. There is an opportunity to preserve on-site interpretation installations where appropriate, while also relocating a portion of the moveable heritage and memorabilia to the new Hurlstone Agricultural High School site.

The former Glenfield Special School group of buildings, together with their landscaped and visual setting, has been assessed herein as being of state significance for historical, aesthetic, associative, social, rarity and representative values. Particular consideration should be given to the retention of the buildings which are of High Conservation Value, and the establishment of an appropriate and sympathetic curtilage to maintain the group's significant setting, as well as its visual link with Macquarie Field House. Any proposed redevelopment of this portion of the Study Area should only be considered after consultation with a qualified heritage consultant to establish appropriate uses for the buildings and landscape, and apply appropriate physical and visual curtilages. The ongoing management of this group's heritage significance, including the nomination of the site to the State Heritage Register, should also form part of any redevelopment of the Study Area.

The broader redevelopment of the Study Area aligns with the intended intensification of urban development within the Glenfield precinct as outlined in Section 3 of this report. However, consideration of the identified significant elements within the Study Area (Section 11.3) together with the adjoining state significant

Macquarie Field House estate, should form the basis for establishing appropriate land uses within the Study Area, and inform considerations of density and scale. Larger lot sizes and lower scale development should be focused on the southern lots adjoining Macquarie Field House estate to enable a more rural and landscaped setting when viewed from significant corridors at Macquarie Field House. Similarly, higher density development and more intensive uses (retail, commercial etc) should be centralised along the rail corridor adjacent to existing development, and should not be located along significant visual corridors or along ridge lines.

12.2. HISTORICAL ARCHAEOLOGY

The potential for historical archaeology to be present within the Study Area has generally been assessed as low to moderate; within developed areas, the archaeological potential is nil to low, while in undeveloped areas the potential for structural remains and occupational deposits associated with earlier phases of occupation is generally assessed as low to moderate.

In Section 10.1, the significance of potential historical archaeological remains was assessed. Based on this assessment, it was determined that archaeological material associated with the phase 1810s-1910s, if present, if found relatively intact, and if able to be conclusively associated with this period, have the potential to be of local significance by way of their association with notable historical figures. However, the anticipated nature and condition of such remains means that they are highly unlikely to be of state significance.

As already discussed, there is little evidence in the historical record regarding the presence/absence, location, or nature of any former structures or buildings that may date from this phase. Subsequent development of the Study Area and its sustained agricultural use will have limited the potential for such remains to be recovered intact, as well as for occupational deposits from this phase to be present. Further, structures and elements directly associated with Meehan, which are known to have existed, are located outside of the Study Area (to the south) and within the state heritage listed Macquarie Fields House property.

Based on the above, it is considered that targeted historical archaeological investigation within the Study Area is not warranted as there is no substantial evidence to suggest that significant or highly intact remains associated with the phase 1810s – 1910s would be present.

To effectively mitigate and manage the potential for historical archaeological remains that may be of local significance by way of their associations with this phase, appropriate Stop Work Procedures have been recommended at Section 14, below.

Material/remains associated with the phase 1910s – present have been assessed as unlikely to have significance on either a local or state level. However, in accordance with best practice and to effectively mitigate potential risks associated with unexpected finds, the Stop Work Procedures mentioned above are recommended to apply to historical archaeological material from this phase also.

12.3. ABORIGINAL CULTURAL HERITAGE AND ARCHAEOLOGY

Based on the findings of this report, several constraints associated with Aboriginal archaeology and cultural heritage have been identified.

With regards to registered sites:

- Two registered Aboriginal sites are located within the Study Area, being #45-5-2495 and #45-5-4253. The AHIMS registrar has confirmed that site #45-5-4253 has been destroyed. Mary Dallas Consulting Archaeologists have confirmed that site #45-5-2495 has been sufficiently investigated via test excavation;
- It is recommended that an ASIRF is lodged to OEH to have the status of site #45-5-2495 formally changed to 'destroyed' or 'not a site' on AHIMS;
- An updated extensive search of the AHIMS database should be undertaken in the future to confirm that the status of site #45-5-4253 has been updated to 'destroyed'. If an updated search reveals that the status has not been updated, it is recommended that an ASIRF is lodged to OEH to have the status updated;
- It is noted that an AHIP application can typically only be made in association with an *approved* development application and on the basis of valid registered Aboriginal archaeological sites being located within areas of impact.

With regards to the established archaeological potential of the Study Area generally:

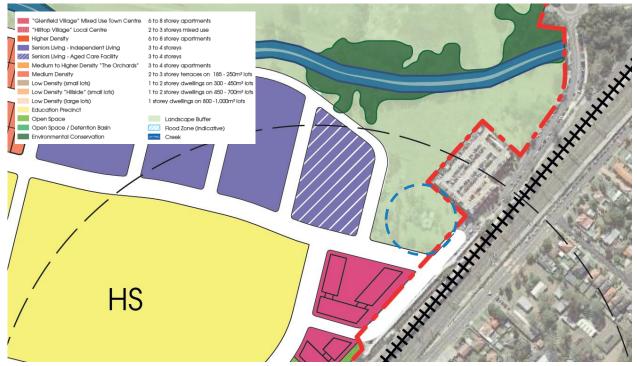
- The Study Area generally has also been assessed to have a low to moderate degree of potential to contain low density artefact deposits, particularly in association with water courses and within the less disturbed areas of the site;
- The potential for all other site types to be present has been assessed as low to nil;
- Based on this identified potential, an Aboriginal Cultural Heritage Assessment (ACHA) Report must be prepared as part of the future Master Planning process. The purpose of this report is to investigate and assess, in detail and in accordance with the relevant legislation, the Aboriginal cultural heritage that may be affected by the proposed activity;
 - Much of the content of the assessment presented in this report will be able to be incorporated into a future ACHA for the Study Area. An ACHA is, however, a stand-alone report that must contain certain information to meet adequacy requirements under the relevant legislation and associated guidelines for reporting;
 - An ACHA Report is a requirement of any AHIP application;
 - Consultation with the local Aboriginal community must be undertaken both as part of any ACHA as well as any AHIP application. Consultation must adhere to the requirements set out in clause 80C of the NPW Regulation. These are further explained in OEH's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010;
 - The purpose of an ACHA is also to determine whether or not archaeological excavation, either test or salvage, is required, and how such excavation should be undertaken (i.e. include a methodology for excavation).
- Based on the assessment presented in this report, it is considered likely that test excavation (at a minimum) will be required within the Study Area prior to any development occurring;
- If archaeological material is recovered during test excavation, further reporting and/or permit requirements will be triggered.

13. IMPACT ASSESSMENT

13.1. FORMER VETERINARY RESEARCH STATION

The former Director's Residence, being the only remaining built structure dating from the Veterinary Research Station phase of development, c.1923, is proposed to be demolished as part of the proposed redevelopment. This area of the site is intended to form part of the 'landscape buffer' along the northern periphery of the site with the Concept Plan.

Figure 111 – Extract of draft Concept Plan, identifying former Director's Residence and landscape curtilage in blue dashed circle



Source: Group GSA / Property NSW

The significance of the Study Area as the site of the former Veterinary Research Station has lost is contextual relevance through the redevelopment of the site for Hurlstone Agricultural High School. The retention of the former Director's Residence will not substantially enhance the understanding of the Veterinary Research Station phase of development. Likewise, its removal, if required to facilitate additional new development, will not reduce the Study Area's significance as the site of the former Veterinary Research Station, as this significance is already substantially diminished and is now generally intangible.

However, as the demolition of the former Director's Residence is proposed only to create additional open landscaped areas, and not to facilitate further development, it is preferred that retention and adaptive re-use options are explored in the first instance. With regard to feasibility of uses and divestment of this asset, it is noted that single residential occupation is not likely to be a realistic option. Alternative options may include integration of the dwelling and landscape curtilage into the proposed adjoining aged care facility to the west (for communal recreation, administration or function purposes), or adaptation of the dwelling for a community / town centre use (including community centre / retail / café or restaurant uses).

13.2. HURLSTONE AGRICULTURAL HIGH SCHOOL

The proposed Concept Plan as discussed in Section 3 of this report proposes to redevelop the general built core of the existing Hurlstone Agricultural High School site, south of Roy Watts Road, into a new education precinct. The existing general built core of Hurlstone Agricultural High School is intended to accommodate a new high school (non-agricultural based) and a new SSP (School for Special Purposes).

The continuation of this area for educational purposes is a positive outcome of the proposed Study Area redevelopment. Notwithstanding that the new High School and SSP will not be agricultural-curriculum based, the continuation of educational uses on the site will enable the retention and / or adaptation of some existing buildings, and provide for the retention of some of the existing interpretation installations around the site.

The retention of the principal original Hurlstone Agricultural High School buildings on the site, together with an appropriate curtilage, will enable the history and significance of the site to be interpreted after the Hurlstone institution has moved elsewhere. The re-use of the site for a new high school enhances the site's historical educational significance and allows for the reuse of significant early educational facilities on-site, which otherwise may have limited adaptive re-use opportunities. It is unlikely that the continuation of educational uses and facilities on this portion of the Study Area will impact on significant views or landscaping, however we are unaware of the final scale and form of the new education facilities to be constructed on the site. The proposed Concept Plan also confirms the retention of the memorial forest, a socially significant element of Hurlstone Agricultural High School.

It is unclear which of the existing Hurlstone Agricultural High School buildings are proposed to be retained / adapted and which buildings are proposed for demolition / redevelopment. This report provides guidance regarding the varying significance of each of the built elements on the Hurlstone Agricultural High School site, and recommendations regarding their retention (see Section 11.3). In particular, retention of the significant original buildings is required to form part of any redevelopment of the Study Area.

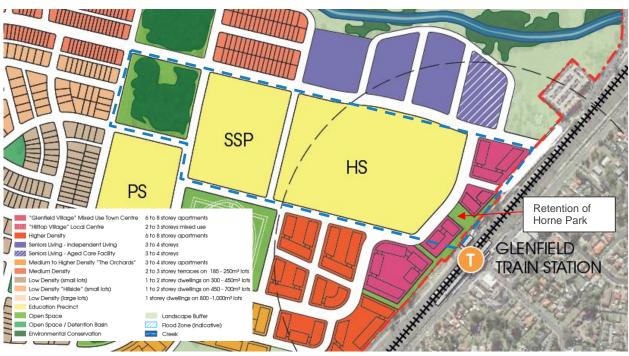


Figure 112 – Extract of draft Concept Plan, identifying the existing Hurlstone Agricultural High School built core and memorial forest outlined in blue dashed lines

Source: Group GSA / Property NSW

The southern portion of Hurlstone Agricultural High School, comprising paddocks, some later buildings and structures as well as the oval and some vegetation, is proposed to be demolished and replaced with a new playing field for the education precinct, medium-to-high density residential development, and mixed-use town centre development. This area will be developed with the highest density development within the proposed Study Area redevelopment.

There is a limited about of built development within this area of Hurlstone Agricultural High School, and no structures or landscape considered to be of substantial heritage significance. There is a small grove of Cumberland wood plain along the northern boundary of the oval, however, the retention of this small grove is considered unnecessary if the memorial forest, and larger grove of Cumberland wood plain to the north is being retained as part of the proposal.

Horne Park is a small triangular park nestled in between the Glenfield train station and Hurlstone Agricultural High School, and is within the area designated to become mixed-use town centre development. This small park contains the main pedestrian pathway from the train station to the Hurlstone Agricultural High School site and has been in continual operation since the 1930s. It has been confirmed verbally by property NSW that Horne Park is being retained as a means of pedestrian access from Glenfield train station to the new education precinct. The retention and integration of the Horne Park pathway from Glenfield Station to the new school precinct is a positive heritage outcome, and will provide an important means of interpretation for Hurlstone Agricultural High School by providing a platform for display of former farm machinery and other interpretative materials which are currently located throughout the site.

Overall the intensification of development on the land adjoining the railway corridor is considered to be the most appropriate location for this higher density development. This location allows for a general physical buffer of lower density development between Macquarie Field House and the proposed "Glenfield Village" mixed-use town centre. Views from Macquarie Field House north towards the subject site are considered to be 'secondary' views from within the state listed property, and a wide buffer of lower density development between Macquarie Field Village" mixed-use town centre will help to mitigate the immediate visual impact of the higher density elements of the proposed development.

However, where possible the "Glenfield Village" mixed-use town centre higher density development should be located on the northern side of Roy Watts Road, along the rail corridor, to provide as much visual separation of this form of development from Macquarie Field House.

13.3. THE FORMER GLENFIELD SPECIAL SCHOOL

The proposed Concept Plan as discussed in Section 3 of this report proposes to demolish all of the buildings which form the former Glenfield Special School precinct, and develop a "Hilltop Village" Local Centre, as well as medium density residential development (2-3 storey townhouses). The vegetated ridgeline immediately south of the former Glenfield Special School is proposed to be retained for open space and environmental conservation reasons.

Figure 113 – Extract of draft Concept Plan, identifying the general location of the former Glenfield Special School in blue dashed lines



Source: Group GSA / Property NSW

The former Glenfield Special School precinct has been assessed in this report at Section 11.2 as being of heritage significance at the state level for historical, aesthetic, associative, rarity, representative and social value reasons. Individually, the buildings which together comprise this precinct have generally been identified of High or Medium Conservation Value. Buildings which are identified to be of High Conservation Value must be retained as part of any redevelopment of the Study Area. This report provides guidance and recommendations regarding the retention of these buildings in Section 14.

The proposed Concept Plan does not provide for the retention and conservation of the former Glenfield Special School buildings and landscaped setting. The proposed Concept Plan will <u>need to be</u> amended to incorporate the former Glenfield Special School precinct.

Continuation of an educational use within the existing buildings would be the preferred outcome for this precinct. However, having regard to the broader redevelopment concept for the Study Area, and feasibility of future uses for these buildings, the recommendations outlined in Section 14 of this report provide high level guidance on alternative uses for the former Glenfield Special School buildings. Full development of an appropriate adaptive re-use and management plan will need to be undertaken in consultation with a qualified heritage consultant if alternative uses are explored.

13.4. MACQUARIE FIELD HOUSE

The draft Concept Plan included herein is assessed from a heritage perspective, having regard to its potential impacts on the significance of adjoining state-listed heritage item, Macquarie Field House. The draft Concept Plan is a development concept only, providing high-level indications of the proposed built-form, location and scale of new development. We do not have detail of the final scale, finishes or design of new development and cannot provide adequate commentary regarding its proposed built form.

The draft Concept Plan indicates that higher density development is to be centralised along the rail corridor and to the immediate south of the proposed new education precinct. As discussed previously, this is the preferred location for this form of development from a heritage perspective, as the natural topography of the land, together the vegetative buffers, will assist with minimising the visual impacts of higher density development on views from within Macquarie Field House. Significant views from within Macquarie Field House are generally directed east, albeit are currently screened by excessive vegetation. Views from Macquarie Field House to the north towards the Study Area are considered secondary views from the side of the homestead and are of lesser, but still important, significance.

Apart from the identified higher density development, the draft Concept Plan confirms that the majority of the southern portion of the Study Area will be developed with low to medium density residential development. This development will significantly alter the rural character of the existing grazing paddocks and bring built development closer towards the Macquarie Field House property. However, the draft Concept Plan has incorporated density and height controls to mitigate the impact of this development on Macquarie Field House. The proposed development is to be progressively larger in lot size and lower in height the closer it is to the Macquarie Field House property. These controls will allow for the development to integrate a sense of landscape within the dwelling buffers, to try and mitigate the loss of open rural land character.



Figure 114 - Extract of draft Concept Plan, identifying the location of Macquarie Field House, south of the Study Area

Source: Group GSA / Property NSW

Macquarie Field House already sits within a substantially altered context with urban development encroaching close to the homestead on the southern side. The property is strategically located within the NSW Government's Draft Glenfield to Macarthur Urban Renewal Corridor Strategy making continued rural and agriculture uses of this region unsustainable in the longer term. The heritage curtilage of Macquarie Field House already excludes the Study Area (notwithstanding that the Study Area once formed part of the wider estate), and the proposed development does not seek to intrude on the existing heritage curtilage of the place. Overall, while the proposed development will have some visual impacts, it will not further diminish the historical or aesthetic significance of Macquarie Field House within its already altered landscape.

14. CONCLUSION AND RECOMMENDATIONS

14.1. BUILT HERITAGE RECOMMENDATIONS

The following recommendations have been prepared in relation to the identified built heritage within the Study Area. The recommendations provide guidance on retention, appropriate future uses and adaptive reuse strategies. These recommendations should be integrated into the overall development plan for the Study Area.

14.1.1. General Recommendations

The following recommendations apply to the whole of the Study Area, and should be undertaken whilst also having regard to site and building specific recommendations outlined in the following sections of this report.

- Prior to any redevelopment works commencing within the Study Area, an archival recording must be undertaken to document the existing configuration and condition of the built elements, setting and visual corridors within Study Area. This archival recording should document all existing buildings and structures, including farm buildings, throughout the whole of the Study Area. Particular attention should be given to the exteriors, interiors and settings of all buildings and structures identified as having High Conservation Value or Medium Conservation Value in Section 11.3 of this report.
- A qualified heritage consultant should be engaged during the design development stage of the development to advise on appropriate scale, design and response of new buildings within the Study Area.
- Any proposed adaptive re-use or alteration to buildings herein identified as having High Conservation Value or Medium Conservation Value should only be undertaken in consultation with a qualified heritage consultant to provide advice on appropriate uses and establish appropriate curtilages of the building, and sympathetic setbacks from new development.
- Overall the intensification of development on the land adjoining the railway corridor is considered to be the most appropriate location for this higher density development. This location allows for general physical buffer of lower density development between Macquarie Field House and the proposed "Glenfield Village" mixed-use town centre. Views from Macquarie Field House north towards the subject site are considered to be 'secondary' views from within the state listed property, and a wide buffer of lower density development between Macquarie Field House and the proposed "Glenfield Village" mixed-use town centre. Views from within the state listed property, and a wide buffer of lower density development between Macquarie Field House and the proposed "Glenfield Village" mixed-use town centre will help to mitigate the immediate visual impact of the higher density elements of the proposed development. However, where possible the "Glenfield Village" mixed-use town centre higher density development should be located on the northern side of Roy Watts Road, along the rail corridor, to provide as much visual separation of this form of development from Macquarie Field House.

14.1.2. Former Veterinary Research Station

The significance of the Study Area as the site of the former Veterinary Research Station has lost is contextual relevance through the redevelopment of the site for Hurlstone Agricultural High School. The retention of the former Director's Residence will not substantially enhance the understanding of the Veterinary Research Station phase of development. Likewise, its removal, if required to facilitate additional new development, will not reduce the Study Area's significance as the site of the former Veterinary Research Station, as this significance is already substantially diminished and is now generally intangible.

However, as the demolition of the former Director's Residence is proposed only to create additional open landscaped areas, and not to facilitate further development, it is preferred that retention and adaptive re-use options are explored in the first instance. With regard to feasibility of uses and divestment of this asset, it is noted that single residential occupation is not likely to be a realistic option. Alternative options may include integration of the dwelling and landscape curtilage into the proposed adjoining aged care facility to the west (for communal recreation, administration or function purposes), or adaptation of the dwelling for a community / town centre use (including community centre / retail / café or restaurant uses).

14.1.3. Hurlstone Agricultural High School Built Heritage

14.1.3.1. General

 It is preferred that the built core of the HAHS site (refer below Figure 115), south of Roy Watts Road in Lot 4 of the Study Area, continues to be used for educational purposes as part of the wider Study Area redevelopment. Changes in use for individual buildings may be required to facilitate this ongoing educational use, and the following sections of this report provide recommendations specific to the adaptive re-use of significant buildings in the Study Area.

Figure 115 - Identification of 'built core' of HAHS site outlined in red



Source: Nearmap 2017

- The buildings and structures identified as having High Conservation Value in Section 11.3.1 of this report must be retained and integrated into the proposed future redevelopment of the Study Area.
- It is preferred that the buildings and structures identified as having Medium Conservation Value in Section 11.3.1 of this report are also retained and integrated into the proposed future redevelopment of the Study Area.
- The buildings and structures identified as being of Low Conservation Value may be demolished or redeveloped. However, adaptive re-use of existing buildings should be considered as a first means of redevelopment where possible.
- Where feasible, the existing configuration of the site, including internal road networks and landscaping, should be integrated into the redevelopment masterplan.
- The existing local heritage listing for Lot 21 DP 1035516 should be amended to reflect only that portion of the Hurlstone Agricultural High School which is of identified significance, including appropriate curtilages to be established by a qualified heritage consultant. This proposed amended curtilage and listing application should form part of the approval process for the proposed redevelopment.

14.1.3.2. Clarke House

- Building 40 known as 'Clarke House' must be retained and conserved. Any future proposed alterations
 or additions to the building or its curtilage should only be undertaken in conjunction with advice from a
 qualified heritage consultant.
- It is preferable that Clarke House continues to be used for education related uses. Currently the building is used for student boarding, a principal's residence and meeting / reception rooms. Changes in use within this building may be required to facilitate its ongoing occupation within the proposed Study Area redevelopment.
 - The main northern portion of Clarke House retains its generally original residential configuration, on both the ground and first floors. Any proposed adaptive re-use of this space should be subject to further detailed heritage advice to ensure that the new use is appropriate and does not require a detrimental level of intervention or alteration. All original external and internal features and principal

spaces must be retained and conserved. Low-impact uses which may be appropriate include administration uses, meeting room use, reception centre uses and continued residential uses. Potential future uses should be separately assessed by a qualified heritage consultant to determine the use's appropriateness for the space, and the impact of any proposed intervention.

- The rear, southern dormitory wings of Clarke House have been internally modified to provide compliant dormitory and ancillary facilities for current boarders. It may not be feasible to maintain an ongoing dormitory use within these areas as part of the Study Area redevelopment, and as such, a range of education related uses may be considered for these areas. Potential new uses should be separately assessed by a qualified heritage consultant to determine the appropriateness of each proposed use, and the impact of any proposed intervention.
- The northern forecourt of Clarke House should be retained and conserved, with no additional buildings or structures being permitted to be constructed within this area. This area provides a significant curtilage to this building, and contains a number of significant features, including the original rose garden and original HAHS entrance gates. This forecourt area should be retained and used for the continued interpretation of HAHS (see recommendations for Interpretation at Section 14.1.3.5). The extent of the forecourt which should be retained is shown hereunder in Figure 116.

Figure 116 - Identification of Clarke House forecourt that should be retained (no-build area), shaded in blue



Source: Nearmap 2017

14.1.3.3. Building 35 – Original Classroom and Dormitory Building

- Building 35 must be retained and conserved. Any future proposed alterations or additions to the building should only be undertaken in conjunction with advice from a qualified heritage consultant.
- It is preferable that Building 35 continues to be used for education related uses. Currently the building is used for student boarding (bedrooms, bathrooms and ancillary recreation spaces) and classrooms. Changes in use within this building may be required to facilitate its ongoing occupation within the proposed Study Area redevelopment, particularly regarding its feasibility to continue as dormitory use areas. A range of education related uses may be considered for these areas. Potential new uses should be separately assessed by a qualified heritage consultant to determine the appropriateness of each proposed use, and the impact of any proposed intervention.

14.1.3.4. Building 56 – Original Classroom Building

- Building 56 must be retained and conserved. Any future proposed alterations or additions to the building should only be undertaken in conjunction with advice from a qualified heritage consultant.
- It is preferable that Building 56 continues to be used for education related uses, and where possible continues to be used for the provision of classroom areas. Changes in use within this building may be required to facilitate its ongoing occupation within the proposed Study Area redevelopment, and a range of education related uses may be considered. Potential new uses should be separately assessed by a qualified heritage consultant to determine the appropriateness of each proposed use, and the impact of any proposed intervention.

14.1.3.5. Interpretation

We understand that Hurlstone Agricultural High School operations will be relocated to a new campus at the Hawkesbury as a result of the Study Area redevelopment, and that the subject HAHS site will be 're-used' for new education-related uses within the redevelopment (in the form of a public school, high school, school for specific purposes or a range of these education uses).

Notwithstanding its proposed relocation, it is important to acknowledge and interpret the historical significance of the HAHS operations at the Study Area. The subject HAHS site currently contains a number of interpretative measures including plaques, former machinery and moveable memorabilia displays. The following recommendations provide guidance on the continued interpretation of the HAHS operations on the subject HAHS site.

- An interpretation strategy should be prepared by a suitably qualified heritage consultant to provide for the interpretation of the HAHS site's significance in the context of the proposed Study Area redevelopment. The interpretation strategy of the subject HAHS site should include strategies that provide for a meaningful understanding of the site's history and significance, which may be similar the following:
 - Use of the Clarke House forecourt area as a medium for interpretation, including the location of old farm machinery, plaques and information panels.
 - Individual building information panels on buildings of significance.
 - Retention of an internal space within Clarke House for the display of HAHS memorabilia and informative displays where appropriate.
 - Retention and integration of the Horne Park pathway from Glenfield Station to the new school precinct, incorporating elements of interpretation (information panels / machinery etc).
- There are a significant number of moveable information displays and sculptures / machinery throughout the subject HAHS site, including numerous pieces of farm machinery displayed on plinths or the placed throughout the site, cabinet displays of past HAHS memorabilia, art sculptures, and engraved pavers referencing past students and staff. Following the redevelopment of the Study Area, HAHS will no longer be in operation on the site.

Some elements of the site's HAHS history should be retained on-site to provide meaningful interpretation displays (refer to the above recommendation regarding an interpretation strategy). However, the bulk majority of memorabilia currently held on-site relates to academic and sporting achievements of past students, and should be kept with the HAHS operations. It is recommended that these non-site-specific memorabilia be recorded, archived and transported with the HAHS operations to the new campus.

14.1.4. Former Glenfield Special School Site Built Heritage

• The proposed Concept Plan as discussed in Section 3 of this report proposes to demolish all of the buildings which form the former Glenfield Special School precinct, and develop a "Hilltop Village" Local Centre, as well as medium density residential development (2-3 storey townhouses). The former Glenfield Special School site has been identified in this report (at Section 11.2) to be of state heritage significance. Accordingly, the proposed Concept Plan will need to be amended to incorporate the former Glenfield Special School precinct.



Figure 117 – Aerial diagram showing significant axis and entrance drive configuration

Source: Nearmap 2017

The buildings and structures identified as having High Conservation Value in Section 11.3.2 of this report
must be retained and integrated into the proposed future redevelopment of the Study Area. Continuation
of an educational use within the existing buildings would be the preferred outcome for this precinct.
However, having regard to the broader redevelopment concept for the Study Area, and feasibility of
future uses for these buildings, exploration of adaptive re-use options for these buildings is encouraged.

Proposed new uses must be developed in consultation with and assessed by a qualified heritage consultant to ensure that they are appropriate, and will not require adverse intervention to original fabric or detrimentally impact the significance of the buildings. Adaptive re-use of the five (5) original classroom / dormitory buildings should not sever the relationship between the buildings, and should provide for the interpretation of their heritage significance.

- We are aware that Property NSW intends to locate a small neighbourhood centre in this precinct. Discussions to date have explored (at a high level) the opportunity for adaptive re-use of the central building (Building 7) for a mixed-use community centre, including community use spaces, retail etc. Having regard to the feasibility of alternate uses for this building, and the future intended residential context of this precinct, this proposed use is considered appropriate, subject to the other recommendations in Section 14:
- The remaining four (4) High Conservation Value buildings within this precinct (the former dormitory buildings) have a range of available alternative uses. We are aware that Property NSW intends for this area to be a low-density residential precinct, and therefore we have assumed that the most likely alternative use of the subject buildings would be for residential use. This proposed use is considered appropriate, subject to the other recommendations in Section 14: This form of alternative use would require careful management of fabric to mitigate the impact of intervention, and its achievability would be subject to full investigations by a suitably qualified architect with experience in adaptation of heritage buildings.

- The circular drive and rose garden immediately north of Building 7 is an important landscape element of the former Glenfield Special School. The retention and interpretation of this arrival avenue should be integrated into the proposed Concept Plan, to help retain a sense of identity of the place. This landscaped forecourt area could be used as a park or general landscaped buffer for the proposed new community use of Building 7 (see proposed visual corridor at Figure 117).
- Development of detailed plans for the adaptive re-use of Buildings 4, 5, 7, 8 and 9, including siting of
 uses within the building, alterations or additions, upgrading of services etc, should be undertaken in
 consultation with a qualified heritage consultant, and an architect with demonstrated experience in
 adaptation of heritage buildings.
- It is preferred that the buildings and structures identified as having Medium Conservation Value in Section 11.3.2 of this report are also retained and integrated into the proposed future redevelopment of the Study Area. However, the Medium Conservation Value buildings within this precinct are of secondary significance only, and whilst their retention is preferred, it is not strictly required. We note that Building 3, the original Superintendent's dwelling, has full potential for reuse as a single detached residence in a low-density residential precinct. Any adaptive re-use of these buildings should be undertaken in consultation with a qualified heritage consultant to mitigate potential impacts of the proposed new uses on the buildings' significance.
- The buildings and structures identified as being of Low Conservation Value may be demolished or redeveloped. However, adaptive re-use of existing buildings should be considered as a first means of redevelopment where possible.
- The arced axis (road) configuration of the five (5) main buildings (Buildings 4,5,7,8,9) is a significant feature of the former Glenfield Special School site. This axis/road should be integrated into the proposed masterplan design to create a defined and continual avenue (vehicular or pedestrian) along the front of these buildings, and ensure the buildings retain an appropriate curtilage depth. This axis is essential to the interpretation of the relationships between the existing buildings on the site.
- The former Glenfield Special School site's identified state heritage significance should be formalised with a nomination for heritage listing on the State Heritage Register. This nomination can be prepared by the owner of the site or a third party, however, we recommend that the nomination is prepared by a suitably qualified heritage consultant with prior knowledge of the site. The listing should identify the significant buildings (including interiors), landscapes and views on the site, and provide an appropriate and identifiable heritage curtilage. The nomination should be undertaken as part of the approval process for the Study Area's redevelopment.
- An interpretation strategy should be prepared by a suitably qualified heritage consultant to provide for the interpretation of the former Glenfield Special School site's significance in the context of the proposed Study Area redevelopment.

14.1.5. Future Development

14.1.5.1. Department of Education Land

The proposed draft Concept Plan prepared by GSA Group and described in Section 3 of this report provides a preliminary proposed land use plan. This plan identified the type and scale of development which is proposed throughout the Study Area.

The Concept Plan currently identifies the built core of the existing HAHS to be within a proposed High School and School for Specific Purposes precinct. This proposed future use is sympathetic to the existing use of the HAHS site and will enable the retention and continued use of the significant buildings within this area.

Higher density development is proposed to be located along the rail corridor and adjacent to the existing commuter carpark and proposed town centre. This is an appropriate location for the proposed higher density development as it will not impact on any of the existing buildings identified as having High Conservation Value, and will not significantly impact on views from Macquarie Field House.

The land use plan identifies the former Glenfield Special School site as being completely redeveloped with a "Hilltop Village" Local Centre and Medium Density dwellings (2-3 storey terraces). From our understanding, this proposal requires the complete demolition of existing improvements across the Glenfield Special School site.

This report has identified that the former Glenfield Special School site is of state heritage significance and has provided recommendations regarding the retention of significant buildings and landscape features from

this area. Amendments are therefore required to be made to the draft land use plan to ensure the retention of significant buildings and landscapes. This amendment may involve moving the "Hilltop Village" Local Centre further north, so that the former Glenfield Special School site is on the Local Centre's south-eastern boundary, or placing the "Hilltop Village" Local Centre elsewhere along Roy Watts Road.

Amendments to the layout of proposed development around the former Glenfield Special School site will likely result in a loss of proposed dwellings (yield) within this immediate vicinity. Dwelling yield may be recouped by adjustment of the higher density development along the rail corridor or constructing additional higher density development adjoining the commuter carpark at Glenfield Station.

14.1.5.2. Office of Strategic Lands Land

From a built heritage perspective, there are limited restrictions for the development of this land. There are however topographical, environmental and archaeological restrictions (archaeology in particular is assessed at a high level within this report).

The northern Office of Strategic Lands (OSL) parcel (Lot 6 within the Study Area) is proposed to accommodate a range of dwelling types, mostly low density one to two storey dwellings. The land use plan proposes a low density, single level dwelling type development for the southern-most OSL parcel (lot 7 within the Study Area).

Lot 7 adjoins the Macquarie Field House estate to the south, and the larger lot sizes and restricted height of the proposed dwelling type are intended to minimise visual impacts on the significant views to and from Macquarie Field House. We are of the opinion that the proposed dwelling type (single level detached) and lot size (800 – 1,000 square metres) are appropriate for Lot 7 development within proximity to Macquarie Field House estate.

The proposed development should be progressively larger in lot size and lower in height the closer it is to the Macquarie Field House property. Development should also consider the integration of landscaping within the dwelling buffers, to try and mitigate the loss of open rural land character.

14.2. HISTORICAL ARCHAEOLOGY RECOMMENDATIONS

Based on the assessment presented in this report, it is considered that targeted historical archaeological investigation within the Study Area is not warranted as there is no substantial evidence to suggest that significant or highly intact remains associated with the phase 1810s – 1910s would be present.

However, to effectively mitigate and manage the potential for historical archaeological remains that may be of local significance by way of their associations with this earlier phase of site development and use, the following recommendations are made. These recommendations are also made for any remains/material that date from the 1910s to present to ensure that any recovered material is able to be adequately and appropriately assessed and managed if unexpectedly recovered.

Recommendations

Recommendation 1

Should any unexpected historical archaeological remains or material be uncovered during excavation works, the Heritage Division must be notified in accordance with Section 146 of the *Heritage Act 1977*. Works must stop and a suitably qualified and experienced archaeologist must be brought in to assess the finds.

Recommendation 2

Depending on the results of the assessment, additional assessment, reporting and approvals may be required before works can recommence on site.

14.3. ABORIGINAL CULTURAL HERITAGE AND ARCHAEOLOGY RECOMMENDATIONS

Based on the assessment presented in this report, the following recommendations are made with regards to Aboriginal cultural heritage and archaeology.

Recommendations

Recommendation 1

It is recommended that an ASIRF is lodged to OEH to have the status of site #45-5-2495 formally changed to 'destroyed' or 'not a site' on AHIMS.

Recommendation 2

An updated extensive search of the AHIMS database should be undertaken in the future to confirm that the status of site #45-5-4253 has been updated to 'destroyed'. If an updated search reveals that the status has not been updated, it is recommended that an ASIRF is lodged to OEH to have the status updated;

Recommendation 3

Prior to any physical works occurring at the Study Area, a full ACHA Report must be prepared for the entire Study Area, including full consultation with the local Aboriginal community in accordance with OEH's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010;

- The purpose of this report is to investigate and assess, in detail and in accordance with the relevant legislation, the Aboriginal cultural heritage that may be affected by the proposed activity. The purpose of an ACHA is also to determine whether or not archaeological excavation, either test or salvage, is required, and how such excavation should be undertaken (i.e. include a methodology for excavation);
- Based on the assessment presented in this report, it is considered likely that test excavation (at a minimum) will be required within the Study Area prior to any development occurring;
- If archaeological material is recovered during test excavation, further reporting and/or permit requirements will be triggered.

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[Note: Some government departments have changed their names over time and the above publications state the name at the time of publication.]

DISCLAIMER

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10. Appendix B - Design Guidelines and recommended DCP Controls

The guidelines outlined in these site-specific development controls are based on the established Statement of Significance for the Glenfield Precinct and are consistent with the Australian International Council on Monuments and Sites (ICOMOS) *Charter for Conservation of Places of Cultural Significance*, also known as *The Burra Charter 2013*. The provisions aim to provide adequate guidance in protecting the heritage context of the Glenfield Precinct, when decisions are made to develop within the area. Any changes within the Glenfield Precinct should be based on an understanding of the significance of the precinct.

Note: These design guidelines may require updating following the findings of the additional studies, which are recommended to be undertaken prior to the subdivision phase. In addition, it should be noted that the objectives and controls below relate to the heritage matters only.

10.1 Objectives

The objectives of this document are to:

No.	Objective
01	Retain, manage and conserve identified heritage fabric/items located within the Glenfield Precinct.
O2	Ensure significant views towards the Macquarie Field House estate and the Hurlstone Agricultural School site are retained and enhanced.
O3	Establish a mixed use urban centre at Glenfield that responds to the heritage items located within and adjacent to the precinct.
O4	Aim to have any future development within the Glenfield precinct has a positive outcome to the character and significance of heritage items.

10.2 General Controls

Development to or within the vicinity of a heritage item must comply with the following development controls. These controls should be read with the site-specific controls, noted in Section 10.3 of this report.

No.	Description of Control
C1	Any future works to heritage items or in the vicinity of a heritage item are to be informed by established studies that consider the history and significance of the heritage item.
C2	Works to heritage items are to limit change to significant fabric and guided by a conservation management document.
C3	Works to heritage items are to employ traditional techniques and materials of the respective item, where possible.
C4	Additions to heritage items are to be subservient and located to the rear, if the rear elevation is not considered primary. They must not be openly visible from primary elevations.
C5	Alterations and additions to heritage items are to respond to the existing building envelope, proportions of the building, street alignment, materials, colours, finishes and landscaping present.
C6	Original facebrick is not to be coated, rendered or painted.
C7	Any major works should involve conservation of original building fabric including any intact facades or internal spaces.

C8	New materials are to complement the proportion, colour and finishes of existing materials and must not detract from the character or significance of the heritage item.
C9	Future works are to consider the removal of unsympathetic alterations and additions.
C10	Where documentary evidence has been found, future works are to consider reinstating missing details.
C11	Development in the vicinity of heritage items is to ensure an adequate curtilage around the heritage item is retained along with any significant landscaping. Significant views to, from and within the heritage items are also to be considered.
C12	Development in the vicinity of heritage items is to respond to the built form and design of the heritage item.
C13	A Heritage Impact Statement is to accompany any future Development Applications and should be prepared by a suitably qualified heritage professional. The statement is to assess the likely impact of the proposed development on the heritage significance of the item.
C14	A detailed landscape heritage assessment of the Glenfield Precinct should be undertaken generally, with specific consideration to the Hurlstone Agricultural School site. The assessment is to be prepared by a suitably qualified heritage landscape specialist and provide information regarding landscape elements that are of heritage significance. This is to be completed prior to subdivision of the Glenfield Precinct and is to inform any future development.
C15	Detailed streetscape analysis to be undertaken to establish the relationship with the heritage items in the vicinity and to accompany development applications.

10.2.1 Subdivision

Any changes to the boundaries of a heritage item, whether through subdivision or land consolidation, requires consideration of the following controls.

No.	Description of Control
C1	Subdivision, including lot consolidation or strata subdivision, should not occur to a heritage item when the original subdivision pattern is readily discernible.
C2	Applications for subdivision involving heritage items where the original subdivision pattern is no longer evident are to illustrate that the setting of the heritage item will not be adversely impacted.
C3	Applications for subdivisions are to consider the impact on the heritage item and its relationship with landscape features, other buildings and fences.
C4	Applications for subdivisions are to be accompanied by a Heritage Impact Statement from a suitably qualified heritage professional. The report is to consider the likely impacts of the subdivision on the heritage significance of the site.
C5	Any applications for subdivision are to be accompanied by a curtilage assessment and is to be prepared by a suitably qualified heritage professional. Depending on the extend of the changes proposed to the heritage item, a Conservation Management Strategy or Plan may also be required.

10.2.2 Street Layout and Design

No.	Description of Control
C1	The design of new streets within the Glenfield Precinct (to the western section only) are to respond to significant views that can be gained to and from heritage items located within the Glenfield Precinct or within close proximity.

C2

Should original subdivisions patterns be evident, the design of new streets is to preserve or reflect this pattern.

10.2.3 Building Form

The bulk, scale, height and character of proposed developments within the Glenfield Precinct require consideration of the heritage items located within the proximity. As such, the following design controls are required to be implemented.

No.	Description of Control
C1	Ensure the build form is compatible with the setting of the precinct and its relationship with the Macquarie Field House. This is particularly important within the OSL site.
C2	Aim for high quality building design with particular reference to the design attributes of the heritage items and buildings of significance within and around the precinct.
C3	Allow for a number of selective housing design choices in a simple and compatible manner to the existing rural landscape including farmlets and detached dwellings.
C4	Building form to respond to its allotment with setbacks and placement to consider its relationship with the identified significant view corridors and connections with the heritage items in particular the Macquarie Field House

10.2.4 Archaeology

The following archaeology DCP controls relate specifically to the western section of the Glenfield Precinct. They do not relate to the eastern section.

No.	Description of Control
C1	Any development resulting in ground disturbance requires archaeological investigation which must comply with the <i>Heritage Act</i> 1977 and <i>National Parks and Wildlife Act</i> 1974
C2	Archaeological assessments are to be undertaken by a suitably qualitied archaeologist (as defined in Section 1.6, Part 6 <i>National Parks and Wildlife Act 1974</i>)
C3	An Archaeological Assessment is required to establish the historical and aboriginal archaeological potential of the site. This study is to be undertaken prior to subdivision of the Glenfield Precinct. Any future works are to be informed by this study.
C4	The Archaeological Assessment is to:
	 determine whether future development of the Glenfield precinct will constitute harm to places or objects of Aboriginal significance. Reference is to be made to the 'requirements to exclude an act from harm', as outlined in the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (Part 6 National Parks and Wildlife Act 1974); and
	 determine whether future development of the Glenfield precinct will constitute the disturbance or excavation of land which is likely to contain historical archaeological remains. In the event that a positive determination is reached, applications are to be made to the Heritage Council, which will require the completion of an <i>S140/S144</i> <i>Archaeological Permit and Variation Form.</i>
C5	Whether harm to places or objects of Aboriginal significance can be avoided or otherwise, an Aboriginal Cultural Heritage Assessment (CHA) report is to be produced as an addendum to the Archaeological Assessment. This will document the process of consultation, investigation and assessment which resulted in a determination. Reference is to be made to the relevant guidelines for the preparation of a CHA, as contained within the <i>Guide to</i> <i>Investigating, assessing and reporting on Aboriginal cultural heritage in NSW</i> (Part 6 <i>National Parks and Wildlife Act</i> 1974).

C6	A Ground-penetrating radar (GPR) survey is to be undertaken in order to further investigate areas of historical archaeological sensitivity.
C7	Anecdotal evidence is to be factored into the preparation of both the Historical Archaeological Assessment and Cultural Heritage Assessment reports.

10.3 Site Specific Development Controls

The following site-specific development controls address specific areas of heritage significance located within the Glenfield Precinct. Some of these areas have been listed as heritage items while others are known to have the potential for heritage significance.

10.3.1 Hurlstone Agricultural School



Figure 69: Aerial view of the Hurlstone Agricultural School site, outlined in red. (Source: SIX Maps captured 15 January 2018)

No.	Description of Control
C1	Development applications for major works or subdivision are to be accompanied by a Conservation Management Plan for the Hurlstone Agricultural School site, encompassing the former Veterinary Research Station and former Glenfield Special School site. The CMP is to be prepared by a suitably qualified heritage professional.
C2	Development applications for major works or subdivision are to be accompanied by a social significance assessment. The assessment is to cover the site as a whole including the oval.
C3	Development applications for major works or subdivision are to be accompanied by a moveable heritage assessment and provide future management details. The assessment is to be prepared by a suitably qualified heritage professional.

C4	Development applications for major works or subdivision are to be accompanied by a landscape heritage assessment, prepared by a suitably qualified heritage landscape specialist.
C5	Development within the areas surrounding the Hurlstone Agricultural School site is to interpret the visual connection between the railway and school currently afforded by Home Park.
C6	Buildings and landscape features identified as Exceptional or High significance in the CMP are to be retained or conserved.
C7	Any future development is to directly respond to the character or significance of Exceptional and High ranked elements
C8	Analysis of historical and visual links between the Hurlstone Agricultural School site and the Macquarie Field House site are required
C9	Prior to any redevelopment work, an archival recording is to be undertaken to document the existing configuration and condition of built and landscape elements within the site.
C10	It is preferable for the Hurlstone Agricultural School to continue to be used as a school. Any changes to the existing use is to be sympathetic and respond to the historic educationa use.

10.3.2 Former Veterinary Research Station

The former Veterinary Research Station is currently not listed as a heritage item but is historically associated with the locally listed Hurlstone Agricultural School. As such, consideration of the heritage values of the site is required in any future development or alterations and additions. The following controls apply.

No.	Description of Control
C1	Development applications for major works or subdivision are to be accompanied by a Conservation Management Plan for the Hurlstone Agricultural School site, encompassing the former Veterinary Research Station and former Glenfield Special School site. The CMP is to be prepared by a suitably qualified heritage professional.
C2	Any future works to the former Veterinary Research Station are to be guided by the CMP and consider the proximity of the site to the heritage listed Hurlstone Agricultural School.
C3	Any development applications involving significant works to the Director's Residence is to include a heritage assessment of the building.
C4	Views to and from the Hurlstone Agricultural School site from within Roy Watts Road are to be preserved.



Figure 70: Views towards Clarke House and the Hurlstone Agricultural School site generally can be gained from various areas along Roy Watts Road. (Source: SIX Maps captured 29 November 2017)

10.3.3 Former Glenfield Special School

The former Glenfield Special School site is currently not listed as a heritage item but is historically associated with the locally listed Hurlstone Agricultural School. As such, consideration of the heritage values of the site is required in any future development or alterations and additions. The following controls apply.

No.	Description of Control
C1	Development applications for major works or subdivision are to be accompanied by a Conservation Management Plan for the Hurlstone Agricultural School site, encompassing the former Veterinary Research Station and former Glenfield Special School site. The CMP is to be prepared by a suitably qualified heritage professional.
C2	Any future works to the former Glenfield Special School site is to retain the arced alignment of the existing buildings.
C3	It is preferable for the former Glenfield Special School to continue to be used as a school. Any changes to the existing use is to be sympathetic and respond to the historic educational use.

10.3.4 OSL site

The OSL site is currently not listed as a heritage item but is historically associated with the state listed Macquarie Field House and future development has potential to adversely affect its rural landscape outlook. As such, consideration of the historical association of the site and setting is required in any future development. The following controls apply.

No.	Description of Control
C1	Any future subdivision of the OSL site is to allocate farmlet sized allotments, no smaller than 1200m ² , in size with the RL 60 zone being allocated for 2000sqm allotments, to preserve the rural landscape character of the site.
C2	Any future development within the OSL site is to consist of single storey residential developments only within the RL30 zone -with no substantial structures including dwellings within the RL40-60 zone at the western third of the OSL site. The area of RL60 must not contain any development other than small structures associated with recreational/ landscaped zoning, such as seating benches, playground or small open gazebo type seating areas that can be seen in public parks. Areas of RL 30-20 are the most suitable development areas and accommodate single to two-storey dwellings within the OSL site.
C3	Changes to the street alignment within the OSL site are to incorporate the original Macquarie Field House driveway alignment.
C5	Development in proximity to the Bunburry Curran Creek is to consider the setting of the creek and is to be guided by a landscape heritage assessment.
C6	The southern area of the OSL site is to incorporate medium scale plantings in order to minimise the visual impact of future development on the Macquarie Field House site.

10.3.5 Eastern Area of the Glenfield Precinct

Redevelopment within the eastern side of the Glenfield Precinct must comply with the following development controls. These controls should be read in conjunction with the general controls detailed above.

No.	Description of Control
C1	Future works to the eastern area of the Glenfield Precinct are to consider the potential impacts the works could have on significant views to and from the Macquarie Field House site.

11. Appendix C - Aboriginal Heritage Advice, Extent Heritage Pty Ltd, 9 March 2018



9 March 2018

Department of Planning and Environment Level 4, 10 Valentine Avenue Parramatta NSW 2124

Attn: Gina Metcalfe (Manager Land Release)

RE: Glenfield Planned Precinct – Aboriginal Heritage Advice

Dear Ms Metcalfe,

Extent Heritage Pty Ltd was commissioned by the Department of Planning and Environment (DPE), to provide Aboriginal heritage management advice to inform the draft rezoning and master plan for the Glenfield Planned Precinct – a precinct along the Glenfield to Macarthur Urban Renewal Corridor. Specifically, we were asked to undertake three specific tasks:

- i. Provide advice on the nature and heritage significance of a stand of trees within Hurlstone Agricultural High School (HAHS) that have been suggested to have Aboriginal cultural value.
- ii. Review the Aboriginal heritage components of two existing Heritage Impact Statements (Urbis 2017; City Plan Heritage 2018), for adequacy purposes.
- iii. Provide advice regarding the Aboriginal heritage management that will be required for future stages of the precinct planning.

In relation to (i), previous assessments identified a stand of trees located within HAHS that was suggested to be the location of a former Aboriginal meeting place, and/or may have been used as a source of traditional medicine (City Plan Heritage Feb 2018:80). In addition, a potential culturally modified (scarred) tree was identified within the Memorial Forest, also in the grounds of HAHS (City Plan Heritage Feb 2018:80). Extent undertook investigation of these sites, with participation of two key local Aboriginal stakeholders and an arborist, and in consultation with the HAHS archivist. Ultimately, it has been determined that neither location has Aboriginal cultural values. There was, however, reference made to a tree stump of a culturally modified tree beneath the transmission line along the northern boundary of HAS, which was not confirmed as part of these works, but should be further explored in future Aboriginal heritage assessment documentation for the project.

In relation to (ii), this letter report contains a desktop review of the Aboriginal heritage components of two existing reports relating to the whole or part of the Glenfield Planned Precinct (Urbis 2017, City Plan Heritage 2018). Overall, the level of Aboriginal heritage investigation to date has been partial, does not cover the entire precinct, and/or in general does not conform to Office of Environment and

Built & Urban Heritage Abor	iginal Heritage Arch	aeology Interpretation	Intangible Cultural He	ritage World Heritage
EXTENT HERITAGE PTY LTD	SYDNEY	MELBOURNE	BRISBANE	PERTH
ABN 24 608 666 306 ACN 608 666 306 info@extent.com.au extent.com.au	3/73 Union Street Pyrmont P 02 9555 4000	13/240 Sydney Road Coburg P 03 9388 0622	Level 7, 757 Ann Street Fortitude Valley P 07 3667 8881	312 Onslow Road Shenton Park P 08 9381 5206

Heritage (OEH) guidelines. These limitations are acknowledged in the two documents, with recommendations for further investigation in the form of an Aboriginal Cultural Heritage Assessment (ACHA).

Given the presence of documented Aboriginal sites within the precinct that will require management and potentially be impacted, and the proximity of Georges River upon which significant cultural material is known to occur, we would concur with these previous recommendations. In relation to point (iii), we therefore similarly recommend that more detailed Aboriginal heritage investigation in the form of an ACHA should be implemented at the earliest opportunity.

Yours faithfully,

Dr. Alan Williams FSA MAACAI • Associate Director

Introduction

The Department of Planning and Environment (DPE) is in the process of planning for the redevelopment of Glenfield Planned Precinct, within the Glenfield to Macarthur Urban Renewal Corridor. This precinct is one of seven identified new growth precincts around seven rail stations from Glenfield to Macarthur. The heritage assessments undertaken to date indicates that the Precinct is likely to have Aboriginal heritage values.

The aims of this letter are to:

- Provide advice on the nature and heritage significance of a stand of trees within Hurlstone Agricultural High School (HAHS) that have been suggested to have Aboriginal cultural value.
- Review the Aboriginal heritage components of two existing Heritage Impact Statements (Urbis 2017; City Plan Heritage 2018), for adequacy purposes.
- Provide advice regarding the Aboriginal heritage management that will be required for future stages of the precinct planning.

Study Area

Glenfield Planned Precinct comprises approx. 605 hectares, bounded to the north by Glenfield Road, The Georges River to the east, Bunbury Curran Creek to the south, and the Hume Highway and Campbelltown Road to the west. The precinct boundary is based on a radius of 800m to 1.5km distance from Glenfield Station, representing a 10-20 minute walk from the station, a major interchange station for the south-west. It is located in the Campbelltown Local Government Area, and in the Parish of Minto, County of Cumberland. The precinct is within the boundaries of Tharawal Local Aboriginal Land Council.

Relevant Legislation

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). 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. Guidelines for Aboriginal Cultural Heritage assessment provided by OEH are:

- Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW, 2010)
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011).
- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010).
- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010).

In most circumstances, in the event that harm to Aboriginal objects or places is likely, an Aboriginal Heritage Impact Permit (AHIP) is required. An ACHA, produced in accordance with the above guidelines, is the documentation required to support an AHIP application.

Document Review

This review examines the sections relating to Aboriginal heritage in the following documents:

- Urbis Pty Ltd. June 2017. Heritage Impact Statement and Archaeological Assessment Hurlstone Development Project at Glenfield NSW 2167. Report to Property NSW.
- City Plan Heritage. February 2018. Heritage Impact Statement Glenfield to Macarthur Urban Corridor Glenfield Precinct Masterplan Draft. Report to Department of Planning.

The Urbis report focussed upon the Hurlstone Agricultural High School (HAHS) (incorporating 7 lots), and the Aboriginal heritage component has been undertaken in broad accordance with Office of Environment and Heritage's (OEH) *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW, 2010). The Urbis report identified that three previously documented sites were within, or in close proximity to, the HAHS subject area, according to a search of OEH's Aboriginal Heritage Information Management System (AHIMS). Of these:

- one site SWRL 15 (AHIMS # 45-5-4253) had been destroyed as part of construction of the South West Rail Link,
- one site had been previously investigated through test excavation, MFH2 (AHIMS # 45-5-2495), and
- the remaining site, MLE1 (AHIMS# 45-5-2744), was an isolated find that was also likely to have been destroyed during the South West Rail Link works.

Urbis contacted OEH and sought the status of the last site to be updated on the AHIMS database to reflect these findings. None of the sites were relocated during the site inspection as part of the Urbis assessment, and no additional Aboriginal objects or sites were identified.

Urbis developed a predictive model of the study area, highlighting the potential for other Aboriginal sites to occur. The less disturbed areas within the subject area were assessed as having a low-moderate potential for cultural deposits in the form of artefact scatters and/or subsurface deposits (potential archaeological deposits (PAD)), with a very low to nil chance of the subject area containing culturally modified (scarred) trees. Unfortunately, no figure or map accompanied the predictive model. Urbis recommended that an Aboriginal Cultural Heritage Assessment Report (ACHAR) would be required as part of the future master planning process, incorporating consultation with the local Aboriginal community in accordance with OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH 2010). Urbis also indicated that based on the results of their assessment, test excavation would likely be a required component of the ACHA.

The City Plan Heritage report covers the entire Glenfield Planned Precinct, but draws heavily on the previous Urbis assessment of the HAHS (which comprises only part of the Precinct). The Aboriginal heritage component of this report is brief, and does not conform with OEH's guidelines, as it lacks the level of detail required for due diligence and/or ACHA documents. In general, the report does not consider Aboriginal heritage beyond the previously recorded sites on the AHIMS database, and does not make any predictions about other areas. However, this report does make reference to two areas

of potential Aboriginal cultural significance within HAHS: one a stand of trees north of the school oval; and a potential culturally modified (scarred) tree within the Memorial Forest. City Plan Heritage similarly recommended that further Aboriginal consultation should be undertaken prior to the next phase of works.

Overall, the Aboriginal heritage components of the two reports is focussed on the HAHS, and neither addresses the whole of the precinct. This has led to the significant omission of the potential heritage values of land alongside the Georges River. Based on regional models, it seems likely that the most significant Aboriginal cultural deposits – and therefore development constraints - would be situated within the Georges River corridor. Recent investigations at the proposed Moorebank Intermodal Terminal, immediately north of the precinct, have revealed Pleistocene (>10,000 years ago) cultural materials. Archaeological investigations undertaken at the Glenfield Waste Management Centre suggest such deposits extend to the west of the river as well.

In general, planning for recent priority growth areas land releases and re-zonings undertaken by DPE have required a substantial level of Aboriginal heritage assessment, often comparable with an ACHA as defined in OEH's guidelines. The information on this precinct to date does not appear to be consistent with precedent (see below for more discussion).

Potential Aboriginal Cultural Value

AHIMS Database

OEH maintains the Aboriginal Heritage Information Management System (AHIMS), a database of known and registered Aboriginal sites in NSW. A search of AHIMS was carried out on 23 February 2018 (Client Service ID: 329878) for the area: Latitude -33.9872, Longitude 150.8708 to Latitude - 33.9578, Longitude 150.9174 with a buffer of 1km, centred on the Glenfield Planned Precinct. The full search results are listed in **Appendix 1** and shown in **Figure 1**.

A total of 86 registered Aboriginal sites are within the search area (**Table 1**). Fifteen of the registered sites within the search area are listed as destroyed, one site is listed as partially destroyed and one site – a modified tree - is listed as 'not a site'. The most common site feature within the search area is artefacts - including both artefact scatters and isolated finds.

Site Features	Total (n)	Total (%)
Art (Pigment of Engraved)	4	4.65
Artefact	65	75.58
Artefact, Potential Archaeological Deposit (PAD)	4	4.65
Artefact, Stone Arrangement	1	1.16
Grinding Groove	1	1.16
Modified Tree (Carved or Scarred)	7	8.14
Potential Archaeological Deposit (PAD)	4	4.65
Total	86	100.00

Within the subject area, there are three registered Aboriginal sites:

- Site #45-5-2495 (MFH 2) an artefact scatter. This site was investigated by Dallas (2000) for a proposed housing subdivision and was found to comprise a low density background scatter of stone artefacts, with types common in the region and therefore with low archaeological significance. Urbis recommended that this site be updated to destroyed or not a site. However, neither recommendation is suitable, since Aboriginal objects were recovered (and therefore it cannot be 'not a site'), and to date, it is unclear if the site has been completely destroyed, partially destroyed, or only impacted by the test excavation.
- Site #45-5-4253 (SWRL 15/AAS1) an artefact scatter now destroyed. This site was identified as an area of archaeological sensitivity on a ridge and slopes between Bunbury Curran and Maxwells Creeks, and which has now been destroyed. Test and salvage excavation resulted in the recovery of 33 artefacts from 13 square metres (AMBS 2010), effectively reflecting a low density or transient occupation of the region in the past. An update has been made to site #45-5-4253 to reflect the destroyed status following recommendations by Urbis.
- Site #45-5-2744 (MLE1) an isolated find likely destroyed. The location of this site is somewhat uncertain with the spatial co-ordinates in AHIMS differing from the location of a site plan also include in the listing. Regardless, the site was likely impacted during the construction of the SWRL. The Urbis report shows the site located within the area of the SWRL and has aerial imagery that show extensive impacts to this area from the construction. However, an earlier Australian Museum Business Services (AMBS) 2010 report mapped the site outside of the impact corridor, and assessed the surrounding area as having moderate potential to contain subsurface cultural material.

It must be noted that while only a few previously recorded sites are located within the study area, significant numbers of sites have been documented in the surrounding areas. These include numerous surface and sub-surface sites on either side of Georges River, some of which have been shown to contain highly significant cultural material that dates back to the Pleistocene (~15 ka). In addition, extensive survey along the South West Rail Link (SWRL) alignment identified a large number of isolated Aboriginal objects and/or stone artefact scatters of varying densities along much of its length; and show that this region was repeatedly used, albeit potentially transitorily, in the past. Therefore, the paucity of previously documented Aboriginal sites within the study area is highly likely to reflect a lack of detailed investigation, rather than necessarily an absence of cultural material.

Potential Aboriginal heritage sites

Two areas of potential Aboriginal cultural value were identified by City Plan Heritage (2018: 80), namely stand of trees which may be associated with a potential former Aboriginal meeting place, and/or may have been used as a source of traditional medicine; and a potential culturally modified (scarred) tree. Both of these areas are located within the grounds of Hurlstone Agricultural High School (HAHS).

A site meeting was undertaken on 5 March 2018 to inspect and discuss the two areas. The meeting was attended by Dr Tessa Bryant (Extent Heritage Advisor), Glenda Chalker (Cubbitch Barta Native

Title Claimants Aboriginal Corporation), Rebecca Ede (Tharawal Local Aboriginal Land Council), Danny Draper (Urban Tree Management – Arborist), Luke Johnson (DPE), Johanna Leglise (HAHS Archivist) and Ann Young (HAHS Deputy Principal).

The first site consisted of a grove of trees to the north of the oval (**Figure 2**). This area had been reported to the school archivist as an area of significance to the local Aboriginal community as it had been a meeting place for local Indigenous women, and the trees were of significant age (HAHS nd, p.25). The location of these trees has been mapped as shale plains woodland by NPWS (2003). However, on inspection, the trees were a mixture of native and exotic trees, suggesting a recent planting (**Plate 1** to **Plate 4**). Further, the majority of these trees were determined to be fairly young by the arborist, with only one or two ironbarks likely to be ~100 years old (**Plate 3**). None of the trees showed any evidence of cultural modification. The area was not known by either of the Aboriginal representatives to hold any cultural values, nor to have been a meeting place in the past.

The second area of investigation encompassed the Memorial Forest, where the potential culturally modified (scarred) tree had been identified. It must be highlighted that the City Plan Heritage (2018:32) report did not identify a specific tree, or provide a specific location for such an investigation. However, most of the trees in this area were planted in the 1950s as a memorial to those from the area who served in World Wars I and II. An inspection of a number of the trees throughout the Memorial Forest was undertaken, and none revealed evidence of cultural modification (e.g. **Plate 5** or **Plate 6**). Additionally, the arborist considered that few of the trees in either the Memorial Forest or shale plains woodlands nearby were of significant age, which would have been required for evidence of Aboriginal cultural modification to be likely (such practices typically stopping in the mid- to late 19th Century in settled Australia).

Discussions were also held regarding rumours of an Aboriginal burial ground within the HAHS grounds. This was considered likely to be a corruption of two separate observations within the local community, specifically the recovery of the remains of an Aboriginal individual from elsewhere in Glenfield incorrectly linked to archaeological sites that were identified and fenced off as part of the SWRL works. Based on this interpretation, it was considered unlikely that any burial ground was present within HAHS.

Finally, one potential culturally modified (scarred) tree, now a tree stump only, was known to the Aboriginal representatives as being located beneath a transmission line on the northern edge of HAHS. This was not visited as part of this site inspection and would require further assessment as part further assessment for the precinct.

Conclusions

In recent planning for priority growth area land release and master-planning studies being undertaken by DPE and its partners, Aboriginal heritage is investigated and assessed in accordance with OEH guidelines. Specifically, the assessment usually takes the form and structure of an Aboriginal Cultural Heritage Assessment (ACHA) to ensure comprehensive investigation of cultural materials, provide a formal framework for Aboriginal consultation, and develop the necessary documentation to allow transition into development following re-zoning. Such a document also provides the foundation for applying for future Aboriginal Heritage Impact Permits (AHIPs) to investigate, harm and/or destroy Aboriginal heritage if required. Neither of the two studies to date fulfil these requirements, with both representing a more preliminary consideration of Aboriginal heritage in only a small portion of the wider precinct. In fact, both these studies recommend that further assessment is undertaken, with some reference to the ACHA process.

Importantly, the ACHA provides the necessary documentation to allow for sub-surface investigations (archaeological test excavations) to be implemented. Based on the preliminary results of the Urbis (2017) and City Plan Heritage (2018) studies, and on the findings of archaeological investigations along the Georges River – and along the SWRL corridor, it is considered that such works would be essential to fully characterise the cultural resource of the study area. Regardless of whether DPE consider implementing such works prior to re-zoning, the ACHA would provide the groundwork to allow them to be easily implemented following the re-zoning if required.¹

As it currently stands, the level of Aboriginal heritage assessment undertaken for the precinct to date is considered insufficient, to manage the potential Aboriginal heritage values of the precinct, compared with other priority growth areas Extent has been involved in. It is recommended that an ACHA, or at the very least a more detailed assessment focussed on Aboriginal heritage and including detailed Aboriginal community consultation, is implemented at the earliest opportunity.

In relation to the two areas identified as being of potential Aboriginal cultural value in the City Plan Heritage (2018) report, we have undertaken additional investigation in consultation with key local Aboriginal stakeholders and an arborist, as well as further discussion with HAHS personnel. Ultimately, it has been concluded that the two areas are unlikely to have Aboriginal cultural significance. This is based on two main factors:

- i. neither of the Aboriginal community representatives had any knowledge of the two areas, despite both groups having been involved in cultural resource management in the region for a considerable time; and
- ii. the arborist considered the trees in question to be typically too young for cultural modification (practices which largely ended in the 19th Century) and/or in some instances non-endemic to the region, suggestive of quite recent planting (and again therefore unlikely to reflect cultural practices undertaken in general more than a century earlier).

Based on these findings, neither area needs to be managed as an Aboriginal site in the masterplanning process. It is highlighted, however, that a further culturally modified (scarred) tree was described on the on the northern edge of HAHS and will require further assessment in the future.

¹ For different priority growth areas, different levels of on-site work have been undertaken. This is typically the most expensive component of Aboriginal cultural resource management. In combination with land access issues, this type of investigation is therefore often problematic for DPE to implement. There are, however, examples where DPE has undertaken these works, notably the East Leppington Precinct, and this has led to greatly improved cultural heritage outcomes for the Precinct; and fewer constraints for future development. Conversely, in the North West Priority Growth Area, such work was not implemented, and now must be undertaken by each developer on a lot by lot basis. These approaches are discussed in more detail in a number of review documents developed by Extent for DPE, including AHMS (2013), Extent Heritage (2015a, 2015b, 2015c).

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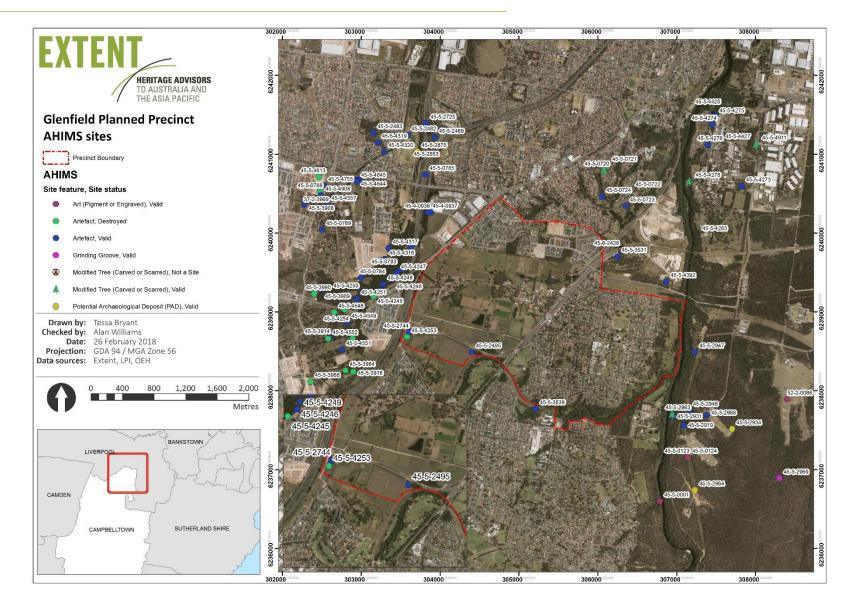


Figure 1. AHIMS sites within and in proximity to the Glenfield Planned Precinct.

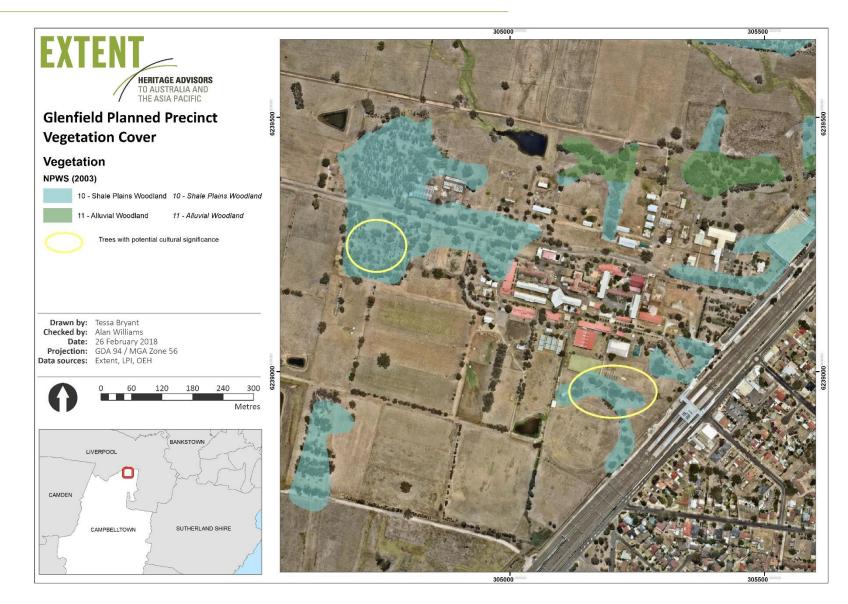


Figure 2. Vegetation mapping within Hurlstone Agricultural High School, with the location of the trees of interest (NPWS 2003).



Plate 1. Trees within grove to north of oval.



Plate 3. Ironbark tree in the grove north of the oval.



Plate 5. View west of trees within the Memorial Forest.



Plate 2. Trees within the grove to north of the oval.



Plate 4. Trees along eastern edge of oval.



Plate 6. View east of trees within the Memorial Forest.

Appendix 1: AHIMS Search



Extensive search - Site list report

SiteFeatures SiteID SiteName Datum Zone Easting Northing Context Site Status SiteTypes Reports 45-5-2495 MFH 2 AGD 56 304300 6238300 Open site Valid Artefact :-Open Camp Site Contact Recorders Mary Dallas Consulting Archaeologists Permits 45-5-2482 Maxwells Creek 10 (MC10) AGD 56 303490 6241050 Open site Valid Artefact :-Open Camp Site 98369,98370,9 8371,98443,98 739 Recorders Ms.Elizabeth White Contact Permits 1564 98369,98370,9 45-5-2483 Maxwells Creek 9 (MC9) AGD 56 303050 6241080 Open site Valid Artefact :-**Open Camp Site** 8371,98443,98 739 Contact Recorders Ms.Elizabeth White Permits 45-5-2469 IF1 AGD 56 303830 6241020 Open site Valid Artefact :-**Isolated** Find 98369,98370,9 8371,98443 Recorders Helen Brayshaw 1398 Contact Permits 45-4-0936 Crossroad 1 56 303780 Artefact : -**Open Camp Site** 98369,98370,9 AGD 6240070 Open site Valid 8371,98443,98 739 Recorders Kerry Navin, Mr.Kelvin Officer Contact Permits 997 45-4-0937 Crossroad 2 AGD 56 303750 6240070 Artefact :-Open Camp Site 98369,98370,9 Open site Valid 8371,98443,98 739 Contact Recorders Kerry Navin, Mr.Kelvin Officer Permits 986 45-5-2455 DD1 AGD 56 302700 6238890 Open site Valid Artefact :-**Open Camp Site** 98739 Recorders Mary Dallas Consulting Archaeologists Contact Permits 45-5-2457 DD3 GDA. 56 302904 6238239 Open site Destroyed Artefact:3 Open Camp Site 98739,102184 Recorders Mary Dallas Consulting Archaeologists, Australian Museum Consulting (AM Consult Permits Contact 45-5-2458 DD 4 GDA 56 302894 6238659 Open site Destroyed Artefact : 2 **Open Camp Site** 98739,102184 Recorders Mary Dallas Consulting Archaeologists, Australian Museum Consulting (AM Consult Permits Contact 52-2-0086 Long Point:Matthews No.1 Shelter; AGD 56 308300 6237700 Closed site Valid Art (Pigment or Shelter with Art Engraved):-Contact Recorders Margrit Koettig Permits 45-6-2428 Glenfield S.T. AGD 56 306200 6239600 Open site Not a Site Modified Tree Scarred Tree 103036 (Carved or Scarred): Recorders Anthony English Contact Permits 45-5-0123 George's River; AGD 56 307040 6236964 Valid Shelter with Art Closed site Art (Pigment or Engraved) :-Contact Recorders R Etheridge Permits 45-5-0124 Harris Creek: AGD 56 307040 Valid Art (Pigment or Shelter with Art 6236964 Closed site Engraved) :-

Report generated by AHIMS Web Service on 23/02/2018 for Tessa Bryant for the following area at Lat, Long From :-33.9872, 150.8708 - Lat, Long To :-33.9578, 150.9174 with a Buffer of 1000 meters. Additional Info : Aboriginal heritage advice. Number of Aboriginal sites and Aboriginal objects found is 86

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Your Ref/PO Number : 5YD18043



Extensive search - Site list report

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders		clean				Permits		
45-5-0720	Kiawaka 3	AGD	56	305980	6240600	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1360
	Contact	Recorders	Mar	y Dallas Con	sulting Archaes	alogists		Permits	264	
45-5-0721	Kiawaka 4	AGD	56	306000	6240660	Open site	Valid	Modified Tree (Carved or Scarred) :	Scarred Tree	1360
	Contact	Recorders	Mar	y Dallas Con	ulting Archaes	ologists		Permits		
45-5-0722	Kiawaka 5	AGD	56	306300	6240340	Open site	Valid	Modified Tree (Carved or Scarved) :	Scarred Tree	1360
	Contact	Recorders	Mar	y Dallas Con	alting Archaes	dogists		Permits	2521	
45-5-0723	Kiawaka 2	AGD		306250	6240150	Open site	Valid	Artefact : -	Open Camp Site	1360
	Contact	Recorders	Mar	v Dallas Con	alting Archaeo	dogists		Permits		
45-5-0724	Kiawaka 1	AGD	- A Contract of the Contract o	305950	6240270	Open site	Valid	Artefact :	Open Camp Site	1360
	Contact	Recorders	Mar	v Dallas Con	ailting Archaes	172		Permits	10	
45-5-0780	MC-3 (Maxwells Creek)	AGD		303350	6239250	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98 370,98371,984 43,98739
	Contact	Recorders	Alice	e Corman La	ura-Jane Smith			Permits		43,307.33
45-5-0781	MC-4 (Maxwells Creek)	AGD	1000 C	303400	6239350	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98 370,98371,984 43,98739
	Contact	Recorders	Alice	e Gorman,La	ura-Jane Smith			Permits		
45-5-0782	MC-5 (Maxwells Creek)	AGD	56	303530	6239640	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98 370,98371,984 43,98739
	Contact	Recorders	Alice	e Gorman,La	ura-Jane Smith			Permits		
45-5-0783	MC-6;	AGD	56	303400	6239550	Open site	Valid	Artefact : -	Open Camp Site	1727,98369,98 370,98371,984 43,98739
	Contact	Recorders	Alice	e Gorman,La	ura-Jane Smith			Permits		
45-5-0784	MC-7;	AGD		302900	6239240	Open site	Valid	Artefact :-	Open Camp Site	1727,98369,98 370,98371,984 43,98739
	Contact	Recorders	the state of the s	the second second second second	ura-Jane Smith			Permits		10000000000
45-5-0785	MC-8;	AGD	56	303710	6240550	Open site	Valid	Artefact :+	Open Camp Site	1727,98369,98 370,98371,984 43,98739

Report generated by AHIMS Web Service on 23/02/2018 for Tessa Bryant for the following area at Lat, Long From : -33.9872, 150.8708 - Lat, Long To : -33.9578, 150.9174 with a Buffer of 1000

meters. Additional Info : Aboriginal heritage advice. Number of Aboriginal sites and Aboriginal objects found is 86

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Your Ref/PO Number : SYD18043

NSW	& Heritage Extensive search	Site list report									Number : 5YD180 Service ID : 3298
iteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatur	es	SiteTypes	Reports
80	Contact	Recorders	Alio	e Gorman,La	ura-Jane Smith	10 C	Salata and a salat	- (2)	Permits	101 Constants	and the
5-5-0788	EP-1	GDA	56	302477	6240520	Open site	Destroyed	Artefact : •		Open Camp Site	1727,98369,98 370,98371,984 43,98739,1024 42
	Contact	Recorders	Mar	y Dallas Con	sulting Archaeo	logists,Mary Dall	las Consulting Archa	eologists,Alice	Permits	3933	
15-5-0789	EP-2;	AGD	56	302400	6239850	Open site	Valid	Artefact : -		Open Camp Site	1727,98369,98 370,98371,984 43,98739,1024 42
	Contact	Recorders		the second second second second	ura-Jane Smith				Permits		
5-5-0001	Macquarie Fields;Three Hand Alcove;	AGD		306685	6236409	Closed site	Valid	Art (Pigme Engraved)	2+	Shelter with Art	1976
	Contact	Recorders	ASR	the second se	100000	21001		2100200000	Permits		
5-5-2725	PAD-05-1	AGD	56	303720	6241200	Open site	Valid	Artefact : -			98369,98370,9 8371,98443,99 739
	Contact	Recorders	Mrs.	Robynne Mi	Ūs.				Permits	1396	
5-5-2744	MLE1	AGD	56	303500	6238550	Open site	Valid	Artefact : -			98739
	Contact	Recorders	Dom	ninic Steele A	rchaeological (Consulting			Permits	1989	
5-5-2853	PAD 6 WSO	AGD	56	303510	6240920	Open site	Valid	Potential Archaeolog Deposit (P.			
	Contact	Recorders	Hele	n Brayshaw					Permits	1638	
5-5-2875	PAD 6 Open Campsite	AGD	56	303610	6240840	Open site	Valid	Potential Archaeolog Deposit (P.			
	Contact	Recorders	Cent	tral West Arc	haeological an	d Heritage Servic	es Pty Ltd		Permits	1737	
5-5-2919	H667	AGD	56	306990	6237370	Open site	Valid	Artefact : -			
	Contact	Recorders							Permits		
5-5-2934	8414	AGD	56	307600	6237325	Open site	Valid	Potential Archaeolog Deposit (P.			
	Contact	Recorders	Nav	in Officer He	ritage Consulta	nts Pty Ltd			Permits		
5-5-2931	H581	AGD	56	306850	6237490	Open site	Valid	Artefact :-			
	Contact	Recorders	Nav	in Officer He	ritage Consulta	nts Pty Ltd			Permits		
5-5-2963	Site H928	AGD	56	306840	6237510	Open site	Valid	Modified T (Carved or	Contraction of the second		

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Extensive search - Site list report

SiteID	SiteName		Zone	Easting	Northing	Context	Site Status	SiteFeatur	10 C	SiteTypes	Reports
* * 4.54K	Contact	Recorders		bie Oakley		A CONTRACTOR	10000		Permits		
5-5-2968	Site H1025	AGD		307280	6237500	Open site	Valid	Artefact : •			
	Contact	Recorders			itage Consulta				Permits		
5-5-2946	H363	AGD	56	307050	6237560	Open site	Valid	Artefact :-			
	Contact	Recorders						3	Permits		
5-5-2947	H362	AGD	56	307130	6238300	Open site	Valid	Artefact : *			
	Contact	Recorders						1	Permits		
5-5-2964	Site H970	AGD	56	307130	6236550	Open site	Valid	Potential Archaeolog Deposit (P/			
	Contact	Recorders		bie Oakley					Permits		
5-5-2969	Site H1029	AGD	56	308200	6236700	Open site	Valid	Grinding G	noove:-		
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-3531	Glenfield 1	GDA	56	306252	6239702	Open site	Valid	Artefact : 1			103034
	Contact	Recorders	Aust	ralian Museu	im Consulting	(AM Consulting)			Permits		
5-5-3535	SWRL S	GDA	56	302757	6239032	Open site	Destroyed	Stone Arra 5, Artefact			
	Contact	Recorders	Aust	ralian Musei	im Consulting	(AM Consulting),)	Kelleher Nightingale C	onsulting Pt	Permits	3849	
5-5-3639	BC1 (Liverpool)	GDA	56	305214	6237770	Open site	Valid	Artefact : 1			101368
	Contact	Recorders	Mr.0	liver Brown					Permits		
5-5-3908	EPCS 1	AGD	56	302179	6240173	Open site	Valid	Artefact : 1			102442
	Contact	Recorders	Meg	an Mebberso	a				Permits		
5-5-3909	EPCS 3	AGD	56	302385	6239089	Open site	Valid	Artefact : 1			
	Contact	Recorders	Meg	an Mebberso	n.				Permits		
5-5-3913	EPCS 12	GDA	56	302904	6238239	Open site	Destroyed	Artefact : 1			
	Contact	Recorders	Meg	an Mebberso	n,Kelleher Nig	htingale Consultin	ng Pty Ltd, Miss. Kriste	Taylor	Permits		
5-5-3914	EPCS 13	AGD	56	302500	6238480	Open site	Valid	Artefact : 2	S		
	Contact	Recorders	Meg	an Mebberso	6				Permits		
5-5-3916	EPCS 15	GDA	56	302904	6238239	Open site	Destroyed	Artefact : 1	100		
	Contact	Recorders	Meg	an Mebberso	n.Kelleher Nig	htingale Consultin	ng Pty Ltd.Miss.Kriste	Taylor	Permits	3849	
5-5-3990	SWRL 14	GDA	56	302406	6239226	Open site	Destroyed	Artefact : 4			102198,10219 9
	Contact	Recorders	Aust	ralian Museu	im Consulting	(AM Consulting),	Kelleher Nightingale (onsulting Pt	Permits	3849	
7-2-3969	EPCS 2	GDA	56	302464	6240386	Open site	Partially Destroyed	Artefact : 9 Archaeolog Deposit (P/	pical		102184

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Your Ref/PO Number : SYD18043



Extensive search - Site list report

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatur	res	SiteTypes	Reports
82	Contact	Recorders	Austr	alian Museu	m Consulting	(AM Consulting).	Ms.Ngaire Richards	utefact - Culta	Permits	4009,4150	steel in
5-5-3984	EPSW 1	GDA	56	302903	6238254	Open site	Destroyed	Artefact : 1			102184
	Contact	Recorders	Aust	alian Museu	m Consulting	(AM Consulting)	Kelleher Nightingale	Consulting Pt	Permits	3849	
5-5-3988	EPSW 5	GDA	56	302361	6238116	Open site	Destroyed	Artefact : 2	9		102184
	Contact	Recorders	Austr	alian Maseu	im Consulting	(AM Consulting).	Kelleher Nightingale	Consulting Pt	Permits	3849	
5-5-4273	MA2A	GDA	56	307826	6240593	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4274	маза	GDA	56	307456	6241375	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4275	MA4A	GDA	56	307489	6241489	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4276	MASA	GDA	56	307396	6241118	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4278	мава	GDA	56	307162	6240648	Open site	Valid	Modified T (Carved or 1	ree Scarred) :		
	Contact	Recorders	Navi	Officer Her	itage Consulta	nts Pty Ltd		19 A	Permits		
5-5-4319	SD-AS-001	GDA	56	303211	6241146	Open site	Valid	Artefact : 1	i i		
	Contact	Recorders	Kaya	ndel Archaer	ological Servic	es.Mr.Lance Sym	e		Permits		
5-5-4320	SD-1F-001	GDA	56	303293	6241031	Open site	Valid	Artefact : 1			
	Contact	Recorders	Kaya	ndel Archae	ological Servic	es,Mr.Lance Sym	e .		Permits		
5-5-4245	CRO 1	GDA	56	303158	6239199	Open site	Destroyed	Artefact : 1			
	Contact	Recorders	Kelle	her Nighting	ale Consulting	Pty Ltd, Doctor.S	Sandra Wallace, Miss. H	tristen Taylor	Permits	3849	
5-5-4246	CR02	GDA	56	303254	6239271	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits	4015	
5-5-4247	CR03	GDA	56	303452	6239489	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W.	allace				Permits		
5-5-4248	CR04	GDA	56	303399	6239413	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4249	CR05	GDA	56	303284	6239350	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4250	CR06	GDA	56	303022	6239250	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4251	CR07	GDA	- A state of the s	302948	6239166	Open site	Valid	Artefact : 1	and the second s		
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		

Report generated by AHIMS Web Service on 23/02/2018 for Tessa Bryant for the following area at Lat, Long From : -33.9872, 150.8708 - Lat, Long To : -33.9578, 150.9174 with a Buffer of 1000 meters. Additional Info : Aboriginal heritage advice. Number of Aboriginal sites and Aboriginal objects found is 86

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Your Ref/PO Number : SYD18043



Extensive search - Site list report

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatur	res	SiteTypes	Reports
	Contact	Recorders	Austr	ralian Museu	m Consulting	(AM Consulting).	Ms.Ngaire Richards	utefact - Culta	Permits	4009,4150	
5-5-3984	EPSW 1	GDA	56	302903	6238254	Open site	Destroyed	Artefact : 1			102184
	Contact	Recorders	Aust	ralian Museu	m Consulting	(AM Consulting).	Kelleher Nightingale	Consulting Pt	Permits	3849	
5-5-3988	EPSW 5	GDA	56	302361	6238116	Open site	Destroyed	Artefact : 2	9		102184
	Contact	Recorders	Austr	ralian Maseu	m Consulting	(AM Consulting).	Kelleher Nightingale	Consulting Pt	Permits	3849	
5-5-4273	MA2A	GDA	56	307826	6240593	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4274	маза	GDA	56	307456	6241375	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4275	MA4A	GDA	56	307489	6241489	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4276	MASA	GDA	56	307396	6241118	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	ints Pty Ltd			Permits		
5-5-4278	MABA	GDA	56	307162	6240648	Open site	Valid	Modified T (Carved or 1	ree Scarred) :		
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd		26	Permits		
5-5-4319	SD-AS-001	GDA	56	303211	6241146	Open site	Valid	Artefact : 1			
	Contact	Recorders	Kaya	ndel Archae	ological Servic	es.Mr.Lance Sym	e		Permits		
5-5-4320	SD-IF-001	GDA	56	303293	6241031	Open site	Valid	Artefact : 1			
	Contact	Recorders	Kaya	ndel Archae	ological Servic	es,Mr.Lance Sym	e		Permits		
5-5-4245	CRO 1	GDA	56	303158	6239199	Open site	Destroyed	Artefact : 1			
	Contact	Recorders	Kelle	her Nighting	ale Consulting	Pty Ltd, Doctor.S	andra Wallace, Miss. H	tristen Taylor	Permits	3849	
5-5-4246	CR02	GDA	56	303254	6239271	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits	4015	
5-5-4247	CR03	GDA	56	303452	6239489	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	ur.Sandra W	allace				Permits		
5-5-4248	CR04	GDA	56	303399	6239413	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4249	CR05	GDA	56	303284	6239350	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4250	CR06	GDA	56	303022	6239250	Open site	Valid	Artefact : 1	-		
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4251	CR07	GDA	56	302948	6239166	Open site	Valid	Artefact : 1	and the second se		
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		

Report generated by AHIMS Web Service on 23/02/2018 for Tessa Bryant for the following area at Lat, Long From : -33.9872, 150.8708 - Lat, Long To : -33.9578, 150.9174 with a Buffer of 1000 meters. Additional Info : Aboriginal heritage advice. Number of Aboriginal sites and Aboriginal objects found is 86

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Your Ref/PO Number : SYD18043



Extensive search - Site list report

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatur	res	SiteTypes	Reports
	Contact	Recorders	Austr	ralian Museu	m Consulting	(AM Consulting).	Ms.Ngaire Richards	utefact - Culta	Permits	4009,4150	
5-5-3984	EPSW 1	GDA	56	302903	6238254	Open site	Destroyed	Artefact : 1			102184
	Contact	Recorders	Aust	ralian Museu	m Consulting	(AM Consulting).	Kelleher Nightingale	Consulting Pt	Permits	3849	
5-5-3988	EPSW 5	GDA	56	302361	6238116	Open site	Destroyed	Artefact : 2	9		102184
	Contact	Recorders	Austr	ralian Maseu	m Consulting	(AM Consulting).	Kelleher Nightingale	Consulting Pt	Permits	3849	
5-5-4273	MA2A	GDA	56	307826	6240593	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4274	маза	GDA	56	307456	6241375	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4275	MA4A	GDA	56	307489	6241489	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd			Permits		
5-5-4276	MASA	GDA	56	307396	6241118	Open site	Valid	Artefact : 1			
	Contact	Recorders	Navi	n Officer Her	itage Consulta	ints Pty Ltd			Permits		
5-5-4278	MABA	GDA	56	307162	6240648	Open site	Valid	Modified T (Carved or 1	ree Scarred) :		
	Contact	Recorders	Navi	n Officer Her	itage Consulta	nts Pty Ltd		26	Permits		
5-5-4319	SD-AS-001	GDA	56	303211	6241146	Open site	Valid	Artefact : 1			
	Contact	Recorders	Kaya	ndel Archae	ological Servic	es.Mr.Lance Sym	e		Permits		
5-5-4320	SD-IF-001	GDA	56	303293	6241031	Open site	Valid	Artefact : 1			
	Contact	Recorders	Kaya	ndel Archae	ological Servic	es,Mr.Lance Sym	e		Permits		
5-5-4245	CRO 1	GDA	56	303158	6239199	Open site	Destroyed	Artefact : 1			
	Contact	Recorders	Kelle	her Nighting	ale Consulting	Pty Ltd, Doctor.S	andra Wallace, Miss. H	tristen Taylor	Permits	3849	
5-5-4246	CR02	GDA	56	303254	6239271	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits	4015	
5-5-4247	CR03	GDA	56	303452	6239489	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	ur.Sandra W	allace				Permits		
5-5-4248	CR04	GDA	56	303399	6239413	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4249	CR05	GDA	56	303284	6239350	Open site	Valid	Artefact : 1			
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4250	CR06	GDA	56	303022	6239250	Open site	Valid	Artefact : 1	-		
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		
5-5-4251	CR07	GDA	56	302948	6239166	Open site	Valid	Artefact : 1	and the second se		
	Contact	Recorders	Doct	or.Sandra W	allace				Permits		

Report generated by AHIMS Web Service on 23/02/2018 for Tessa Bryant for the following area at Lat, Long From : -33.9872, 150.8708 - Lat, Long To : -33.9578, 150.9174 with a Buffer of 1000 meters. Additional Info : Aboriginal heritage advice. Number of Aboriginal sites and Aboriginal objects found is 86

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Your Ref/PO Number : SYD18043



Extensive search - Site list report

SiteID 45-5-4283	SiteName MA1A	Datum GDA	Zone 56	Easting 307309	Northing 6240020	Context Open site	Site Status Valid	SiteFeatur Artefact : 1	Potential	SiteTypes	Reports
								Archaeolog Deposit (P/	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Contact	Recorders	Navi	n Officer Her	itage Consulta	ints Pty Ltd		Deposit (P)	Permits		
45-5-4316	CVWIF1	GDA		303303	6239666	Open site	Valid	Artefact : 1	and the second second		
	Contact	Recorders	Mr.j	oshua Madde	n,Artefact - Cu	Itural Heritage M	lanagement		Permits		
45-5-4317	CVWIF2	GDA	56	303350	6239805	Open site	Valid	Artefact : 1			
	Contact	Recorders	Mr.j	oshua Madde	n,Artefact - Cu	iltural Heritage N	lanagement		Permits		
45-5-4253	SWRL 15	GDA	56	303584	6238681	Open site	Destroyed	Artefact :-	5		
	Contact	Recorders	Aust	ralian Musey	im Consulting	(AM Consulting)			Permits		
45-5-4254	SWRL 16	GDA	56	302792	6239029	Open site	Destroyed	Artefact :-	9		
	Contact	Recorders	Aust	ralian Muses	am Consulting	(AM Consulting),	Kelleher Nightingale	Consulting Pt	Permits	3849	
45-5-4392	GWD3	GDA	56	306870	6239382	Open site	Valid	Artefact : -			
	Contact	Recorders	Mr.A	dan Williams	E				Permits		
45-5-4425	MAII	GDA	56	307222	6241626	Open site	Valid	Artefact : -, Archaeolog Deposit (P/	pical		
	Contact	Recorders	Mrs.	Nicola Hayes				1.3	Permits		
15-5-4427	MA13	GDA	56	307602	6241186	Open site	Valid	Artefact : +, Archaeolog Deposit (P)	pical		
	Contact	Recorders	Mrs.	Nicola Hayes					Permits		
5-5-4613	Croatia Avenue IF1	GDA	56	302465	6240709	Open site	Destroyed	Artefact :-			
	Contact	Recorders	Mary	y Dallas Cons	ulting Archaeo	ologists,Mary Dal	las Consulting Archae	ologists,Ms.T	Permits	3933	
15-5-4557	Croatia Ave Artefact Scatter 1	GDA	56	302571	6240359	Open site	Valid	Artefact : -			
	Contact	Recorders	MsT	'amika Gowa	rd				Permits		
5-5-4548	EPS ISF 1	GDA	56	302660	6238993	Open site	Destroyed	Artefact : -			
	Contact	Recorders		and the second se	And the second se	Pty Ltd, Ms. Mary	Dallas, Miss. Kristen T		Permits	3849	
45-5-4549	EPS ISF 2	GDA		302825	6238865	Open site	Valid	Artefact :-			
	Contact	Recorders		fary Dallas	1000000	100 B.	100000		Permits		
15-5-4551	SW 5	GDA	56	302759	6238518	Open site	Valid	Artefact :-			
	Contact	Recorders	- in the second second	tage Concept					Permits	3849	
45-5-4552	SW 6	GDA		302584	6238657	Open site	Destroyed	Artefact : •			
1	Contact	Recorders			Contraction of the second s		ng Pty Ltd, Miss. Kriste		Permits	3849	
45-5-4643	2102CVW IF1	GDA		302979	6240675	Open site	Valid	Artefact : -			
	Contact	Recorders	Ms.F	enella Atkin	son				Permits		

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Your Ref/PO Number : SYD18043



Extensive search - Site list report

Your Ref/PO Number : 5YD18043 Client Service ID : 329878

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	i 1	SiteTypes	Reports
45-5-4644	2102CVW IF2	GDA	56	302947	6240669	Open site	Valid	Artefact :-			
	Contact	Recorders	Ms.F	Fenella Atkin	Ison			P	ermits		
45-5-4645	2102 CVW IF3	GDA	56	302946	6240653	Open site	Valid	Artefact : -			
	Contact	Recorders	Ms.F	Fenella Atkin	son			P	ermits		
45-5-4755	EPCS 2 re-recording	GDA	56	302530	6240600	Open site	Valid	Artefact : 1			
	Contact	Recorders	Ms.ł	enella Atkin	son			P	ermits		
45-5-4911	Moorebank Scar Tree	GDA	56	308009	6241121	Open site	Valid	Modified Tree (Carved or Sc			
	Contact	Recorders	Dun	Dummy Organisation for AHIMS APP Users, Doctor. Paul Wynn				P	ermits		
45-5-4908	Reburtal of Croatia Ave IF1 (AHIMS #45-5-4613) and EP-1 (AHIMS #45-5-0788)	GDA	56	302493	6240478	Open site	Valid	Artefact : -			
	Contact	Recorders	Mar	Mary Dallas Consulting Archaeologists,Ms.Tamika Goward				<u>P</u>	ermits		

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