

3.0 Analysis of Evidence

3.1 Introduction

This section discusses the physical condition of the site and the nature and extent of its potential historical archaeological resource. The Aboriginal archaeological potential of the site is not discussed in detail in this report. The archaeological potential of the site has been evaluated through consideration of the observed physical evidence, examination of historical information related to the development and occupation of the site, and documentation and evidence of activities or episodes (including construction of site features) that would have disturbed archaeological remains associated with former site features and activities.

The term 'historical archaeology' relates to the study of physical evidence related to human activity since the development of written documents. In Australia, this period generally relates to the period since European arrival in this country in 1788. (This is distinct from the study of Aboriginal archaeology which relates to any evidence of Aboriginal people, which may either predate the arrival of Europeans or be associated with the co-existence of Aboriginal and non-Aboriginal people during the 'contact' period.)

The term 'archaeological potential' is defined as the likelihood that a site may contain physical evidence related to an earlier phase of occupation, activity or development. This term is differentiated from 'archaeological significance' and 'archaeological research potential', which are more subjective statements on the value of the archaeological resource and discussed in more detail in Sections 4.0 and 6.0 of this report.

3.2 General Site Description

The site covers 9.98 hectares and contains a number of elements including buildings, roadway areas, landscaping and other infrastructure. These elements include the Penfolds administration building (formerly part of Bayview Asylum), the c1959 Penfolds warehouse complex, a c1959 residential building and Kennards Storage Depot.

This report does not include a detailed description of the site elements, except where relevant to the site's archaeological resources. Further information on existing site elements is detailed in the Heritage Impact Statement.

3.3 Evaluation of Potential Historical Archaeology

3.3.1 Background

Intact historical archaeological deposits and features can provide information to enhance the documented history of New South Wales, a local area or a specific site. Archaeological investigations can reveal information about social, economic and technological conditions and provide information about a site that is not available from any other source. The archaeological resource can also address broader issues and questions relating to the material culture and daily activities of people and their use of sites and buildings.

The archaeological resource (or 'relics'), once examined and recorded, can provide primary evidence about the way of life of previous generations through an examination of remnant structural features, artefacts and occupation deposits. Archaeological sites that contain these elements intact

can therefore have a high research value. This value can be further enhanced where there is a substantial body of supporting documentary evidence that enables further inference to be drawn from the archaeological records. It is through this potential for revealing information that the heritage significance of an archaeological resource occurs.

Because history frequently records only prominent people or certain events, artefacts (relics) in the archaeological record are frequently the only resource associated with day-to-day activities of inhabitants and users of a site who were not its principal occupants. These inhabitants and users of the site are often only represented in history by the artefacts they leave behind. A historical archaeological resource of integrity and significance at the subject site, for example, could potentially yield information about developments and changes in the treatment of patients in nineteenth and twentieth century asylums in Sydney.

The potential for the archaeological resource to address questions and reveal useful information depends on its quality and intactness. Disturbed archaeological deposits and contexts may expose structural remains and random artefacts, but their use in reconstructing the development of a site, or in addressing research questions, is limited because those deposits and contexts have been disassociated from the stratigraphic sequences that establish their provenance and date of deposition.

Accordingly, this report first identifies where intact archaeological resources are likely to be found on the site, before it assesses their archaeological heritage significance against standard and archaeologically specific heritage significance assessment criteria (see Section 4.0).

3.3.2 Potential Disturbance

The site has been subject to extensive development throughout its history, including major redevelopment in the mid twentieth century, resulting in considerable ground disturbance. The entire site contains built elements, hard surfaces or modified surfaces.

Episodes of ground disturbance across the subject site include its original clearing, the construction and later demolition of buildings and associated landscaping works during the mid nineteenth to mid twentieth century, extensive quarrying associated with the former brickworks and the construction of the existing buildings and associated changes of ground levels (including episodes of cut and fill). The installation of many utility services, in addition to mature tree plantings and additional landscaping, would also have disturbed the below-ground archaeological resource.

Extensive surface modification (including the introduction of fill deposits) and grading/excavation works have occurred. The eastern (at present undeveloped) half of the site consists of a large area of sandstone rubble fill (see Figure 3.1). This fill is likely to cap the St Peters Council tip that was in operation from c1942–1961 in the area of the site formerly occupied by the brickworks quarry. The extensive quarry would have removed any earlier archaeological remains.

The construction of the brickworks in the late nineteenth century on the area of the site now occupied by the Kennards Storage Depot is also likely to have extensively disturbed any earlier archaeological remains formerly located in this part of the site. The demolition of the brickworks and subsequent grading and preparation of the land prior to the construction of the Kennards Depot is likely to have disturbed evidence the brickworks, especially in the northwestern corner of the Kennards site where the ground level has been cut below the level of the Princes Highway (see Figure 3.2).

The construction of the Penfolds industrial factory buildings in the 1950s is likely to have resulted in extensive disturbance to any below-ground archaeological remains which may have been present. The building has basement levels and the ground surface around the building footprint has been extensively modified, including excavation around its curtilage to a depth of up to 2m to provide vehicular access around the building (see Figures 3.3 and 3.4).

The extant building formerly used as the administration offices by Penfolds was built in c1930 as part of the Bayview Asylum. The construction of this two-storey building with a basement level would have substantially disturbed any archaeological resource predating c1930 in this part of the site.

The southeastern portion of the site, to the rear of the current Penfolds warehouses, appears to have been filled with the same sandstone rubble fill covering the eastern area of the site (see Figure 3.4 and 3.5). This fill may have sealed and protected any pre-existing archaeological resource in this area.

A large number of utility services are present across the site, excavated to varying depths up to c1.5m deep. The installation of these services would have resulted in localised disturbance of subsurface deposits across the area. While the precise nature and extent of this disturbance is difficult to ascertain, it is assumed that the installation of these services would have resulted in at least minor disturbance to any archaeological remains present in these areas, in particular any remains predating the construction of the existing buildings. In addition, two underground storage tanks (USTs) are located to the rear of the main Penfolds warehouse. The installation of these tanks would have resulted in considerable localised disturbance to any sub-surface deposits in the area.

The tree plantings and episodes of landscaping across the northwestern portion of the study area are likely to have caused some local disturbance to the subsurface remains in the area, in particular any remains predating the construction of the existing buildings.

As such, the entire site has been assessed as having been subject to at least minor disturbance which would have affected the potential for the site to contain historical archaeological evidence associated with previous phases of development and occupation.

3.3.3 Relevant Studies and Reports

634–726 Princes Highway, Tempe—Heritage Advice June 2007

The June 2007 Heritage Advice report¹ included a preliminary assessment of the historical archaeological potential of 634-726 Princes Highway, Tempe and recommended that a comprehensive archaeological assessment and archaeological research design be prepared for the site.

The preliminary assessment of the historical archaeological assessment of the site contained in the heritage advice report is expanded upon below.

Proposed Residential Development, 634–726 Princes Highway Tempe, NSW 2044—Preliminary Site Inspection, 2003

Geotechnical investigations can be used to indicate where natural profiles have been modified and can assist in locating where disturbances such as construction, landscaping and demolition have

left evidence in the soil profile. Geotechnical samples can also indicate potential archaeological deposits and any disturbance that may have occurred to the archaeological resource.

The 2003 geotechnical report² presents the results of a preliminary site investigation involving the drilling of twelve boreholes to a maximum depth of 3.1m. The boreholes were located in the western portion of the study area, around the Penfolds warehouse complex. No boreholes were located outside this area, for example in the area of sandstone rubble fill to the rear Penfolds complex and across the eastern portion of the site. (See Figure 3.6 for the locations of the test bores.)

The results of the borehole investigation indicated that in general there was little or no fill (c150mm of concrete and associated bedding material overlying natural deposits, as indicated in boreholes 8–12—see Figure 3.6) around the main two-storey Penfolds warehouse building. However, the northwestern landscaped area of the site to the northwest of the Penfolds administration building contained c700mm of topsoil and fill above natural deposits (as indicated in boreholes 1, 4 and 5—see Figure 3.6).

3.3.4 Potential Historical Archaeological Remains

Pre–1837 Development and Use

The site appears to have remained undeveloped until the land was purchased as part of an estate by Lesslie Duguid in c1836. Any evidence associated with the use of this area prior to its purchase by Duguid (eg for agricultural activities) is likely to be patchy at best, and it would be impossible to specify what remains may exist and where they would be located. The subsequent development of the site throughout the nineteenth and twentieth centuries is likely to have removed all evidence associated with the early agricultural or pastoral use of the area.

The Poffle and Rugby School 1837–1864

Lesslie Duguid built his house, 'The Poffle', on his newly purchased estate in c1837. In 1856 The Poffle was converted into a collegiate school named Rugby until it was closed in 1865. Associated with The Poffle were a number of outbuildings (including a stables which later included a coach house and possibly a caretakers hut, a saltwater bathing house with associated drains, a gatehouse, a summer house and a freshwater enclosure with pumps), landscaped gardens, paths and carriageways (see Figures 2.1, 2.2 and 3.7).

The site of The Poffle is beneath the current Pretty Girl premises outside the area of study of this report (see Figure 3.8). The majority of the structures and features associated with The Poffle and Rugby School were also located outside the study area (beneath the Pretty Girl premises) or have been substantially impacted upon by the construction of the Penfolds industrial factory buildings in the 1950s. Figure 3.8 shows the 1943 aerial photograph overlain onto a current survey plan of the site illustrating the locations of the early structures. The buildings and features potentially within the study area and outside the footprints of the extant buildings include the stables, coach house and possible caretakers hut, the saltwater bath house and associated drains, the freshwater enclosure with pumps and various elements of landscaping, paths and driveways.

- Evidence of the stables, coach house, possible caretaker's hut and salt water bath house with associated drains is likely to be located along the south-western—boundary of the study area beneath the sandstone rubble fill covering this area of the site (see Figures 3.7 and 3.8). The

fill may have protected any archaeological remains associated with the stables area and bath house.

- The freshwater enclosure with pumps is likely to have been located towards the rear of the extant Penfolds industrial factory building (see Figures 3.7 and 3.8). Although not beneath the footprint of this building, this feature is likely to have been disturbed by the extensive cut and fill activities which appear to have been undertaken across the rear portion of the site (see Figure 3.9). The results of the geotechnical investigation confirm that this portion of the site has been cut down into natural deposits (see Section 3.3.3).
- The extensive development across the site associated with the extensions to Bayview Asylum and the later construction of the Penfolds industrial factory building, including changes in the ground level, is likely to have removed all evidence of early formal gardens, landscaping, paths and driveways in these areas of the site. There may be evidence of hard landscaping elements, for example the path to the stables and bath house (visible on the 1943 aerial - see Figures 3.7), remaining beneath the area of sandstone fill to the rear of the Penfolds building.

Bayview Asylum 1868–1946

In 1868 the site was purchased by Dr George Alfred Tucker. Tucker renamed The Poffle 'Bayview House' and established an asylum there. The old house was extended at this time to include two wings and further outbuildings (possibly including a chapel) were constructed. The formal carriageway of the original house, the stables, and bathhouses all remained in place, with the addition of a new, more direct driveway to the house from Cooks River Road. An 1894 plan shows proposed extensions to the site, which at that time included a new wing of dormitories, single rooms and amenities to the northeast of the original house site (see Figure 2.5). These planned extensions went ahead. The asylum continued to operate until 1946. Aerial photographs of the site from 1930 and 1943 indicate the buildings from the the Poffle and Bayview eras still standing at this time (see Figure 3.7). Note the locations of the stables and bath house are still evident at this time, as are a number of other features, such as landscaping, paths and roads.

The majority of the structures and features associated with Bayview Asylum were located outside the study area (beneath the Pretty Girl premises) or have been substantially impacted upon by the construction of the Penfolds industrial factory buildings in the 1950s. Figure 3.8 shows the 1943 aerial photograph overlain onto a current survey plan of the site illustrating the locations of structures during this period of the site's usage. The buildings and features potentially within the study area and outside the footprint of the extant buildings include the Bayview Asylum extension and new wing and various elements of landscaping, paths and driveways.

- The c1894 Bayview Asylum extension and new wing was located in the northwest of the study area, close to the Princes Highway, to the northwest of the extant c1930-built Penfolds administration building. The results of the geotechnical investigation indicate that this portion of the site consists of up to 700mm of topsoil and fill material above natural deposits (see Section 3.3.3). As a result, the remains of the c1894 structure are likely to remain below the ground level in this area (see Figure 3.10).
- Extensive development across the site associated with the construction of the Penfolds industrial factory building, including changes to the ground level, is likely to have removed all evidence of early formal gardens, landscaping, paths and driveways in these areas. However, the results of the geotechnical investigation indicate that the area of the site between the extant

c1930-built Penfolds administration building and the Princes Highway consists of up to 700mm of topsoil and fill material above natural deposits (see Section 3.3.3) and is thus likely to have sub-surface remains of the gardens shown on the 1943 aerial photograph (see Figures 3.7 and 3.8).

St Peters/Tempe Brickworks Site

In the late nineteenth century a large brickworks was established on the site to the northeast of the Bayview Asylum. The brickworks are likely to have closed in c1942, after which time the then St Peters Council is reported to have utilised the quarry as a rubbish tip. The 1943 aerial photograph shows the brickworks with its kilns, chimneys and associated buildings along the Princes Highway and the deep excavation of the quarry to the rear (see Figure 3.7). The structures associated with the brickworks appear to have survived into the 1970s before being demolished as they are evident on a 1970 aerial photograph (see Figure 2.9). The Kennards Storage Depot now occupies the site.

- Evidence of the nineteenth-century brickworks, including footings of chimneys, kilns and associated buildings is likely to be located beneath the northern portion of the Kennards Storage Depot (see Figures 3.8 and 3.11).
- The site of the former quarry associated with the brickworks is located beneath the southern portion of the Kennards Storage Depot and an area of sandstone rubble fill located across the eastern half of the site (see Figure 3.1). The edge of the quarry is likely to have been located approximately along the east-to-west running step down in the ground levels within the Kennards Storage Depot (see Figure 3.12). The sandstone fill is likely to cap the council rubbish tip used between c1942 and 1961. The tip is likely to contain household rubbish, trade waste and some industrial waste from this period.

1946–Present

In c1953 the Bayview Asylum site was purchased and subdivided by Drug Houses of Australia and Penfolds Wines. Penfolds began demolition of most of the buildings soon after purchase, leaving only one two-storey building from the asylum for use as its administration offices. This building remains on site. Penfolds constructed an industrial factory building with a prominent clock tower on the site.

3.3.5 Summary of Historical Archaeological Remains

Table 3.1 below lists the potential archaeological remains of the site from all historical phases and considers the site formation processes that may have affected the survival of those relics. It assesses the potential for survival of those remains as low, medium or high.

Table 3.1 Potential archaeological remains and likelihood of survival

Potential Archaeological Remains	Date	Processes Affecting their Survival and Likely Remains	Likelihood of Survival
Pre-construction of The Poffle (ephemeral evidence of early use of the area)	Pre-1840	The clearing of land and the subsequent development of the site in the mid nineteenth and early twentieth century, including construction, landscaping and installation of services, are likely to have destroyed pre-existing archaeological remains, particularly potential evidence of any early agricultural use of the area, which is typically ephemeral and sensitive to disturbance	Low–nil

Potential Archaeological Remains	Date	Processes Affecting their Survival and Likely Remains	Likelihood of Survival
Stables, coach house and possible caretaker's hut	c1840	Demolition of these structures likely to have disturbed archaeological deposits. However, structural remains (footings and surfaces) are likely to survive. Sandstone fill introduced to this part of the site has the potential to have sealed and protected pre-existing remains (such as footings and surfaces).	High
Artefacts associated with the stables, coach house and possible caretaker's hut	c1840	Demolition of the structures is likely to have disturbed any archaeological remains. However, deposits (including building materials and artefact deposits) may survive beneath sandstone fill covering rear area of site. The potential for artefacts to survive is slightly higher in the vicinity of the stables, where accumulations of refuse and deposits are more likely to have occurred, than elsewhere on site. Deposits (including building materials and artefact deposits) may survive. Sandstone fill introduced to this part of the site has the potential to have sealed and protected pre-existing remains (such as artefact deposits).	Medium
Other domestic artefacts	c1840s	Domestic artefacts are commonly found in refuse dumps and pits adjacent to homes in the poorer areas of nineteenth-century Sydney. Such features are less common on sites such as the former site of The Poffle where refuse is likely to have been efficiently disposed of elsewhere by its wealthy inhabitants and where sanitation was better.	Low
Salt water bath house and associated drains	c1840s	Demolition of this structure likely to have caused considerable disturbance to any archaeological remains. However, structural remains (footings and sub-surface drains) are likely to survive. Sandstone fill introduced to this part of the site has the potential to have sealed and protected pre-existing remains (such as footings and sub-surface drains).	Medium
Artefacts associated with saltwater bath house	c1840s	Demolition of the structure is likely to have disturbed any archaeological remains. Although there is unlikely to be a substantial body of artefacts associated with a bath house, deposits (including building materials and artefact deposits) may survive. Sandstone fill introduced to this part of the site has the potential to have sealed and protected pre-existing remains (such as artefact deposits).	Low
Freshwater enclosure and pumps	c1840s	Site preparation (grading, cut and fill) activities associated with the construction of the Penfolds warehouse complex are likely to have removed all evidence of this feature.	Nil-low
Landscape elements, paths and driveways	From c1840–1864	The remains of garden beds are typically ephemeral and sensitive to later disturbance. Later landscaping, construction and subsequent demolition of buildings, and the installation of utility services are likely to have disturbed evidence for the original gardens and landscaping. However, there is some potential for evidence of hard landscape features and plantings to survive across the rear of site (where introduction of sandstone fill has the potential to seal and protect pre-existing remains). Early alignments of paths and driveways may survive in this area. However, unsealed paths and driveways are highly susceptible to disturbance.	Low

Potential Archaeological Remains	Date	Processes Affecting their Survival and Likely Remains	Likelihood of Survival
Service utilities	From c1840–present	Service utilities associated with the former use of the site are likely to be present across the site. Subsequent development is likely to have disturbed evidence of early drains and services and service installation may have disturbed or re-used the original alignments or lie above the earlier pipes and channels.	Medium
Unknown features	c1840s	Although unlikely, evidence of unrecorded features (for example deeper sub-surface features like cesspits and wells) may survive within areas of the site not impacted on by subsequent development of the site.	Low
Landscape elements, paths and driveways	From c1868–1946	The remains of garden beds are typically ephemeral and sensitive to later disturbance. Later landscaping, construction and subsequent demolition of buildings, and the installation of utility services are likely to have disturbed evidence for the original gardens and landscaping. However, there is some potential for evidence of hard landscape features and plantings to survive across rear of site (where introduction of sandstone fill has the potential to seal and protect pre-existing remains) and in the area of current landscaping between the current Penfolds Administration building and the Princes Highway. In addition, early alignments of paths and driveways may survive in these areas. However, unsealed paths and driveways are highly susceptible to disturbance.	Low
Bayview Asylum extension and new wing footings	c1894	Demolition of these structures likely to have caused considerable disturbance to any archaeological remains. However, structural remains (footings and surfaces) are likely to survive.	High
Underfloor deposits associated with Bayview Asylum extension and new wing footings	c1894	Underfloor deposits are less common in structures where floors are likely to have been well constructed (tongue and groove flooring with covering) and fewer artefacts found their way beneath them into the sub-floor area.	Low
Other domestic artefacts	From c1894s	Domestic artefacts are commonly found in refuse dumps and pits adjacent to homes in the poorer areas of nineteenth century Sydney. Such features are less common on sites such as the site of the former Bayview Asylum where refuse is likely to have been efficiently disposed of.	Low
Underfloor deposits associated with extant Penfolds administration building (formerly part of Bayview Asylum)	c1930s	Underfloor deposits are less common in structures where floors were well constructed (tongue and groove flooring with covering) and fewer artefacts found their way beneath them into the sub-floor area. In addition, the sub-floor areas are likely to have been disturbed during the installation of services, refurbishment and repairs.	Low
Brickworks	Late nineteenth century	Demolition of these structures likely to have caused considerable disturbance to any archaeological remains. However, structural remains (footings of structures, chimneys, kilns and associated surfaces) are likely to survive beneath the Kennards Storage Depot.	High
Domestic, trade and industrial artefacts	c1942–1961	Assorted artefacts from council rubbish dump likely beneath sandstone rubbish fill.	High

Although there has been considerable disturbance to the archaeological resource of the subject site as a result of the mid twentieth-century Penfolds redevelopment, there is the potential for historical archaeological remains from the three main phases of development to survive on the site (see Figure 3.13).

The c1840-built stable, coach house (and possible caretakers' hut) and the saltwater bath house associated with The Poffle are likely to survive at the rear of the site beneath the sandstone rubble fill. Associated with the structural remains of these buildings there is also likely to be artefactual evidence and remnant drains. Evidence of hard landscape elements (paths and driveways) may also survive beneath the sandstone rubble fill located across the east of the site.

There is the potential for the remains of the c1894-constructed extension and new wing to Bayview Asylum to be located in the northwest of the site between the extant Penfolds administration building (formerly part of Bayview Asylum) and the Princes Highway. Evidence of formal gardens and landscape elements may also survive within the current landscaped area to the north of the Penfolds administration building.

In the northeast portion of the site there is likely to be sub-surface remains beneath the current Kennards Storage Depot, of the late nineteenth century brickworks. These remains are likely to consist of the footings of chimneys, kilns and other associated structures. The quarry associated with the former brickworks was located to the south of the brickwork buildings. There is likely to be artefactual evidence within the fill of the quarry associated with its use as a tip between c1942 and 1961.

3.4 Aboriginal Archaeological Potential

A detailed assessment of the Aboriginal archaeological potential of the site has not been undertaken as part of this study. The Department of Environment and Climate Change (DECC) Aboriginal Heritage Information Management System (AHIMS) database has also not been searched as part of this study.

Evidence of Aboriginal occupation of this area would be very unlikely to survive at this site considering the degree of disturbance that has occurred in association with the European development and occupation of the site.



Figure 3.1 View to the west showing the large area of sandstone rubble fill located across the eastern half of the subject site. Note the c1959 constructed Penfolds Warehouse complex with its distinctive clock tower. The sandstone fill is likely to cap the fill of the quarry, associated with the former brickworks, which was located in this area of the site. (Source: GML 2008)



Figure 3.2 View to northwest of the north-western corner of the Kennards Storage Depot. Note the graded ground level of the depot compared to the level of the Princes Highway at the rear of the photograph. (Source: GML 2008)



Figure 3.3 View to the southeast showing vehicular access along the south—side of the Penfolds warehouse complex. Note the difference in level between the access road and the landscaped area on the right of the photograph. (Source: GML 2008)



Figure 3.4 View to the southeast from the rear of the Penfolds warehouse complex. Note the change in levels between the access driveway to the rear of the warehouse building and the area of sandstone on the south-eastern portion of the site. (Source: GML 2008)

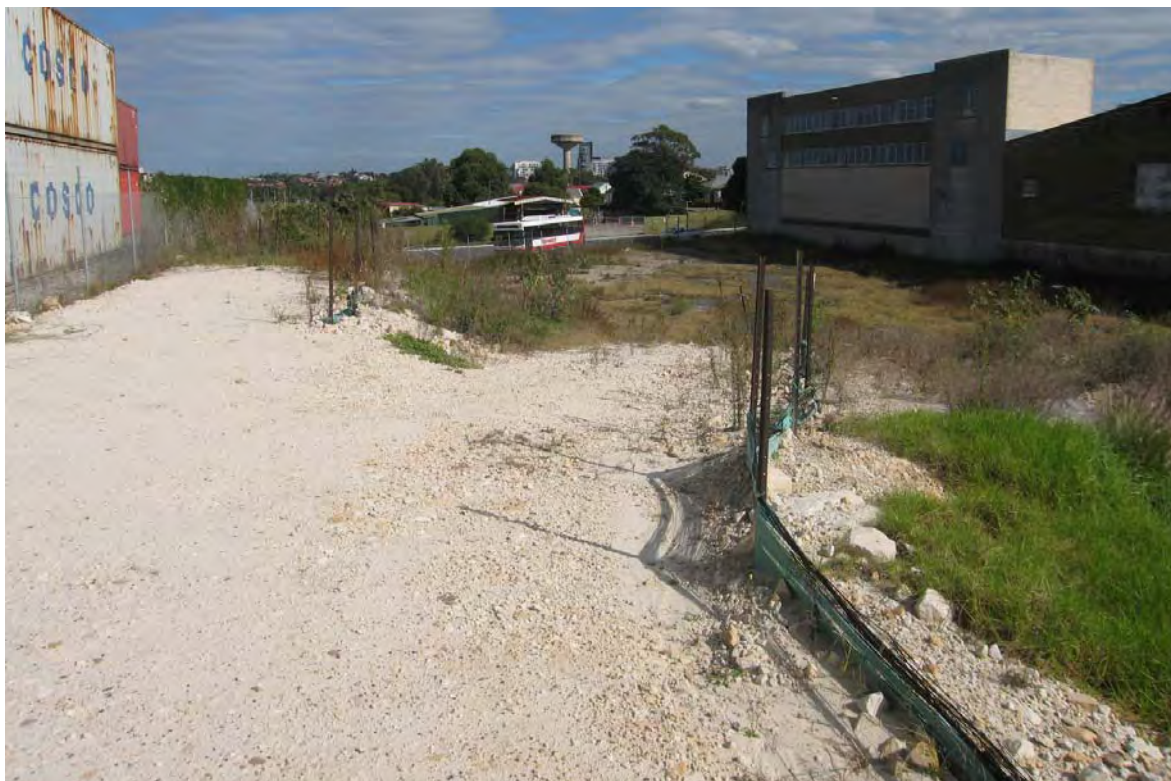


Figure 3.5 View to the southwest showing the sandstone fill in the south-western corner of the site. The remains of the stables and coach house associated with The Poffle are likely to be located beneath this fill. Note the location of Smith Street in the background. (Source: GML 2008)

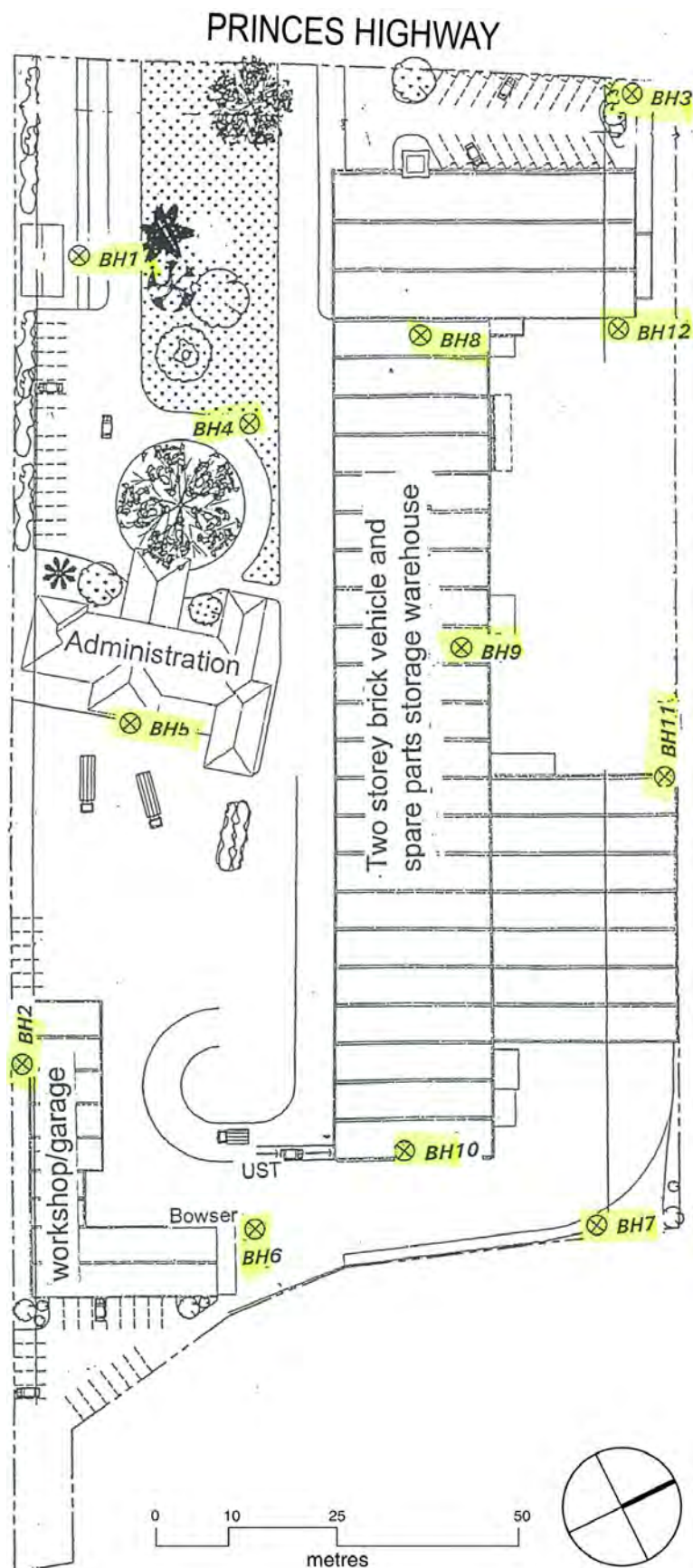


Figure 3.6 Location of Environmental Monitoring Services boreholes in the western portion of the study area. (Source: Environmental Monitoring Services)



Figure 3.7 1943 aerial indicating the locations of early structures and features on the subject site. (Source: RTA)



Figure 3.8 1943 aerial photograph overlain onto a current survey plan of the site illustrating locations of early structures and features within the study area. (Source of base plan: RTA)



Figure 3.9 View to the east showing the eastern corner of the Penfolds warehouse complex, the freshwater enclosure with pumps associated with The Poffle is likely to have been located in this area. (Source: GML 2008)



Figure 3.10 View to the southeast looking towards the c1930s-constructed Penfolds administration building showing the landscaped area in the northwest of the study area. The c1894 built extension and new wing of the Bayview Asylum is likely to have been located in this area. Note the Penfolds warehouse on the left of the photograph. (Source: GML 2008)



Figure 3.11 View to the west showing the Kennards Storage Depot. Note the level ground and location of service trenches. The distinctive tower of the Penfolds warehouse complex is at the rear of the photograph. (Source: GML 2008)



Figure 3.12 View to the north showing the step down in levels within the Kennards Storage Depot. The edge of the quarry associated with the former brickworks is likely to have been located in this area. (Source: GML 2008)



Figure 3.13 Archaeological potential. (Source: GML 2008)

3.5 Endnotes

¹ Godden Mackay Logan, June 2007, Ateco Site, 634–726 Princes Highway, Tempe—Heritage Advice, prepared for Crown International Group.

² Environmental Monitoring Services, April 2003, Preliminary Site Investigation—Proposed Residential Development, 634–726 Princes Highway, Tempe, NSW 2044, prepared for Ateco Automotive Pty Ltd.