

Former Inwards Parcels Office Historical Archaeological Assessment and Research Design

Prepared by AMBS Ecology & Heritage for Urbis Pty Ltd

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Glossary

Term	Definition		
Atlassian Site	8 – 10 Lee Street, Haymarket		
The Project	Commercial and hotel development above the Former Inwards Parcel Shed at 8 – 10 Lee Street, Haymarket		
Block B or "Dexus/Frasers Site"	14-30 Lee Street, Haymarket. Adjoining land immediately to the south currently comprising three 8 storey commercial buildings		
Block C or Adina Hotel	2 Lee Street, Haymarket The Former Parcels Post Office The Adina Apartment Hotel Sydney Central		
Central Sydney	Land identified as Central Sydney under the Sydney LEP 2012 and includes Sydney's Central Business District		
Sub-precinct Western Gateway Sub-precinct			
Atlassian Central	The Atlassian tower building (building only)		
Atlassian Central development	The whole Atlassian development within the Atlassian Site including the tower and public domain works		
Devonshire Street Tunnel	The pedestrian and cycle tunnel running between Chalmers Street and Lee Street		
Link Zone	The publicly accessible land within the Site		
Central Walk West	The future western pedestrian entry to the new 19 metre wide underground concourse customers to suburban rail and Sydney Metro platforms		
Habitat Level 1 Flexibly ventilated workspace areas			
The Benevolent Society of NSW	Charitable organisation established c.1818 to relieve the poor, distressed, aged and infirm		
The Benevolent Asylum	Established c.1819-20 by the Benevolent Society of NSW to house the infirm, aged, blind, lame and poor. Operated until 1901.		

Abbreviations

Abbreviation	Meaning
CBD	Central Business District
CHL	Commonwealth Heritage List
CMP	Conservation Management Plan
Devonshire Tunnel	Devonshire Street Pedestrian Tunnel
DPC	NSW Department of Premier and Cabinet
DPIE/Department	NSW Department of Planning, Industry and Environment
DP	Deposited Plan
ED	Excavation Director
EIS	Environmental Impact Statement
HARD	Historical Archaeological Assessment and Research Design
HIS	Heritage Impact Statement
LGA	City of Sydney Local Government Area
m	Metre

NHL	National Heritage List
Parcels Office	Former Inwards Parcels Office
TfNSW	Transport for New South Wales
SEARs	Secretary's Environmental Assessment Requirements
SHR	State Heritage Register
SSD	State Significant Development
SSDA	State Significant Development Application
Sub-precinct	Western Gateway Sub-precinct
Sydney LEP 2012	Sydney Local Environmental Plan 2012
Urbis	Urbis Pty Ltd
WHL	World Heritage List

1 Introduction

AMBS Ecology & Heritage (AMBS) has been commissioned by Urbis Pty Ltd (Urbis), on behalf of Atlassian, to prepare this Historical Archaeological Assessment and Research Design in accordance with the Conditions of Approval (CoA) of Development Consent under Section 4.38 of the Environmental Planning and Assessment Act 1979 (EP&A Act) for SSD 10405, issued 15 October 2021.

Specifically, this report addresses the following CoAs:

Condition of Approval	Report Reference
E41. The Applicant shall nominate a suitably qualified and experienced historical archaeologist to manage both Aboriginal and non-Aboriginal historical archaeological programs (testing and open area salvage etc) according to the following conditions (Conditions E42 to E49). This person must fulfil the Heritage Council's Excavation Director Criteria 2019 for the excavation of State significant archaeological sites to the satisfaction of the Planning Secretary.	Section 7.2
E44. Prior to the commencement of archaeological test excavation, the Archaeological Research Design and Excavation Methodology prepared by Urbis for test excavation (ARD) shall be revised to guide the early works testing program. The ARD must be prepared in consultation with the Heritage Council of NSW (or its delegate) and submitted to and approved by the Planning Secretary. The ARD shall address Heritage NSW comments provided in response to the Response to Submissions dated 20 July 2021 including revision of test areas to investigate and understand the archaeological potential of key significant phases anticipated (including the Benevolent Asylum).	

1.1 Description of the Site

SSD 10405 refers to the site at 8-10 Lee Street Haymarket, Lots 116, 117 and 118 in DP 1078271 and Lot 13 in DP 10662447. The site is known as 8-10 Lee Street, Haymarket. It is an irregular shaped allotment with a small street frontage to Lee Street; however, this frontage is limited to the width of the upper access road and that of Ambulance Avenue.

The Site has an area of approximately 3,764sqm which includes 277sqm of air rights that apply from RL40.



Figure 1.1 Site location and boundary.

1.2 Site and Surrounding Context

The Site is directly adjacent to the Western Wing Extension of the Central Railway Station, and forms part of the 'Western Gateway Sub-precinct' of the Central Railway Station lands. It is situated between the existing CountryLink and Intercity railway platforms to the east and the Adina Hotel (former Parcel Post Office) to the west.

Existing vehicle access to the Site is via Lee Street; however, the Lee Street frontage of the Site is only the width of the upper access road and that of Ambulance Avenue.

Current improvements on the Site include the Parcels Shed, which operated in association with the former Parcels Post Office (now the Adina Hotel). The Site is currently used as the Railway Square YHA. The Site also includes the western entryway to the Devonshire Street Pedestrian Tunnel at the southern corner of the study area. The tunnel runs east-west through Central Station under the existing railway lines.

The Site is situated in one of the most well-connected locations in Sydney. It is directly adjacent to Central Station Railway which provides rail connections across metropolitan Sydney, as well as regional and interstate connections and a direct rail link to Sydney Airport. The Site is also within close proximity to several educational institutes and is a city fringe location which provides access to key support services.

Central Railway Station is currently undergoing rapid transformation to allow for integration of rail, metro and light rail transport infrastructure. This will elevate the role of Central Station not only for transport but also enhance opportunities for urban renewal and revitalisation of the surrounding precinct. This is one of the key drivers for the identification of the Central SSP and the Western Gateway Sub-precinct to accommodate a new innovation and technology precinct.

The proximity of the Western Gateway Sub-precinct to the city, while still being located outside the core Sydney CBD, provides opportunity for it to evolve to attract technology and innovation companies. It has access to all required services while being sufficiently separate to the CBD to establish a distinct technology industry ecosystem. Its CBD fringe location will provide affordable commercial rents which will support Startups and entrepreneurs which are a key component of an innovation precinct.

1.3 Project Description

The project will be a new mixed-use development comprising 'tourist and visitor accommodation' (in the form of a 'backpackers') and commercial office space within the tower form. Retail, lobby and food and drink premises at the Lower Ground level and Upper Ground level.

Atlassian Central at 8-10 Lee Street will be the new gateway development at Central Station which will anchor the new Technology Precinct proposed by the NSW Government. The new building will be purpose-built to accommodate the Atlassian Headquarters, a new TfNSW Pedestrian Link Zone, and the new Railway Square YHA backpacker's accommodation, in addition to commercial floorspace to support Tech Start-ups.

The new development is to be built over the existing heritage former Inwards Parcels Shed (the Parcels Shed) located on the western boundary of Central Station with the Adina hotel to the west. The works includes a 38-storey mixed-use tower with basement loading dock facilities and EOT facilities accessed off Lee Street, 2 storey lobby utilising the Parcels Shed building, lower ground and upper ground retail, YHA hostel and commercial tower with staff amenities to the mid-level and roof top areas and a pedestrian Link Zone works for TfNSW.

The building design has been conceived to support the delivery of a site plan designed to connect with future developments to both the south and east and integrate with a cohesive public realm for the broader Sydney community in accordance with NSW government strategic planning.

The tower design is a demonstration project for Atlassian, representing their commitment to environmental sustainability and contemporary workplace settings through tower form and construction systems along with a set of emblematic outdoor workplaces stacked in the tower form.

The existing Parcels Shed will be adaptively re-used in accordance with best practice heritage process and form the upper level of a 2-storey entry volume that connects visually with the 2 level Link Zone. Over the roof of the Parcels Shed, a new privately owned but publicly accessible landscaped area will be created as the first part of a new upper level public realm that may extend to connect to a future Central Station concourse or future Over Station Development.

The proposed mixed-use tower directly adjoins a live rail environment to the east and public domain to the north, west and south. These works will consider these rail environments and have been designed to ensure that all TfNSW external development standards are achieved. This ensures there is no impact to the operation or safety of these TfNSW assets.

Interfaces from the overall site and especially the State works Link Zone have been designed in consultation with the adjoining stakeholders. These stakeholders include TfNSW to the north and south, Toga and the Adina Hotel operator to the west and the Dexus Fraser's site to the south. Connections via the Link Zone, through the basements, and off the proposed new Link Zone dive ramp will be designed to enable existing and future developments to function in both the day 1 scenario and end state when all developers have completed their works.

The overall project aspiration is to create a world class tech precinct with effective pedestrian links through the Atlassian site to the Central Station western forecourt to Central Walk west and adjoining stakeholder's sites.

The construction of the tower includes basement car parking and as such will remove all underlying archaeology.

1.4 Methodology Adopted to Undertake the Assessment

This report is consistent with the principles and guidelines of the *Burra Charter: The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance 2013* and current best practice guidelines as identified in the *NSW Heritage Manual* (1996), published by the Heritage Office and Department of Urban Affairs and Planning, and associated supplementary publications, in particular Assessing Significance for Historical Archaeological Sites and 'Relics' (2009) and the Historical Archaeological Code of Practice (2006).

This HARD aims to identify the archaeological sensitivity and heritage significance associated with the study area to assist in the determination of recommendations that ensure the protection of the heritage values of the former Inwards Parcels Shed. This report has been prepared by Victoria Cottle and Madeleine Rodwell, AMBS Historic Heritage Consultants. Lian Ramage, Senior Historic Heritage Consultant, and Jennie Lindbergh, AMBS Director Historic Heritage have provided input and reviewed this report quality and consistency.

A physical inspection of the Site was undertaken on 10 March 2020 by Victoria Cottle and Madeleine Rodwell, accompanied by Andrew Crisp, Urbis Senior Archaeology Consultant and Joseph Ravi, Avenor Australia Development Manager. All photographs in this report were taken by Madeleine Rodwell at this time unless otherwise identified.

1.5 Likely Environmental Effects

The CBD of Sydney has outstanding heritage significance for the evidence of the development of colonial Sydney since European settlement. The Site encompasses the former location of the Benevolent Asylum (c.1819-1901); the extant Former Inwards Parcels Office, c.1906, retains its original scale and form and now functions as the YHA.

The Project includes the provision of basements beneath the Parcels Office. Should the archaeological resources associated with the Benevolent Asylum be present the Project would result in complete removal of the potential archaeological features, deposits, and any remaining structural elements, including deposits that may contain archaeological relics. These resources have the potential to make an important contribution to research themes associated with early colonial history, and the operations of benevolent institutions. As such, the Site in its entirety has high research potential if archaeological resources are found to be present.

1.6 Measures Proposed to Mitigate Adverse Effects

The construction of basements below the Parcels Office for the Project would have an adverse and irreversible impact on any potential archaeological resource in the Site. The potential archaeological resource within the Site, if present with good integrity, is likely to have a high level of research potential and would meet the threshold for state heritage significance. Heritage NSW preferred management strategy is to retain archaeological resources in situ where possible, the proposed development has not presented this as a viable option; thus, an archaeological research design has been developed for the Site to provide a framework for archaeological investigations and to guide the management of the Site.

It has been suggested that should an archaeological investigation program reveal substantial state significant features, Atlassian would need to consider redesign of the proposed development in order to protect and preserve the resource. This would be determined in consultation with Heritage Council and/or DPIE, as appropriate. Where this is not possible, full salvage excavation of the archaeological resource should be undertaken.

2 Legislative Context

The conservation and management of heritage items, places, and archaeological sites takes place within the framework of relevant Commonwealth, State or local government legislation. Non-statutory heritage lists and registers, ethical charters, conservation policies, and community attitudes and expectations can also have an impact on the management, use, and development of heritage items. The following statutory and non-statutory lists and registers have been reviewed to identify the location and significance of historic heritage items and places in the vicinity of the Site:

- World Heritage List (WHL)
- National Heritage List (NHL)
- Commonwealth Heritage List (CHL)
- State Heritage Register (SHR)
- Transport Asset Holding Entity (TAHE) Heritage and Conservation (Section 170) Register
- City of Sydney Local Environmental Plan (LEP) 2012
- National Trust of Australia (NSW) Register

No items within the Site are listed on the WHL, NHL or CHL. No historical archaeological sites are listed on the TAHE s170 Register, the City of Sydney LEP, nor the National Trust Register.

2.1 Heritage Act 1977

The *Heritage Act 1977* (Heritage Act) provides protection for heritage places, buildings, works, relics, moveable objects, precincts and archaeological sites that are important to the people of NSW. These include items of Aboriginal and non-Aboriginal (historic) heritage significance. Where these items have particular importance to the people of NSW, they are listed on the State Heritage Register (SHR).

The former Inwards Parcel Office is listed on the SHR as part of the *Sydney Terminal and Central Railway Stations Group* (Item 01255) (Figure 2.1). The Inwards Parcel Shed is listed within the description of Precinct 3: Sydney Terminal as:

To the west of the southern end of Platform 1 is the Inwards Parcel Office. This was the loading dock for parcels and mail from the post office. The mail was loaded via a tunnel from the post office.

The RailCorp Heritage & Conservation (Section 170) Register identifies *Central Railway Station and Sydney Terminal Group* (Item 4801296) as having *technical heritage value in such elements as.... The early mail, parcels and luggage subway system* which includes the use of the Inwards Parcels Office.

The Inventory for the former Inwards Parcels Shed attached to the *Central Station Conservation Management Plan,* prepared by Rappoport Pty Ltd in 2013 includes a Statement of Significance, which although remains relevant, does not address the associated archaeology (see Section 6 below):

While containing much contemporary fabric and a c.2000 fit out as a Youth Hostel, overall, the former Inwards Parcels Shed continues to retain its original scale and form. Its significance is largely derived from its ability to document the c.1906 site and it also documents the history of the role of the Central Station site, and NSW Railways generally, in the development of postal services in NSW (Rappoport 2013: Part 7, Precinct 3, Item 318).

Urbis is preparing a site-specific Conservation Management Plan for the Former Inwards Parcels Shed to satisfy the SEARS for the proposed project, that will include an updated Statement of Significance.

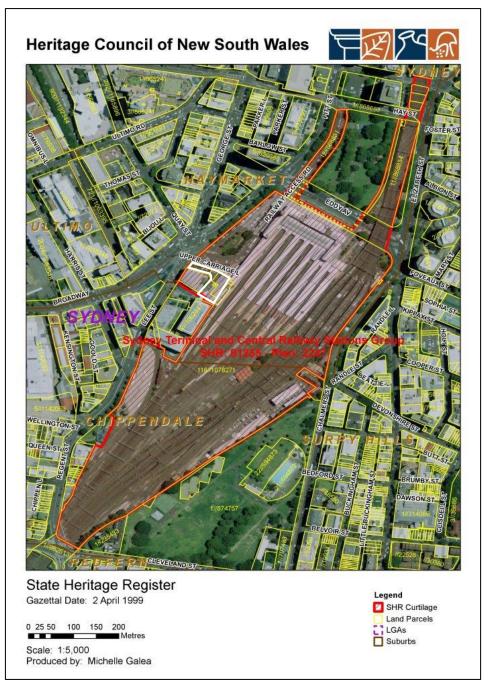


Figure 2.1 The State Heritage Register curtilage of the *Sydney Terminal and Central Railway Stations Group* with the Site boxed.

Approval under Section 4.12(8) of the *Environmental Planning & Assessment Act 1979* was issued on 15 October 2021, and as such, Approvals under Part 4 Sections 57 to 69 of the *Heritage Act 1977* will not be required. However, a Research Design describing the works and archaeological methodology in accordance with Heritage Council guidelines will fulfill the requirements of CoA E44 by assessing the potential for relics to be present, their significance, impacts and appropriate management.

An archaeological relic is defined as meaning 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.

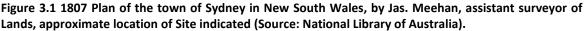
3 Historic Context

The following history is based on Section 3 of the *Heritage Impact Statement Former Inwards Parcels Shed, Nos. 8-10 Lee Street, Sydney* by Weir Phillips Heritage and Planning (2018).

3.1 Early Land Use

In the early days of the colony, the Site was in the outskirts of the city, the eastern portion of Sydney developed as the administration centre while the western portion was developed by the convicts, sailors and soldiers; however, there was little order to the development. The area surrounding the site of Central Station appears undeveloped in the 1807 Plan of Sydney; however, the area immediately to the north was the location of the brickfields (Figure 3.1).





With the arrival of Governor Macquarie, the future site of Central Station began to be developed with the construction of the Carters Barracks (1820), the Benevolent Asylum (1819-1820) and the establishment of the Devonshire Street Cemetery (1820). Carters Barracks were built in 1819-1820 with the purpose of housing convict boys who were then taught a trade and given schooling and to house male prisoners who were sent out each day to work (Annable, 2009: 1). The barracks were described by Macquarie as being *at the "Brick Fields"* with a barrack for 200 male convicts and another barrack for 100 convict boys, separated by a High Party-Wall (Annable, 2009: 1). The barracks appeared to form a single building from the street. The cemetery, set behind the Asylum and Carters Barracks, was established in 1820 to replace the old burial grounds near present Town Hall.

Construction of the Benevolent Asylum began in late 1820 by the Benevolent Society, a charitable organisation which was first began in 1813 as The NSW Society for Promoting Christian Knowledge and Benevolence (Thorp, 1998: 16). The Society was changed to The Benevolent Society of NSW in 1818 with the purpose to 'relieve the poor, the distressed, the aged, and the infirm' (Benevolent

Society 2020). The Asylum was built at the government's expense with the intention to house 50 to 60 infirm aged, blind, lame, poor persons and encouraged industrious habits whereby the inmates would provide in industries where they could learn skills to be able to support themselves. The Asylum was officially opened on 12 October 1821 (Annable, 2009: 19; Thorp, 1998: 12; Rathbone, 1994: 22).

The main building of the Asylum was a pseudo-classical, two-storey brick building that measured ninety-seven feet long and twenty-five feet wide; it faced Pitt Street and included a central staircase separating the men's dining room from the women's accommodation on the ground floor and providing access to the men's accommodation above (Rathbone, 1994: 22). A smaller building was situated behind the main building which housed the kitchen and Superintendent with a separate outhouse (Figure 3.2) (Annable, 2009: 20; Thorp, 1998: 12).

The 1830s saw a number of additions constructed as the Asylum exceeded its maximum capacity; by this time, the Asylum housed 144 inmates; this was more than double the number it was built to house (Figure 3.3 and Figure 3.4) (Rathbone, 1994: 28). In c.1830, a north wing was added by the society and in 1839 a south wing was built with government funding, providing hospital facilities and additional accommodation (Rathbone, 1994: 27). In 1839, the building was described as *one of the handsomest public edifices in Sydney.... in an airy and agreeable situation* and, with the extensions, allowed for the accommodation of 200 people (Thorp, 1998: 12). By the 1850s, additions were made to the east of the kitchen wing and the southern wing was further extended (Figure 3.5) (Annable, 2009: 20).

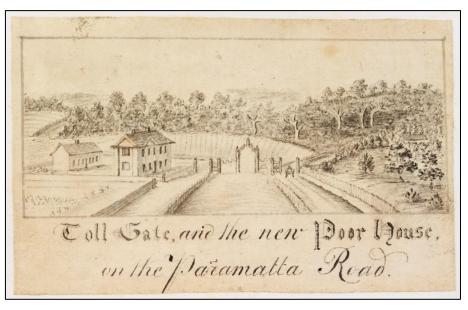


Figure 3.2 Sketch of the Benevolent Asylum and Toll Gate pre 1830. The Main Building is to the right with the Kitchen and Superintendent's Building behind (Source: State Library of NSW, IE1130728, Views of Sydney and Surrounding District).

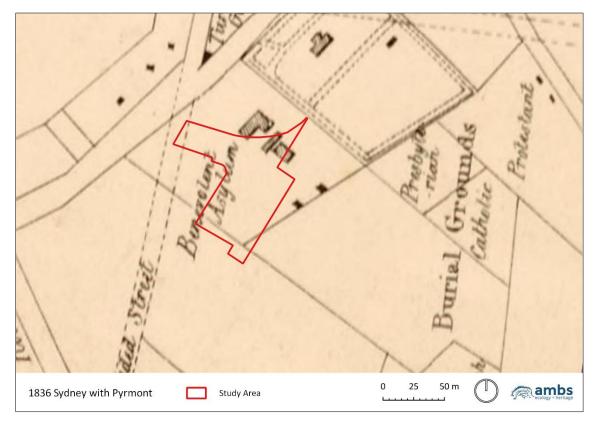


Figure 3.3 'Plan of Sydney with Pyrmont New South Wales: the latter the property of Edwin Macarthur Esqre, divided into allotments for building 1836'. The approximate location of the Site has been indicated (Source: https://nla.gov.au/nla.obj-

232683131/view?searchTerm=plan+of+sydney+with+pyrmont#search/plan%20of%20sydney%20with%2 0pyrmont).

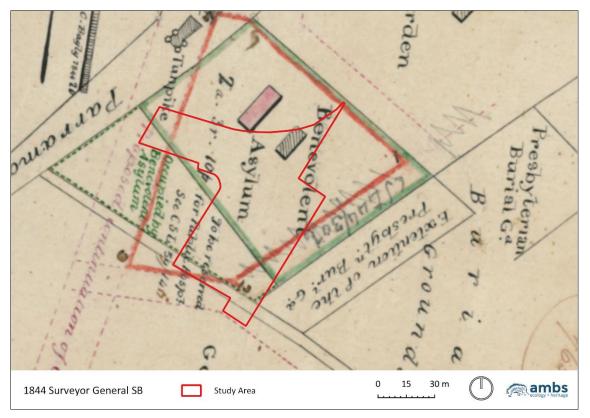


Figure 3.4 'Tracing Showing the Benevolent Asylum', Surveyor General Sketch Book 5 Folio 2 dated 1844 (approximate location of Site overlayed) (Source: State Library of NSW, IE195860).

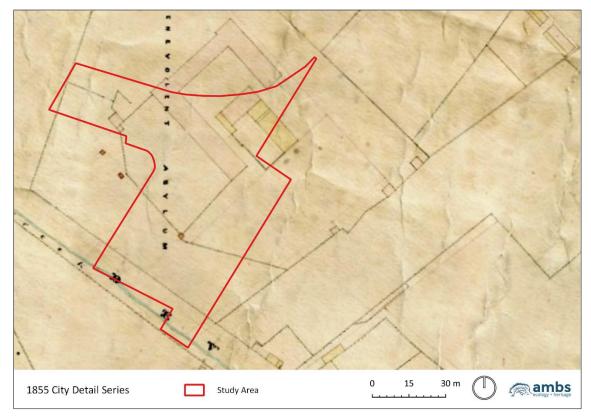


Figure 3.5 1855 Plan with Benevolent Asylum (approximate location of Site overlayed) (Source: City ofSydneyArchives,DetailPlans,1855:Sheet23,[A-00880168].<https://archives.cityofsydney.nsw.gov.au/nodes/view/1709095>).

Despite the extensions made in the 1830s, the Asylum suffered from extreme overcrowding, housing almost 500 inmates by 1849 (Davies et al, 2013: 24). In 1851, male inmates were transferred to the Liverpool Hospital which had recently been converted after ceasing as a convict hospital (Davies et al, 2013: 24). The Benevolent Asylum then devoted its efforts to the relief of poor and needy women and abandoned children. With the Benevolent Asylum, House of the Good Shepherd and the Sydney Female Refuge, the area became devoted to the care of women and children (Annable, 2009: 20). In 1862, 150 women were transferred to the Hyde Park Barracks Asylum for the Infirm and Destitute which had recently been established (Davies et al, 2013: 24).

In 1874, the Benevolent Asylum was refurbished, including some minor alterations to the exterior, the removal of outbuildings, the replacement of the boundary fence and landscaping works to the front (demonstrated by a comparison of Figure 3.6 and Figure 3.7) (Thorp, 1998: 12). In c.1860s water was reticulated in the area and by the late 1870s it had been connected to the sewer (Figure 3.8) (Aird, 1961: 11; Henry, 1939: 157). The Benevolent Asylum continued operating, with no further alterations, until it was resumed for the construction of Central Station in 1901 (Figure 3.9).

The land from the north of Devonshire Street to the south of Garden Road (now Eddy Avenue) and across to Elizabeth Street was resumed for the purposes of constructing Central Station in 1901. This included the demolition of all buildings within this area and the reinterment of the graves from within the cemetery. The buildings were demolished by day labour and the materials that were salvaged were sold (Figure 3.10, Figure 3.11 and Figure 3.12).



Figure 3.6 Benevolent Asylum 1871 (Source: State Library of NSW, IE1232164).

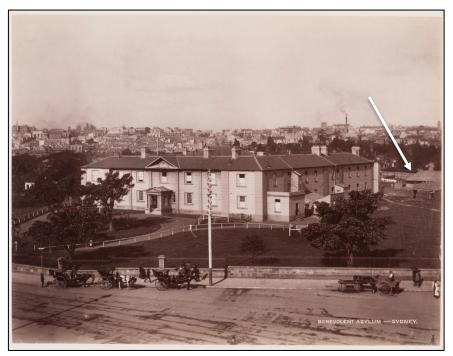


Figure 3.7 Benevolent Asylum c.1892-1900, note the additional buildings behind the southern wing which are likely the buildings coded iron in Figure 3.7 (Source: State Library of NSW, IE3326895.



Figure 3.8 Detail of Sydney Water Archive Plan, BLKWTL3845, dated March 1888. The main sewer runs north-east to south-west across the Benevolent Asylum and the Site (the approximate location of Site is overlayed) (Source: Sydney Water Archives).



Figure 3.9 Rygate & West Plan of Sydney, Sheet 43, dated August 1888, showing the Site (approximate location overlayed). Note: The buildings referenced as iron (coloured blue), south east of the Benevolent Asylum, are likely the buildings seen in Figure 3.6 (Source: City of Sydney Archives, [A-00880458] <https://archives.cityofsydney.nsw.gov.au/nodes/view/1709385>).



Figure 3.10 Benevolent Asylum on Pitt Street, sign for the auction of building material in forefront in preparation for the demolition and construction of Central Station. Note the slight uphill incline (Source: SL NSW, IE8546525, Glass Negatives of Sydney and Suburbs ca.1900-1914).



Figure 3.11 1901-1902 Benevolent Asylum after demolition, looking East towards Pitt Street (Source: State Library of NSW, IE8952327, Royal Australian Historical Society photonegatives).



Figure 3.12 1901-1902 demolition of the Benevolent Asylum, looking West from Pitt Street South. Note: some fence lines of the asylum have been arrowed (Source: State Library of NSW, IE8952327, Royal Australian Historical Society photonegatives).

3.2 First Sydney Stations

Proposals for a public railway began in the 1840s. In 1846 a public meeting resulted in the commissioning of a feasibility report for a railway between Sydney and Goulburn. By 1848, the Legislative Council had made a series of resolutions providing for the construction of a railway via private enterprise with some government support. The following year, the Sydney Railway Company was formed. The area between Devonshire and Hay Streets was first considered for the new railway terminus; however, the Cleveland Paddocks, between Devonshire and Cleveland Streets, was already available and provided a cheaper alternative (Thorp, 1998: 17). The paddocks were a large undeveloped area of land used to rest livestock which transported goods to and from the city.

Sydney's first railway station was opened, as Redfern, in 1855 and comprised a single timber platform with a track covered by a corrugated iron shed and an iron building with a lean-to roof for public rooms and offices (Figure 3.13 and Figure 3.14). The following year, Redfern station was expanded to include an engine shed, carriage shed and goods shed. The majority of buildings were constructed of wood with only a few constructed of brick or stone, as indicated in the 1865 Trigonometrical Survey (Figure 3.15). The construction of the first Sydney Railway also included the construction of the Mortuary Station which began in 1852; however, it was not completed until the 1860s (Figure 3.16) (Thorp, 1998: 17). As Devonshire Street Cemetery began to overflow, the government acquired 200 acres of land at Haslem's Creek to be used as a cemetery, known as Rookwood cemetery. Funeral services began in 1867, leaving Sydney twice daily (Rappoport, 2013: 38).

On 26 September 1855, the first timetabled train departed for Parramatta, the line was double track until Newtown and then a single track to Parramatta; however, the line was soon duplicated all the way to Parramatta. By 1856, a line to Liverpool had also been completed (Rappoport, 2013: 35). At this time, it was proposed to connect the railway to the rest of the city; the costs of the project were deemed too excessive and instead, a horse tramway was built to Circular Quay. The

tram was opened in 1861 and timetabled to coincide with the trains; however, was replaced in 1866 by horse drawn omnibuses (Rappoport, 2013: 36). The eastern portion of the paddocks was dedicated as a reserve for public recreation and named Prince Alfred Park in 1865.



Figure 3.13 Sydney Station 1855, with the approximate location of the Site overlayed (Source: NSW State Library, IE8790300).



Figure 3.14 First Sydney Station, May 1871 (Source: State Library of NSW, IE1229095).

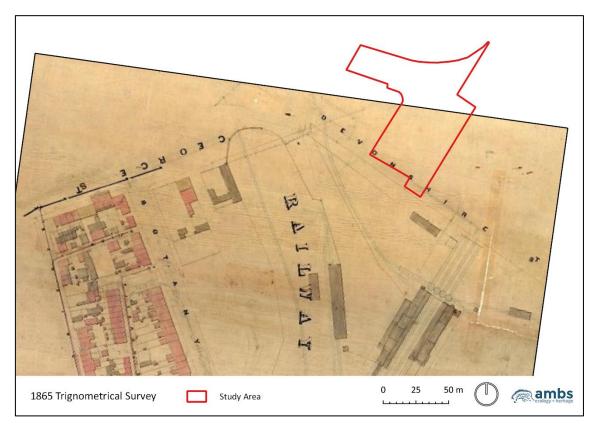


Figure 3.15 1865 Trigonometrical Survey – First Sydney Station, south of Devonshire Street. The approximate location of the southern portion of the Site is indicated (there is no Survey map for the location of the Asylum) (Source: City of Sydney Archives, *City of Sydney Trigonometrical Survey, 1855-1865: Block* S2, [A-00880408]. https://archives.cityofsydney.nsw.gov.au/nodes/view/1709335).



Figure 3.16 Mortuary Station, Redfern, 1871 (Source: State Library of NSW, IE1229914).

As a result of public pressure for a permanent station, a new station was built in the same location in 1871 and opened in 1874. The new station building was a neo-classical brick construction with two platforms. A third platform was constructed in 1878 to meet the demands of the increasing number of passengers (Thorp, 1998: 17). Additional carriage sheds, good sheds, workshops, siding and other infrastructure were also constructed. The number of platforms were eventually increased to 13, with the original platforms becoming platforms five and six (Figure 3.17).

The increase of inland railway construction began to put pressure on Sydney station, in 1884, to deal with the increased traffic, the lines were quadrupled. It soon became clear that there was not sufficient space in Sydney yard to maintain the servicing needs of the rail network. Plans were made in 1871 to build railway workshops at Eveleigh which was completed in 1887 (Rappoport, 2013: 39). A temporary steam tram was established to connect the station to the city ahead of the International Exhibition in 1879; however, it was extended into the suburbs in the 1880s due to its popularity. The late 1880s and 1890s saw the increased development of the suburban network (Rappoport, 2013: 40).



Figure 3.17 Sydney's Second Station on Devonshire Street, ca.1882-1900 (Source; State Library of NSW, IE3326895).

In 1891, Edward Eddy submitted proposals to build a large terminus for country trains at the present site of Central Station. With the economic downturn of the 1890s, the project was not reconsidered until 1897. In June 1900, the Parliamentary Standing Committee on Public works adopted the Devonshire Street proposal after also considering Hyde Park (Rappoport, 2013: 42). The Benevolent Asylum, Christ Church Parsonage, Police Barracks, steam tram depot, Police Superintendent's residence, Carters Barracks and Devonshire Street Cemetery were all resumed slated for demolition to make way for Central Station in 1901 and 1902. The is little evidence of materials being reused for the new station; however, as previously mentioned, many materials had been auctioned as could be seen in the advertisement outside of the Benevolent Asylum (Figure 3.10). One example of materials being reused is the cast iron columns from the old station being used in the awning over the parcels dock (Thorp, 1998: 20).

Walter Liberty Vernon, the first NSW Government Architect, along with an advisory board designed the main building after an Act of Parliament enabled the construction of the new station in 1900 (Rappoport, 2013: 46). The terminus was built in two stages due to funding issues, the first stage, including the parcels shed, was completed by 1906 and the second stage between 1915 and 1921. By mid-1902 it was reported that *all the old buildings and the human remains have been removed from the site… the levelling of the whole site is practically finished…* (Thorp, 1998: 20). The earth works included the excavation and levelling of the area on the eastern side of the block – on the Devonshire Street Cemetery side – and building up areas in the north-west along Lee Street to make Central Station level with the old station (Figure 3.18 to Figure 3.20) (Thorp, 1998: 20). Edward O'Sullivan, Minister of Public Works, laid the Foundation stone near the corner of Eddy Avenue and Pitt Street in 1902 (Rappoport, 2013: 47).



Figure 3.18 Looking south-east towards Redfern Station, cleared land for Central Station. The Site is not visible in this image (Source: State Library of NSW, IE11306447).



Figure 3.19 Eddy Avenue, levelled site with tramline stanchions in place, before paving. Looking southeast, cleared land for Central Station (Source: State Library of NSW, Box 14: Royal Australian Historical Society: photonegatives, ca. 1900-1925, IE8952327).



Figure 3.20 Excavations looking towards Elizabeth Street (Source: State Library of NSW, Box 14: Royal Australian Historical Society: photonegatives, ca. 1900-1925, IE8952327).

During the first construction stage, the Main Concourse, Booking Hall, Waiting Rooms, Dining and Refreshment Rooms, Cloak Rooms, Barbers Saloon, parcels dock and the rail sidings and yard in the Western Yard Precinct were all completed (Rappoport, 2013: 47). Pedestrian and passenger movement was separated from other movement around the station to avoid conflicts. Road traffic entered from the corner of Hay and Pitt Streets, travelling along a ramp parallel to the tram lines and left via Railway Square. Vehicles entering the parcels offices followed a one-way route with a separate entrance and exit in Pitt Street (Rappoport, 2013: 48).

The Sydney Terminus building was opened in August 1906 with the first train leaving from Platform 12, soon eight platforms were in operation and the old station was demolished. By October 1906, all 15 platforms were operating (Rappoport, 2013: 48).

3.3 Inwards Parcels Shed

The brick buildings of the parcels area were located adjacent and beneath Platform 1, the Outwards Parcels Shed was located near the corner of Eddy Avenue on the lower level of the station. The Inwards Parcel Shed was built at platform level at the southern end of Platform 1, on the western side and was reached by ramp from Railway Square (Figure 3.21) (Rappoport, 2013: 48). The shed was described in *The Daily Telegraph* as being in the basement of the western wing where *the visitor finds first the lower inwards parcels office, combined with the mail-room, both of great and lofty extent (The Daily Telegraph*, 1906: 4).

It comprised a corrugated metal shed with a loading dock and yard situated on its western side. The Inwards Parcels Shed was constructed with corrugated fibreglass skylights which supplemented internal lighting and corrugated metal walls which had few openings. Internally, there were four rows of columns – two running down the length of the shed and one row along each of the walls.

The shed was intended as a clearing house for packages that arrived from the country. Luggage and mail that arrived at Central via trains moved through a series of subways and loading docks beneath the concourse and platforms, removing them from public places (Rappoport, 2013: 48). Parcels were delivered to the shed via a ramp adjacent to the Parcels Post Office and vehicles exited over a bridge that spanned the Devonshire Street pedestrian subway and came down onto Lee Street (Figure 3.22).

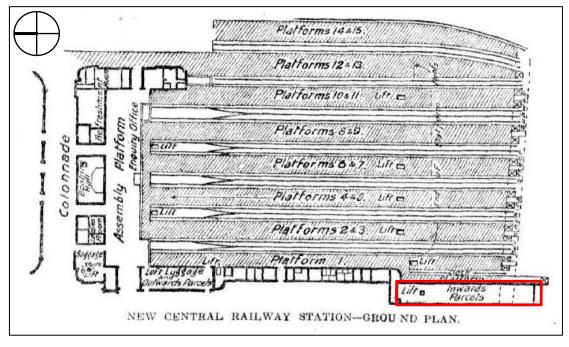


Figure 3.21 Diagram of the layout of Central Station at the time of the opening. The Inwards Parcels Shed is depicted at the southern end of the station (boxed in red), note the lift indicated within the shed and the parcels dock adjacent (Source: The Daily Telegraph (2 August 1906) *New Railway Station*, p. 4, viewed 19 February 2020, <http://nla.gov.au/nla.news-article237638849>.



Figure 3.22 Central Station overlooking Railway Square, prior to 1913. Inwards Parcels Shed is seen to the right (Source: Weir Phillips Heritage & Planning 2018:15)

The Parcels Post Office was opened in c.1913 and was constructed adjacent to the Inwards Parcels Shed. The building was built of brick with stone dressings, it was originally four storeys and was extended to six (Thorp, 1998: 21). External parcel chutes were built onto the eastern façade which lead to the passageway under the Inwards Parcels Shed (Figure 3.23). These chutes were removed in the late twentieth century.



Figure 3.23 Central Station looking south. Inwards Parcels Shed and Post Office, 1910s, with chutes attached to the Post Office (Source: Weir Phillips Heritage & Planning 2018:15).

In 1999-2000, the Inwards Parcel Dock, West Carriage Shed and Parcels Dock awning were demolished for the Henry Deane Park Plaza development. These were located outside of the current Site; however, were in close proximity.

In c.2000, the Inwards Parcels Shed was converted into backpackers' accommodation. These works included an exterior dining and lounge area which occupies the former parcels platform on the western side, a small swimming pool and interior dining area in a section of the former yard on the eastern side, aluminium windows have been built into the façade, a contemporary kitchen, reception area and sleeping accommodation and a mezzanine level was built at the southern portion of the building for further accommodation.

4 Physical Analysis

The Site is bound by Ambulance Avenue to the north, Central Station CountryLink platforms to the east, Henry Deane Plaza to the south and Lee Street and the Adina Hotel to the west. The site is accessed via stairs from the Devonshire Street Tunnel (running beneath the site to Central Station) and a ramp to the site off Lee Street (north of the Adina Hotel) (Figure 4.1 to Figure 4.4).

The building is a rectangular, timber-framed structure, clad in corrugated metal sheets, with a gable roof also clad in corrugated metal. The roof extends out on the eastern and western sides; timber rafters are fixed to timber purlins, supported by timber columns (Figure 4.5). There are aluminium-framed windows around the building.

The western elevation of the building contains the entrance (Figure 4.6). This entrance leads into the main reception and lobby area of the YHA atop a floating concrete floor (Figure 4.7). To the west of the reception desk is a dining room (Figure 4.8). There is a mezzanine level accessed via stairs in the lobby that lead to additional accommodation for the hostel (Figure 4.9). The lower level of accommodation within the building is accessed through a gated door north of the lobby (Figure 4.10 and Figure 4.11). A door on the eastern elevation of the building leads to additional exterior accommodation immediately adjacent to the CountryLink platforms of Central Station; a glass barrier separates the carriages from the platforms (Figure 4.12 to Figure 4.13). Four dormitories resembling railway carriages stand on a rail siding off the original Platform 1 of Central Station (Figure 4.14).

Ambulance Avenue provides access to the 'basement' level beneath the YHA; it is situated between the curved brick retaining walls of the Western Forecourt of Central Station to the north, and the ramp from Lee Street to the south (Figure 4.15 to Figure 4.17). A corrugated metal awning attached to the retaining wall of the Lee Street ramp extends out over the basement level (Figure 4.18 and Figure 4.19). This lower level consists of concrete vaults, with masonry walls supporting the floor of the YHA above. These vaults function as workshop spaces associated with catering services for the CountryLink trains, as well as garbage disposal facilities and amenities (Figure 4.20 to Figure 4.30). There are various tunnels in this basement level, with one leading to Central Station and another to Henry Deane Plaza (Figure 4.22 and Figure 4.29).



Figure 4.1 View south-east towards the Devonshire Street Tunnel, running beneath the YHA.



Figure 4.2 View north-east of stairs to YHA from Devonshire Street Tunnel.



Figure 4.3 View south-east of ramp to YHA from Lee Street. Ambulance Avenue is left of this ramp.



Figure 4.5 Western elevation of the YHA.

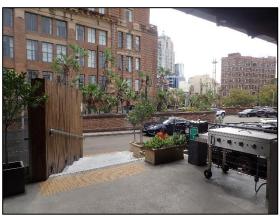


Figure 4.4 View north-west from entrance of the YHA, towards the Adina Hotel.



Figure 4.6View south-west of windows into the dining area of the YHA, adjacent to the entrance (left).



Figure 4.7 View south-west of the YHA reception area.



Figure 4.8 View south-west of the dining area of the YHA.



Figure 4.9 View south-west of stairs leading to the mezzanine levels of the YHA.



Figure 4.10 View east of the YHA. Accommodation is accessed via the green gated door to the left, and carriage accommodation is accessed via illuminated door to the right.



Figure 4.11 View north-east of accommodation accessed through gated door.

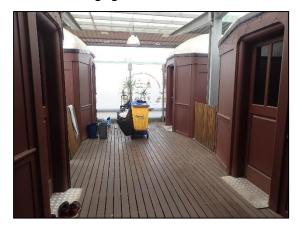


Figure 4.13 View east of two rows of carriage accommodation adjacent to Central Station platforms (illuminated in background).



Figure 4.12 View north-east of the carriage accommodation at the rear of the YHA.



Figure 4.14 View north-east of carriages, showing former rail siding associated with Central Station.



Figure 4.15 View west of Ambulance Avenue, towards Lee Street. The Adina Hotel is to the left.



Figure 4.16 View north-east of retaining wall north of Ambulance Avenue. The Central Station clocktower is in background.



Figure 4.17 View east of Ambulance Avenue, from Lee Street, showing level beneath the YHA.



Figure 4.18 View south-east of level beneath the YHA.



Figure 4.19 View south-east of Ambulance Avenue, showing the underside of awning over basement level.



Figure 4.20 View south of room associated with CountryLink catering services beneath YHA.



Figure 4.21 View south-east of room associated with CountryLink catering services beneath YHA.



Figure 4.23 View south-west of room associated with CountryLink catering services beneath YHA.



Figure 4.25 View south-east of room associated with CountryLink catering services beneath YHA.

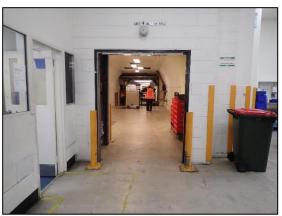


Figure 4.22 View east of tunnel beneath YHA leading to Central Station.



Figure 4.24 View north-east of room associated with CountryLink catering services beneath YHA.



Figure 4.26 View north of room associated with CountryLink catering services beneath YHA.



Figure 4.27 View north-west of room associated with CountryLink catering services beneath YHA.

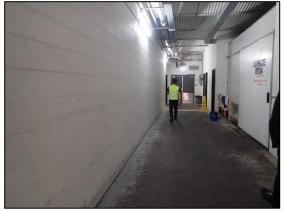


Figure 4.28 View south-west of tunnel beneath YHA, providing access to a garbage disposal and amenities (right).



Figure 4.29 View south-east of tunnel beneath the YHA that turns south-west, leading to Henry Deane Plaza.

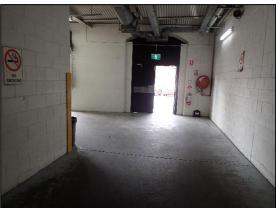


Figure 4.30 View north-east of tunnel beneath YHA leading out to Ambulance Avenue.

5 Evaluation of the Archaeological Resource

5.1 Archaeological Sites in the Vicinity

Relevant archaeological investigations within the vicinity of the Site are (Figure 5.1):

- Central Railway Station, Haymarket, assessed by Artefact Heritage in 2018, and excavated in 2019 (report pending).
- Lee Street Substation, Haymarket investigated by AMAC from 2016 to 2018
- Western Forecourt, Central Station, excavated by Casey & Lowe in 2009

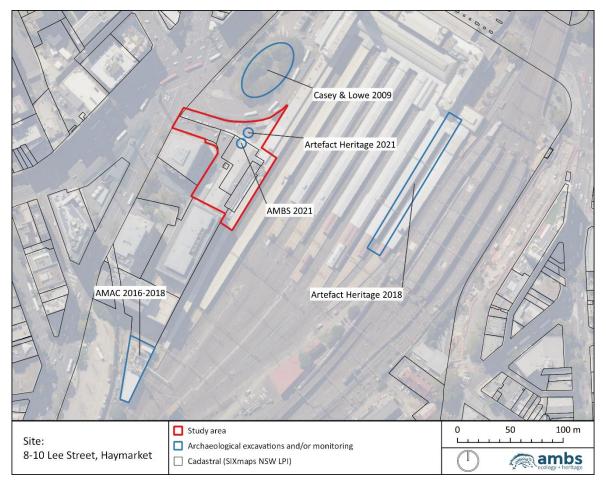


Figure 5.1 Archaeological investigations in the vicinity.

5.1.1 Artefact Heritage 2018: Central Railway Station, Haymarket

In 2018, Artefact Heritage prepared an *Archaeological Method Statement (AMS)* for Central Station as part of the Sydney Metro City & Southwest Chatswood to Sydenham project. The proposed works included the construction of a new Station Box with two new platforms below the existing Platforms 13-15, and two new concourses (Artefact, 2018: 10). The archaeological management approach that was outlined in the document involved archaeological monitoring and test and salvage excavations within the proposed work areas (Figure 5.2) (Artefact, 2018: 29).

Four occupation phases were identified for the site; the following is a summary of the archaeological potential provided in the AMS for these four phases:

1. Early European settlement and the Devonshire Street Cemetery (1788-1855): It was demonstrated that the proposed works were located within the curtilage of the former Devonshire Street Cemetery and Cleveland Paddocks (Artefact, 2018: 53). However, it was stated that there was a low potential for State significant archaeological remains

associated with this phase to be revealed; it is likely that the majority of the graves were exhumed and that the original landscape that they were buried in has been nearly entirely disturbed (Artefact, 2018: 61).

- The first and second railway stations (1855-1900): It was identified that there was moderate-high potential for State significant remains of this phase to be uncovered, particularly evidence of the former main rail sidings and train storage areas, train turntables and the Prince Alfred Sewer (Artefact, 2018: 53-54).
- 3. The twentieth century land resumptions and station expansion involving exhumation of burials from the Devonshire Street Cemetery (1900-1930): The archaeological resource of this phase was also identified as moderate-high potential, as the proposed work areas encompassed the original railway platforms of the third Central Station (Artefact, 2018: 53-54). The archaeological resources of this phase would be of local heritage significance.
- 4. The mid-late-twentieth century station modifications (1930-present): The majority of the proposed work areas were identified to have moderate-high potential for this phase, particularly relating to modern rail infrastructure, utilities and drainage services; as such, the archaeological resource of this phase would have no heritage significance. (Artefact, 2018: 53-54).

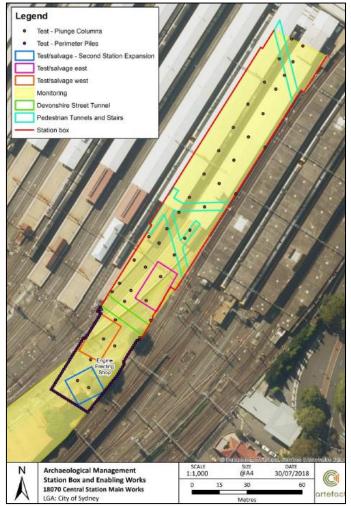


Figure 5.2 Proposed work areas for archaeological monitoring and test/salvage excavations (Artefact, 2018: 79).

Artefact Heritage began their archaeological works in 2019 (Figure 5.3). The post excavation reporting for this project is currently being undertaken; thus, the exact results are not yet available. A newsletter published by Sydney Metro in October 2019 identified that evidence of the original Central Station and Devonshire Street Cemetery had been excavated, stating that *artefacts*

including coins, rings and coffin fixtures have been identified as well as sandstone vaults, gravesites and fragments of human remains...over 70 grave sites and seven vaults have been uncovered (Sydney Metro, 2019: 2).



Figure 5.3 View north of archaeological excavations at Central Station undertaken by Artefact Heritage (Sydney Metro, 2019: 2).

5.1.2 AMAC 2016-2018: Lee Street Substation Site, Haymarket

Archaeological monitoring and salvage excavation were undertaken by AMAC between September 2016 and June 2018, at the Lee Street Substation site, in the Western Precinct of Central Station. The site required a combination of monitoring and targeted and open-area excavation (AMAC, 2019: 61). State significant archaeological remains were uncovered during archaeological monitoring along the eastern flank of the site from September to November 2016, including several sandstock brick footings and remains of a wagon turntable foundation [073] (AMAC, 2016: 61-62). The discovery of these substantial remains prompted an *Archaeological Assessment & Research Design* to be prepared as supporting documentation for an additional excavation permit under s60 (AMAC, 2019: 61). Remains from the first, second and third Sydney Station phases were uncovered at the site (Figure 5.4).

Remains of the decommissioned twentieth century railway sidings from the third Sydney Station phase, leading to the c.1904-1996 Western Carriage Shed were uncovered, among other disturbed sections of railway. A dark brown subbase fill [076] underlying the tracks covered the entire excavation area and capped substantial nineteenth century remains (AMAC, 2019: 89).

Parallel footings [066 and 080] of sandstock and semi-plastic bricks oriented north-south, were uncovered beneath fill [076] (Figure 5.5). These footings were suggested to date to c.1884 when the original platforms of the Second Sydney Station were widened and lengthened (AMAC, 2016: 88-89). Footing [066] measured 50cm in width, 46.5 metres in length and was between one and four courses, with the base course occurring at various depths (likely following the natural soil profile). This footing was the western wall footing for a major passenger platform for the Second Sydney Station (AMAC, 2019: 98). The second footing [080] was on an angle with [066] with the south-west ends of the footings tapering together; [080] measured 60cm wide, approximately 28 metres long, and was one course deep (AMAC, 2016: 88).

The removal of footing [080] revealed a sand, gravel and redeposited clay backfill. Beneath this backfill was a circular sandstock brick footing [073], belonging to the first Sydney Station phase (c.1870). The foundation was for a wagon turntable, functioning as a mechanism to move rail vehicles from one track to another (AMAC, 2016: 96). It was 4.63m in diameter and was comprised

of an outer ring of three brick courses, a paved inner floor that was one course deep, and a 62cm square central brick plinth of five courses (Figure 5.6) (AMAC, 2016: 94; AMAC, 2019: 113). The footing was constructed using re-used bricks, and various bonding methods were evident; it is likely that an existing turntable bonded with shell-lime mortar was dismantled and relocated, and bonded with cement (AMAC, 2016: 97; AMAC, 2019: 112). The wagon turntable was considered to be of state significance as it was present with good integrity; it was disassembled for offsite conservation and reconstruction (AMAC, 2019: 113). During the disassembly, two generations of ceramic drainage pipes [102] and [114] were revealed. The presence of these pipes indicated that the footing likely also functioned as a sump (AMAC, 2019: 138).

Excavations at the Lee Street Substation site were expected to reveal evidence of the twentieth century features of the third Sydney Station; however, the site was considered to have no archaeological potential for earlier remains. Although unexpected, nineteenth century remains belonging to the first and second Sydney Station phases including [066, 080 and 073], were substantial and present at a relatively shallow depth (AMAC, 2019: 133). The archaeological resource of the Lee Street Substation site was present with good integrity, and due to its close proximity to the Site, the excavation provides support for the presence of archaeological remains of good integrity within the Site.

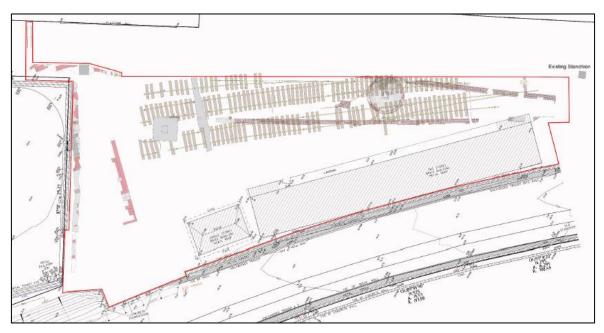


Figure 5.4 Detail of plan of archaeological findings at Lee Street Substation site 2016-2018 (area of excavation outlined in red). Areas shaded grey indicate concrete, orange indicates ceramic, pink represents brick, yellow indicates metal and brown indicates timber (AMAC, 2019: 63).

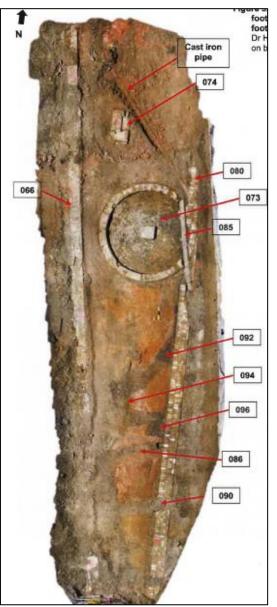


Figure 5.5 Orthographic photo of the linear brick footings [066 and 080] as well as turntable footing [073] (AMAC, 2016: 84).



Figure 5.6 Detail of wagon turntable footing [073], facing north-east (AMAC, 2019: 125).

5.1.3 Casey & Lowe 2009: Western Forecourt, Central Station

In 2009, Casey & Lowe undertook archaeological investigations within the Western Forecourt of Central Station. Two test trenches were excavated in the predicted locations of the former Benevolent Asylum in the southern area of the forecourt (Trench 1) and the Christ Church parsonage in the northern area of the forecourt (Trench 2) (Figure 5.7) (Casey & Lowe, 2009: 4).

Trench 1 measured 4.5m long and 1.2m wide, and was excavated to a maximum depth of 1.4m. Beneath the topsoil layer that was 300mm thick, a series of fills were excavated that measured approximately 800mm in total thickness (Casey & Lowe, 2009: 6). Beneath these fills, approximately 1m below the surface, a demolition fill was uncovered; it contained mortar and pieces of sandstock brick (with several marked with the 'government arrow') (Casey & Lowe, 2009: 5). The demolition material was consistent with the expected remains of the Benevolent Asylum. Beneath the demolition layer, natural sand was exposed, as well as some archaeological features. A linear cut filled with sandstone rubble was exposed in the northern end of the trench, and was interpreted to be a foundation trench backfilled with discarded building materials from the Benevolent Asylum (Figure 5.8) (Casey & Lowe, 2009: 5). A rectilinear cut feature was identified in the southern end of the trench, likely associated with the construction of the Benevolent Asylum, potentially an internal wall that was removed during its demolition (Casey & Lowe, 2009: 6). The middle of the trench was not excavated, as services were encountered (Casey & Lowe, 2009: 5).

Trench 2 measured 3.2m in length and 1.2 in width and was excavated to a maximum depth of 2.45m. Similar to Trench 1, several layers of fill were uncovered beneath the topsoil, that were above a fill predominantly consisting of demolition material (Casey & Lowe, 2009: 9). Towards the base of this demolition fill, a line of sandstone blocks, aligned northwest-southeast, were uncovered directly above the natural soil; these blocks were interpreted as part of the northern footing of the Christ Church parsonage (Figure 5.9) (Casey & Lowe, 2009: 9).

This archaeological investigation, particularly of Trench 1, is significant to the understanding of the archaeological potential of the Site. It demonstrates that foundation trenches associated with the Benevolent Asylum and evidence of its demolition may also be uncovered within the Site. The relationship between the findings of Casey & Lowe, and the disturbance and alteration of the nineteenth century landscape has been explored in further detail later in the report.

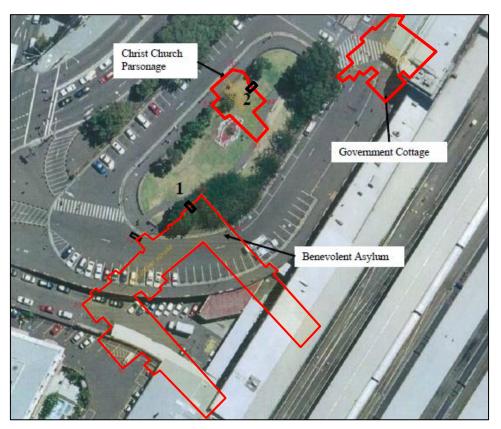


Figure 5.7 Plan of the Western Forecourt, with an overlay of former historic structures of the Benevolent Asylum and Christ Church parsonage. Due to the poor visibility of the structures in the overlay, they have been outlined in red. The locations of Trench 1 and 2 are also indicated (Casey & Lowe, 2009: 1).



Figure 5.8 Northern end of Trench 1 showing stone rubble interpreted as remains of Benevolent Asylum wall (Casey & Lowe, 2009: 8).



Figure 5.9 Sandstone footing at the base of Trench 2 (Casey & Lowe, 2009: 11).

5.1.4 Artefact Heritage 2021: Ambulance Avenue Test Excavation

Artefact Heritage undertook archaeological testing in Ambulance Avenue in September 2021. Two test trenches were excavated in locations that corelated with the former location of the Benevolent Asylum and outbuildings (Figure 5.10). The trench summaries below have been reproduced from Artefact Heritage's results report (2021).

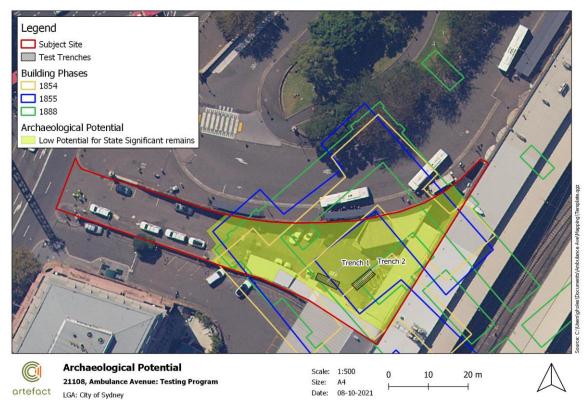


Figure 5.10: Location of test trenches in Ambulance Avenue (Artefact Heritage 2021)

Test Trench 1

Test Trench 1 was located along the south side of Ambulance Avenue and was oriented north-west by south-east. The trench was 6m long and 2m wide.

The surface of Test Trench 1 (RL 15.1m) consisted of the asphalt road surface and underlying road base, which continued to a depth of about 160mm. The asphalt and road base were founded on a layer of crushed sandstone which was present across the entire trench. The layer of crushed sandstone was about 160mm deep and covered mottled red-white sterile clay (Figure 5.11). A 1000mm x 500mm x 200mm sondage was excavated along the northern side of the trench to confirm that the clay was the natural subsoil. Excavations in Test Trench 1 therefore ceased at a depth of 320mm (RL 14.78) where the natural clay was identified.

No archaeological features or artefactual material or deposits were encountered during the excavation of Test Trench 1.

Test Trench 2

Test Trench 2 was located along the east side of Ambulance Avenue and was orientated north-east by south-west. The trench was 6m long and 2m wide.

The surface of Test Trench 2 (RL 14.87) consisted of the asphalt road surface and underlying road base, which continued to a depth of about 160mm as it did in Test Trench 1. The removal of the road surface identified the same deposit of crushed sandstone found in Test Trench 1. The crushed sandstone was again about 160mm deep and covered the natural red-white sterile clay (RL 14.55). The clay was between 80-160mm deep and covered the sandstone bedrock (RL 14.45).

A north-east by south-west cut which bisected the trench (Figure 5.12) was identified beneath the crushed sandstone. The cut was 600mm wide at the surface and was filled with a mix of clay and crushed sandstone, which appeared to be a redeposited mix of the local contexts. This cut matched the alignment of the anomaly that had been previously detected during a Ground Penetrating Radar survey of the area. The cut was interpreted as being a utility trench, therefore, for safety purposes, machine excavation ceased, and a vacuum truck was used to excavate a 400mm wide pothole in the cut. No archaeological remains were identified in the cut and therefore it was excavated to a depth of 1000mm through a combination of machine and hand excavation. It was confirmed that the cut truncated the crushed sandstone and clay units and was excavated into the bedrock. Once excavation depth reached 1000mm, a 1000mm long sondage was hand excavated at the south end of the cut. Excavation of the sondage encountered a 200mm wide terracotta pipe within the cut at a depth of 1200mm below the road surface (RL 13.67). No further excavation was undertaken within the trench.

Artefactual material encountered within Test Trench 2 was limited to 20-30 fragments of plain whiteware pressed into the natural clay. The ceramic sherds were small and fragmentary, ranging in size from 10-45mm, and featured no diagnostic elements. The artefacts were left in situ and were not recovered.



Figure 5.11: Exposed natural clay beneath the road base in Trench 1 (Artefact Heritage 2021).



Figure 5.12: Service cut through the bedrock in Trench 2 (Artefact Heritage 2021).

5.1.5 AMBS 2021: Structural Test Pit Monitoring, Lower Ground Floor YHA

Structural Test Pit 4.8 was 1200mm long and 900mm wide and was excavated through the slab floor of a 16m x 5m space fronting Ambulance Ave, on the lower ground floor of the YHA building on 1 November 2021. The aim of the excavation was to expose the footing of the building to assess its structural integrity. The excavation was monitored by Mike Hincks, AMBS Senior Historical Heritage Consultant. The footing and the floor slab were constructed on light grey clays overlying bedrock at a depth of 875mm below the slab. There was no cultural material within the clay. The clays were undisturbed and showed signs of development in situ, including cracking and iron staining and weathering of the underlying parent material. The clays were typical of a very deep soil unit within the Blacktown soil landscape, which underlies the sand sheet in this area.

Depth below surface	Description	Interpretation		
0mm-180mm	Thin slab and loose metalling, bitumen	Construction base and surface		
180mm-650mm	Pale light grey clays, strong pedal structure, laminations of iron oxide between peds			
650mm-875mm	Degraded fragments of sandstone stained heavily with iron in strong pedal clay matrix. Iron becoming more prevalent	Unaltered soil unit. Very similar to Blacktown soil landscape unit bt4. Indicates several upper units have been removed from the site.		
875mm	Sandstone bedrock with heavily weathered surface, stained with red iron oxide; splits along shallow horizontal planes with moderate applied force			

Table 5.1: Units present within TP4.8

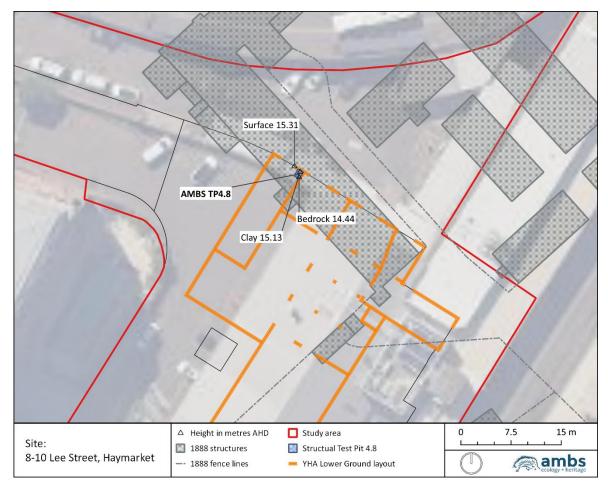


Figure 5.13: Location of structural test pit TP4.8.



Figure 5.14: South-facing section within TP4.8 showing iron stained bedrock at the base.

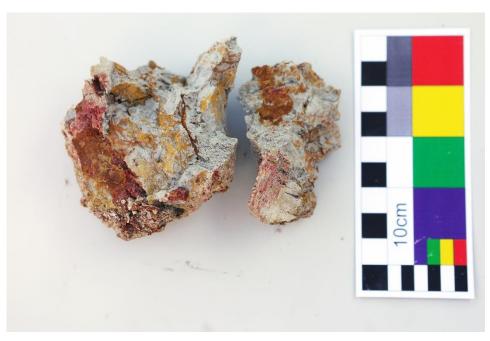


Figure 5.15: Clay sample from TP4.8 showing strong pedal structure and iron laminations. This material is consistent with an in situ unit and strongly resembles Blacktown soil landscape unit bt4.

5.2 Comparative Archaeological Sites

In order to understand the potential archaeological resource associated with the Benevolent Asylum, the following archaeological sites have been chosen for comparison:

- Liverpool College of TAFE, 1 College Street, Liverpool, investigated by Godden Mackay Logan in 2008-2009
- Former Lidcombe Hospital Site, Joseph Street, Lidcombe, Heritage Precinct, excavated by Godden Mackay Logan in 2006-2007
- Randwick Destitute Children's Asylum Cemetery, excavated multiple times from 1993-1995
- Hyde Park Barracks, Macquarie Street, Sydney, excavated various times in the 1980s

5.2.1 Liverpool College of TAFE

Godden Mackay Logan (GML) conducted an archaeological monitoring program at the Liverpool College of TAFE at 1 College Street from November 2008 to April 2009, as a requirement for the proposed upgrade of the site's fire hydrant service. Trenches 250mm wide were excavated to a depth of 950mm in various areas of archaeological potential (Figure 5.16) (GML, 2009: 23-24). The site comprises extant buildings of the former Liverpool Hospital, with some maintaining original features and others incorporating later additions and modifications (GML, 2009: 11).

The Site was first developed in c.1810-1813, when a brick hospital was constructed. From 1822-1829, a larger second hospital was constructed north of the original hospital; the Georgian brick and sandstone structure was built by convict labour (GML, 2009: 12). The earliest archaeological evidence exposed during investigations was a convict built sandstock brick box drain associated with the first hospital phase of the site. The box drain was uncovered in the concrete entrance driveway adjacent to the main building; it ran north-south and had no bonding (Figure 5.17). The investigations of this drain allowed for a better understanding of the location of the first hospital; it was situated further north than originally presumed. As such, it was stated that there was high potential for archaeological remains of the hospital to exist in the area between the driveway and the south wing of the main building (GML, 2009: 41). The fire hydrant service was laid further east to avoid impacts to the drain (GML, 2009: 45).

From 1830 to the 1840s, the hospital was managed under the authority of the Colonial Medical Service, charged with the care of ill convicts. During this time, additional essential buildings including baths, kitchen, dispensary, stores, offices and medical officer's quarters (GML, 2009: 13). The abandoned hospital was converted to an asylum by The Benevolent Society in 1851. Following dissatisfaction with the Benevolent Society's management of the asylum, the Liverpool and Hyde Park asylums were adopted under government management in 1862; by this time, the Liverpool asylum had 403 residents (GML, 2009: 13). In 1867 and 1872, two additional adjacent brick and sandstone wings were constructed, to the north and south respectively. Water was reticulated at the site in 1894 through the Nepean system, and a limited sewerage system was connected in 1900; prior to this time, the asylum had used dry earth closets and buried spoil by the river (GML, 2009: 14). Other modifications and additions were undertaken in the late 1900s including the extension of the asylum's bakehouse and long storeroom, construction of a new kitchen (and demolition of former kitchen), laundry and new water supply (GML, 2009: 14).

Various archaeological resources associated with the Government Asylum phase of the site were uncovered in various areas. A compact sandstone surface was uncovered in the vicinity of Blocks K and H in the northern part of the Site and was interpreted to represent a former pathway (GML, 2009: 31). Brick footings of former urinal and shed structures were also identified, as well as a circular sandstock brick feature likely associated with nineteenth century drainage services (GML, 2009: 32). The monitoring surrounding the main building (Blocks B and C) revealed a dry-pressed brick and concrete wall, interpreted as a footing for a 1901 outbuilding (GML, 2009: 34). Sandstone paving stones that formed a plinth for a decorative flower urn (depicted in historic photographs) were located in the forecourt (GML, 2009: 35-37). Evidence of the construction of Telford road base was revealed in the concrete entrance driveway; one metre of sandstone blocks of variable sizes and an ash lens were revealed. The construction of this road base likely dates to the early 1900s during the period of upgrades at the site (GML, 2009: 39-41).

During the early twentieth century, the asylum served as a refuge for indigent elderly men, and remained as one of the state's main hospitals in the first half of the century. The early buildings were not suited to the adaption of the site into a modern hospital; thus, in 1958 the asylum and hospital were closed at the site (GML, 2009: 14). In the south-west of the site, archaeological remains of a large shed or outbuilding dating from the early-mid twentieth century (Liverpool State

Hospital phase) were exposed; sandstone slabs likely associated with a former chimney and postholes were uncovered (GML, 2009: 42). A dry-pressed brick footing bonded with cement exposed in the forecourt was also identified as also belonging to this phase, and was interpreted to have formerly functioned as the footing for a flagpole or pump.

In June 1961, the site was opened as the Liverpool Technical College and was occupied by the Department of Education and Training. Since this time, several new blocks have been constructed on the site, and outbuildings and structures associated with the asylum have been demolished (GML, 2009: 14).

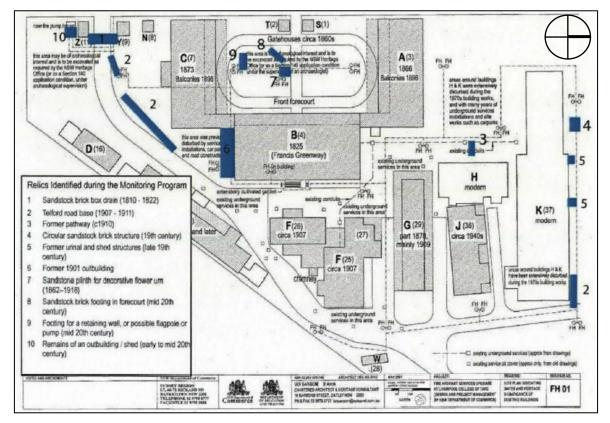


Figure 5.16 Location of historical relics identified during monitoring (shaded blue) (GML, 2009: 28).



Figure 5.17 View north of convict-built box drain (GML, 2009: 40).

5.2.2 Former Lidcombe Hospital Site, Heritage Precinct

The first development of the site occurred from 1855; buildings were constructed for a proposed Boys' Reformatory, however a change in government caused the project to cease (GML, 2013: 7). In 1893 the unused reformatory was used as a refuge for destitute men (mostly elderly), and evolved into the Lidcombe Hospital. Throughout the late nineteenth and early twentieth century, the site was developed further, with the construction of new wards, the Village Green and the Main Avenue entry road (GML, 2013: 7). In 1914, the refuge became known as the Rookwood State Hospital and Asylum for Men; the hospital/asylum was self-sufficient, utilising surrounding farming land (GML, 2013: 8). In 1927 the function of the asylum was transferred to medical authority, becoming the Lidcombe State Hospital. New buildings were constructed in the following decades, and farming land was resumed for the development of the Cumberland College Campus (GML, 2013: 8). By 1968, the hospital was designated as a Regional Geriatric Centre, and in 1995 its services were joined with the Bankstown Hospital, and the Lidcombe Centre closed (GML, 2013: 9). The site was selected to function as the Olympic Media Village for the Sydney Olympic Games of 2000; several former hospital buildings were demolished to accommodate the erection of temporary structures and services were installed, disturbing the archaeological resource (GML, 2013: 9).

There have been various excavations undertaken at the Former Lidcombe Hospital site on Joseph Street. From December 2006 to March 2007 GML undertook archaeological monitoring of environmental testing and a program of test excavation at the site (GML, 2010: 1). The environmental testing involved the monitoring of 48 test pits across the site and 21 test trenches across the village Green and grass verges of Brooks Circuit (GML, 2010: 2-3). The test pits and trenches were excavated mechanically and revealed archaeological evidence of earlier surfaces, road edgings (including Telford road base), utility services and footings of former late twentieth century buildings (GML, 2010: 8-9). Four phases of the development of the Village Green and Brooks Circuit were identified (in the centre of the site); it was found that the original Brooks Circuit was wider than its current alignment (GML, 2010: 13). Differing fabrics, such as gravel and concrete road surfaces were revealed as well as earlier kerbing and a brick dish drain (GML, 2010: 13-16).

No archaeological evidence of the early open yard associated with the original six buildings of the Asylum was uncovered (GML, 2010: 13).

Further excavations were undertaken by GML in 2012 in various areas of the precinct surrounding Village Green (Figure 5.18); no evidence of the nineteenth century development of the site was uncovered, nor was any artefactual evidence (GML, 2013: 20-21). An open space was excavated (the location of former Medical Library), and revealed no evidence of earlier road fabric, attributed to the disturbance of the construction and demolition of the Library (GML, 2013: 21). The front of the buildings along Brooks Circuit revealed no new evidence of drains, kerbs, surfaces or garden beds (GML, 2013: 21). The testing undertaken at Pedan Lane (west of Village Green) provided information on the earlier road construction, using the Telford system (GML, 2013: 21).

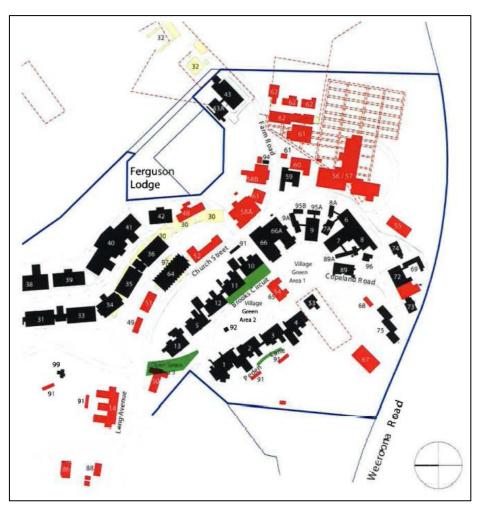


Figure 5.18 Plan of the Lidcombe Hospital Precinct showing the areas that were subject to 2012 monitoring (shaded green). Buildings shaded yellow and red are no longer extant; those in yellow were constructed pre-1926, and those red were constructed 1927-1966 (GML, 2013: 21).

5.2.3 Randwick Destitute Children's Asylum Cemetery

From August 1995 to March 1996, archaeological works were conducted by Austral Archaeology and Godden Mackay at the Prince of Wales Hospital for its proposed redevelopment. The site was the location of the former Randwick Destitute Children's Asylum Cemetery, associated with a benevolent institution that operated from 1858-1916. The property was subsequently used as a military and repatriation hospital until 1953 when it became the Prince of Wales Hospital (Austral Archaeology & Godden Mackay, 1997a: 1). The cemetery was located approximately 300m southwest of the main asylum buildings on a sand dune, and measured 91.3m north-south and 24m east-west (Austral Archaeology & Godden Mackay, 1997a: 83). The purpose of the archaeological excavation was to recover all grave furniture, burial goods and human skeletal material from within the cemetery area (Austral Archaeology & Godden Mackay, 1997a: 11). Initially the site was excavated in test trenches measuring 5m by 5m, and eventually the site was subject to an open area excavation consisting of 121 test trenches (Austral Archaeology & Godden Mackay, 1997a: 11). Documentary sources indicate that 175 individuals were interred in the Asylum Cemetery. During the excavations, 65 in situ burials were excavated, and a further 216 individual skeletal elements were recovered from dispersed burials (Figure 5.19) (Austral Archaeology & Godden Mackay, 1997a: 86). Evidence of fence posts were also recovered along the western margin, precisely matching the boundary lines recorded in 1891 (Austral Archaeology & Godden Mackay, 1997b: 103).

No evidence of the use of grave markers was associated with the burials that were recovered; all graves investigated were single earth-cut primary inhumations (Austral Archaeology & Godden Mackay, 1997a: 86). Sixty-two of the burials displayed evidence that a coffin had been employed (Austral Archaeology & Godden Mackay, 1997a: 89). The cemetery was divided on sectarian lines with the principal divisions being Protestant and Roman Catholic (Austral Archaeology & Godden Mackay, 1997b: 99).

Grave goods recovered from the investigated burials were limited in number and type; three classes of goods were identified (Austral Archaeology & Godden Mackay, 1997a: 92). Four burials contained remnants of dress cloth and twenty-six of the burials contained buttons; it was suggested that the children were dressed in shirts or a night shirt prior to their burial, as the buttons were positioned at the throat or shoulder at either the front or back of the body (Austral Archaeology & Godden Mackay, 1997b: 101). Nine contained copper alloy pins and the location of these pins indicated where garments were fastened; evidence of the use of jaw cloths was indicated by pins recovered from areas of the cranium (Austral Archaeology & Godden Mackay, 1997a: 93). The only example of a religious artefact was a rosary entwined in the right hand of one of the burials (Austral Archaeology & Godden Mackay, 1997a: 92-93).

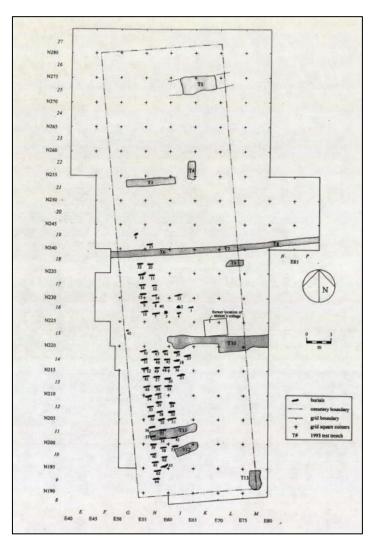


Figure 5.19 Plan of the distribution of the burials of the Randwick Destitute Children's Cemetery (Austral Archaeology & Godden Mackay, 1997b: 78).

5.2.4 Hyde Park Barracks

The Hyde Park Barracks complex was constructed in 1817-1819 to house approximately 600 male government-assigned convicts; the precinct was enclosed by perimeter walls and encompassed a central Georgian style dormitory building, surrounded by mess rooms, kitchen, cells, guard houses and residential accommodation for the Deputy superintendent and his family (Davies, Crook & Murray, 2013: 2). The Barracks were not designed to function as a prison, however, in the 1830s-1840s, it was used as a place to punish refractory convicts (Davies, Crook & Murray, 2013: 3). In 1848, the Barracks were refitted to accommodate orphans and female migrants. In 1862, the top floor of the main building was occupied by the Government Asylum for Destitute Women; 150 women from the Benevolent Asylum were transferred to Hyde Park in the same year. By the 1880s the Barracks housed approximately 300 inmates; in 1886 they were moved to other facilities. The complex was then remodelled for use by the Department of Attorney General and Justice, and the site was used for judiciary purposes until 1979 (Davies, Crook & Murray, 2013: 5).

In 1980, works began to restore the site to its original convict phase and conversion to a museum, prompting archaeological works; the bulk of the archaeological collection was derived from archaeological work completed from 1980-1981 (Davies, Crook & Murray, 2013: 19). The site was opened as a museum by the Museum of Applied Arts and Sciences (MAAS) in 1984, and continues to operate as such today. In July 2010, the site was listed on the UNESCO World Heritage List (A

large amount of historical research and archaeological investigations have been undertaken at the Hyde Park Barracks site).

The bulk of the archaeological collection was derived from archaeological excavations of underfloor deposits on Levels 2 and 3 of the Barracks, completed from 1980-1981, during renovation and conservation works at the site (Davies, Crook & Murray, 2013: 6). The artefact assemblage includes well over 100,000 artefacts, with the majority excavated from the underfloor deposits of Level 2 and 3 by Patricia Burritt (Davies, Crook & Murray, 2013: 18). The collection encompasses glass, ceramics, ferrous items, as well as leather, textile, paper and other organic items, in addition to a large amount of clay pipes, pen nibs, matches and matchboxes (Davies, Crook & Murray, 2013: 15).

The underfloor excavation was completed in two stages; the first involved archival recording and test trenching by Carol Powell and Wendy Thorp, in areas that would be adversely impacted by the proposed works (on Level 1 and in the courtyard and northern buildings) (Davies, Crook & Murray, 2013: 20). Stage 2 involved a larger-scale excavation, by Burritt, of the underfloor cavities in the main building (predominantly on Levels 2 & 3) and in the courtyard (Davies, Crook & Murray, 2013: 20). Levels 2 and 3 retained the original floor boards of the convict barracks; these floor boards were removed for the excavation, and then restored afterwards (Burritt, 1991: 29; Davies, Crook & Murray, 2013: 11-14). The majority of the underfloor deposits were excavated using industrial vacuum cleaners, and then sieved with the artefacts being bagged. Larger items such as rats' nests were manually excavated and recorded separately (Burritt, 1991: 29-30). No evidence of activity on the site prior to the construction of the Barracks; it was difficult to assign the artefactual material to the early convict phase of the site. It was stated that the majority of the resource likely dates to the immigrant centre phase (1848-1889) (Burritt, 1991: 30-31). Following the excavations, a zoning plan was created for the site, identifying sensitive areas (labelled A, B & D in Figure 5.20).

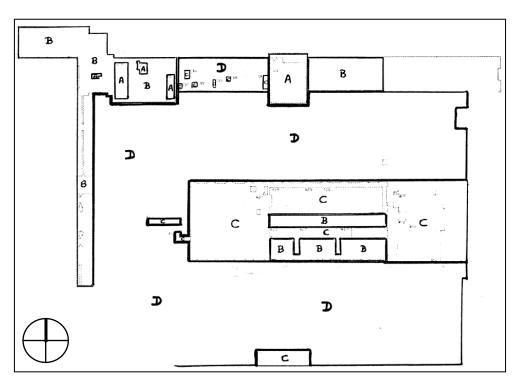


Figure 5.20 Archaeological zoning plan of Levels 2 & 3 of the Hyde Park Barracks site following excavations in 1980-81. Areas labelled A are those that should not be disturbed, those labelled B should be investigated prior to proposed disturbances, those labelled C refer to disturbed or thoroughly investigated areas where no further archaeological work is required and D refers to the need for archaeological supervision of disturbances.

Many other smaller salvage excavations were undertaken prior to the opening of the museum in 1984. For example, Graham Wilson undertook a salvage excavation at the Bakehouse, and Northern and Southern Gatehouses of the site from 1982-83. During these excavations, foundations of former buildings, ovens and fireplaces were revealed in the Southern Gatehouse and Bakehouse and underfloor deposits were explored in the Northern Gatehouse (Wilson, 1983: 2-14). Since the opening of the museum in 1984, various cataloguing, stock-taking and analysis of the collection has taken place (Davies, Crook & Murray, 2013: 21-22).

5.2.5 Summary of Archaeological Potential

The archaeological investigations discussed above provide an insight into the potential archaeological resource at an institutional site.

The convict-built brick box drain uncovered at the Liverpool Hospital site, from the early nineteenth century hospital phase, was present with good integrity and was a significant feature as it allowed for a better understanding of the location of the first hospital. This type of convict-built drain may be similar to the early drainage system within the Benevolent Asylum site, that would not necessarily be indicated on historic plans.

The archaeological investigation of the Lidcombe Hospital site identified features including early road surfaces and a brick dish drain. The identification of specific archaeological features associated with the preparation of the land and early services/drainage features may be directly associated with the Site where there may be evidence of site formation processes and early drainage systems. The former Lidcombe site has been substantially more disturbed than the Site, particularly from changes for the 2000 Sydney Olympics, and thus demonstrates the potential archaeological features that may be present within the Site.

Some asylums are known to have had an associated dedicated burial ground; the archaeological investigation of the Randwick Destitute Children's Cemetery. According to the historic research, the Benevolent Asylum did not have a dedicated burial ground, and as the Devonshire Street Cemetery was located in close proximity and was contemporary it would have served the Asylum. Should isolated or unrecorded burials be uncovered within the Site, the results of the Randwick Destitute Children's cemetery would provide an insight into the burial practices that may have been employed.

The vast collection of artefacts recovered from underfloor deposits from Hyde Park Barracks provide for an understanding of the daily life of the inmates and the historic development of the asylum that is not available from other sources. The artefact assemblage also allows for an understanding of the change in use and gender of the site, from originally housing men, and from the mid-nineteenth century to house women (including those from the Benevolent Asylum). A comparison of the assemblage from this site with the potential artefacts of the Benevolent Asylum will allow for an enhanced understanding of the daily life of the inmates.

5.3 Assessment of Archaeological Potential

The archaeological resources of any site are finite but have the potential to provide insights into everyday life that are not available from any other resource. Archaeological resources may provide evidence that will enhance the historical record and, as such, make a contribution to an understanding of the history and settlement of a local region. In view of the substantial costs involved in archaeological excavation of a site, a clear justification for any archaeological excavation needs to include the following considerations:

- What is the likely integrity of the archaeological resource? Is it likely that largely intact physical evidence would be exposed during excavations such as structural features, artefacts from underfloor deposits, rubbish- or cess-pits, wells or other features with an ability to contribute meaningfully to an understanding of the development of the site as part of the wider development of Sydney?
- What is the research potential of the archaeological resource? Is it likely that the results of the excavation make a significant or important contribution to an understanding of wider research issues regarding the early settlement and development of Sydney?

The Heritage Council of NSW's *Historical Archaeology Code of Practice* and *Assessing Significance for Historical Archaeological Sites and 'Relics'* provides guidance on defining levels of archaeological sensitivity and significance as tabulated:

Grading	Justification	Status
Exceptional	Rare or outstanding item of local or State significance.High degree of intactness.Item can be interpreted relatively easily.	Fulfills criteria for local or State listing.
High	High degree of original fabric. Demonstrates a key element of the item's significance.Alterations do not detract from significance.	Fulfils criteria for local or State listing.
Moderate	Altered or modified elements. Elements with little heritage value but which contribute to the overall significance of the item.	Fulfils criteria for local or State listing.
Little	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
Intrusive	Damaging to the item's heritage significance.	Does not fulfil the criteria for local or State listing.

5.3.1 Integrity of the Resource

The CBD of Sydney has outstanding heritage significance for the evidence of the development of colonial Sydney since European settlement. The historic context of the Site indicates a long period of occupation dating from the early nineteenth century, and includes dramatic transformations. This revision of archaeological potential, undertaken in November 2021, has considered recent archaeological and geotechnical testing at the site, which has enabled a more detailed and comprehensive assessment of potential (Figure 5.22). The results of the recent testing suggest that for most of the site the archaeological resources are unlikely to be present with good integrity.

Four categories of potential have been identified at the site (Figure 5.21):

- Nil-Low: Ambulance Avenue and Lower Ground 8-10 Lee Street
- Low: Street frontage Ambulance Avenue and 8-10 Lee Street; Rail access tunnel north
- Moderate: Former Inwards Parcels Shed Platform and associated tracks
- High: Ramp for Upper Carriage Lane

The 1888 plan of the site (represented similarly in the Rygate and West and Sydney Water versions from the same year) has primarily been used to determine potential in terms of the location of the main building, as the survey correlates well with modern cadastral data, corresponds with the

Casey & Lowe results, and also shows the asylum at its maximum extent (Figure 5.21). The 1855 City Detail Series plan overlays well with the 1888 survey, and a combination of the two has been used to predict the location of structures on the potential plans.



Figure 5.21: Revised archaeological potential at the site.

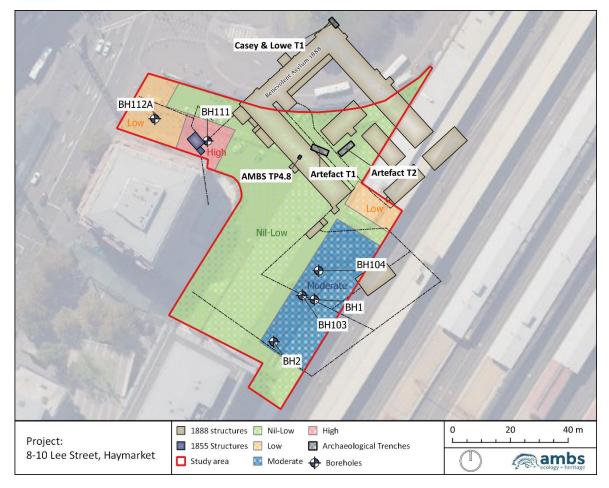


Figure 5.22: Investigations that have informed the revised potential.

Nil-Low Potential: Ambulance Ave and Lower Ground Floor

The recent test excavations by Artefact Heritage in Ambulance Avenue and the archaeological monitoring by AMBS in the Lower Ground Floor of 8-10 Lee Street have encountered deep soil units associated with the Blacktown soil landscape immediately beneath the current surface. The Blacktown soil landscape underlies the sand sheet in this area. The identification of this unit demonstrates that several upper layers have been removed from the area of Ambulance Avenue and the Lower Ground Floor of 8-10 Lee Street. Furthermore, the levels recorded at these two investigations show that the pre-construction subgrade in these areas is over 2m below the remains of the Benevolent Asylum that were encountered in the Casey & Lowe testing (Figure 5.23 and Table 5.3). The archaeological potential across Ambulance Avenue and the Lower Ground Floor of 8-10 Lee Street to Nil-Low. Only a very deep feature associated with the institution (such as a well) has the potential to (partially) survive at that depth.

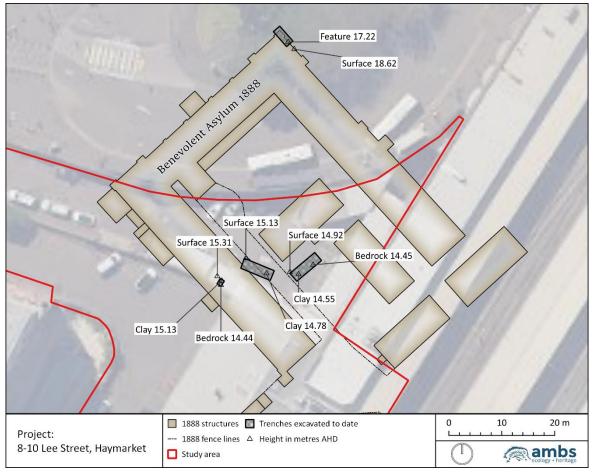


Figure 5.23: Archaeological investigations of the Benevolent Asylum to date, showing relative levels.

	Casey & Lowe 2009 Trench 1	Artefact Heritage 2021 Trench 1	Artefact Heritage 2021 Trench 2	AMBS 2021 Test Pit 4.8
Ground Level	18.62m AHD	15.13m AHD	14.92m AHD	15.31m AHD
Benevolent Asylum Remains	17.22m AHD	-	-	-
Top of Undisturbed Units	-	14.78m AHD	14.55m AHD	15.13m AHD
Bedrock	-	-	14.45m AHD	14.44m AHD

Table 5.3: Summary of relevant levels

Low Potential: Street frontage Ambulance Avenue and 8-10 Lee Street

This area has suffered less from the cutting and grading associated with the lower parts of Ambulance Avenue, and some parts of the area may have been protected by the infill for the Inward Parcels Office ramp. However, there are no known structures or features within this area, with the possible exception of the palisade fence which once skirted the asylum grounds. Because this location was the public interface with the institution, any archaeological remains in this area are unlikely to be representative of the rest of the institution, and particularly unrepresentative of the experience of living at the asylum. Despite its high chances of good preservation in relation to cutting and grading, this location is likely to be heavily utilised for underground services. In addition, this location has little or no research potential, and the remains within it are unlikely to

embody the significance values of the institution and the site as a whole. Archaeological remains in this location may have a contributory significance value.

Low Potential: Rail Access Tunnel north

Unlike the rest of the Lower Ground Floor, this area has been built up to meet the height of the railway lines and platforms. However, this location is between three separate access tunnels at Lower Ground Floor level, the construction of which is likely to have removed or significantly disturbed any archaeological remains in the area.

Moderate Potential: Former Inwards Parcels Shed Platform and associated tracks

This part of the site has had a different development history to the previously discussed areas. With no Lower Ground Floor, this part of the site contains a retaining wall and infill that supports the tracks and platform, and raises the level to that of the station proper in the east. Although the construction of the retaining wall and the activity associated with building the parcels shed and platforms will have had some impact on the area, this part of the site is closer in development character to those areas investigated by Artefact Heritage in 2019. Geotech investigations in this area have encountered sand deposits which could represent the original topsoil at between 16m and 17m AHD. However, the differences in height between the top of the deposit suggests that there has been some disturbance through this area. In particular, the height difference of 600mm between BH1 and BH103 (4m apart) suggests that there is likely to be inconsistencies in the quality of preservation across the area.



Figure 5.24: Geotech investigations have encountered sand deposits between 16m and 17m AHD in the area of moderate potential.

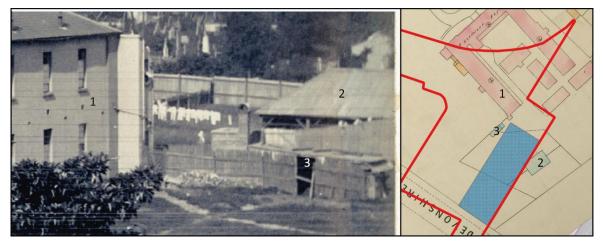


Figure 5.25: The area of Moderate potential (blue) is located outside the footprint of known structures. On the left is a detail from an 1892-1900 photograph of the asylum (State Library of NSW, IE3326895), and on the right is a detail of Rygate and West's 1888 plan showing the same structures.

Number in Figure 5.25	Description
1	Southern wing of the Benevolent Asylum
2	Large, open sided shed with galvanised iron roof
3	Dilapidated timber structure with galvanised iron roof

This area of Moderate potential is located between three structures (Figure 5.25) and is contained within the footprint of an enclosed space on the 1888 plans. The photograph from the same period shows open space divided by incomplete fences, and also shows the dilapidated state of Structure No.3. While Structure No.2 is large, well-built and may leave archaeological traces, only a small part of one corner is within this area of moderate potential, and the remainder is outside the site.

While this area has moderate potential, there are no known structures or features within it. Rubbish pits, wells and cisterns may have been located in this area, although the latter are much more likely to have been positioned closer to the main building and kitchen. Smaller features which were located close to the ground surface may have been destroyed by the disturbance which is suggested by the borehole logs. It is more likely that this area will contain evidence of larger scale events like the demolition of the asylum and its ancillary structures.

Although it is highly likely that residents of the Benevolent Asylum who died in the institution would have been buried in the neighbouring Devonshire Street Cemetery, it is possible that like other similar institutions there may be isolated and unrecorded burial(s) within the Benevolent Asylum grounds. It is possible but unlikely that these types of remains may be encountered in this area of Moderate potential.

High Potential: Ramp for Upper Carriage Lane

This area has been built up rather than cut down, and the borehole log for BH111 shows that sand deposits occur at 17.50m AHD, which is comparable to the height at which Casey & Lowe found the foundations of the Benevolent Asylum during the forecourt testing. The comparable levels and the presence of suspected intact deposits makes this location the most likely to contain archaeological evidence of the asylum. There is one known structure within this area. The structure appears (from its position) to be a gatehouse/gatekeeper's residence. It was demolished before 1871, and only appears on the 1855 plan. Although the structure is unlikely to be representative of the residents' life at the asylum, it may provide some insights into this earlier phase of the institution.

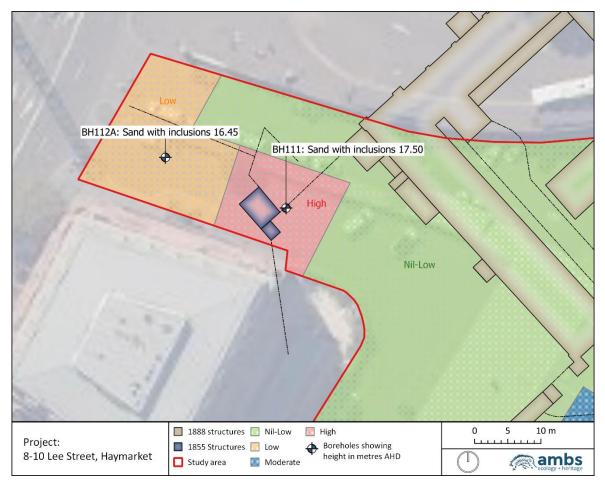


Figure 5.26: Intact sand deposits have been detected below Upper Carriage Lane at comparable levels to those found in the Casey & Lowe testing.

5.3.2 Research Potential

The historical and physical analysis indicates that most of the site is unlikely to contain any archaeological remains of the asylum. In areas of Moderate and High potential, there may be remains of ancillary structures or works that have the potential to tell us about some aspects of the institution, but there are unlikely to be any remains at the site that are directly associated with the residents of the asylum, or the conditions in which they lived. The unknown structure which appears on the 1855 plan and is within an area of High potential is most likely to have been a building associated with staff or management. If the remains of this structure and evidence of activity within it survive in good condition, it has the potential to tell us indirectly about some aspects of life at the asylum, and may contain evidence which can be compared with that from contemporary institutions in NSW.

Comparative sites, previously discussed in Section 5.2, demonstrate multiple occupation and development periods. The history of some of these sites are entwined with that of the Benevolent Asylum; male inmates from the Benevolent Asylum were sent to the Liverpool Hospital in 1851 and in 1862, female inmates were transferred to the Hyde Park Barracks. Interesting comparisons could be drawn between these sites, particularly in the artefactual records, that would further the understanding of operations of the Benevolent Asylum.

There is also potential for unmarked features such as cess pits, rubbish pits and post holes to be uncovered with associated artefacts that may be indirectly demonstrative of the daily lives and activities of those living and working on the site. Despite the very low potential of evidence of the asylum surviving across most of the site, the small windows that are offered into aspects of the institution in areas of Moderate and High archaeological potential have high research value.

6 Archaeological Significance

The physical evidence of past activities is a valuable resource that is embodied in the fabric, setting, history and broader environment of item, place or archaeological site. The above evaluation of the site has identified the potential for relatively intact archaeological resources in some parts. The value of this resource to the community can be evaluated by assessing its cultural heritage values. 'Cultural heritage significance' and 'heritage value' are terms used to express the tangible and intangible values of an item, place or archaeological site, and the response that it evokes in the community.

Archaeological resources can provide information regarding the daily and working life of a local area or a specific site that may not be available from other sources. An item will be considered to be of state or local heritage significance if, in the opinion of the Heritage Council, it meets one or more of the following criteria.

6.1 Assessment of Archaeological Significance

Historical archaeological relics assessed as having State or local significance should be managed under the 'relics' provisions of the *NSW Heritage Act 1977*.

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

The potential archaeological resource of the Site, if present with good integrity, would likely make an important contribution to specific research themes concerning:

- Health; activities associated with promoting or maintaining well-being, Accommodation; activities associated with the provision of housing,
- Welfare; activities associated with the provision on social services be the state or philanthropic organisations, and
- Domestic life; activities associated with creating, maintaining, living in and working around houses and institutions.

These research themes can provide insight into the operations of benevolent institutions in New South Wales throughout the nineteenth century. Documentary resources associated with asylums are scarce, and those that are available, largely focus on the personal records of the inmates. The potential artefact assemblage of the Benevolent Asylum that may be present in unrecorded structures, cesspits, wells or cisterns has the potential to reveal information regarding the operations of the Benevolent Asylum (c.1819- 1901) and may provide some insights into the daily life of the residents.

If such evidence survives, the archaeological resource would meet the criteria for State significance.

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

The archaeological resource at the site is unlikely to meet the threshold for local or State significance under this criterion

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

It is unlikely that the remains of the main structure of the Benevolent Asylum are present within in the Site; as such, the remains would not meet the threshold for inclusion against this criterion.

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

While no consultation has been undertaken with the local community in relation to the values of the archaeological resource, it is acknowledged that local and wider communities are interested in the archaeology of their local area and its development. Should substantial and intact archaeology be uncovered within the Site, it may have value to the local community. It is likely that if the public are made aware of the archaeology through the media or an Open Day, community appreciation of the physical remains of their past will provoke considerable interest.

The threshold for significance against this criterion has not been met at this time.

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

Comparison of the artefact assemblage from the Benevolent Asylum with similar benevolent institutions in Sydney, would contribute to an understanding of the daily life of the infirm and destitute and the operations of such institutions.

The potential archaeological evidence of the site, if present with good integrity would have high research potential and as such, would likely meet the threshold to satisfy the criterion for State significance.

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

Archaeological excavation of the Benevolent Asylum has the potential to reveal an insight into the daily workings of the first such asylum in colonial Sydney. The artefact assemblage could provide an insight into the daily lives of those living and working at the asylum that may not be available from any other resource. As such the site has the potential to reveal a rare insight into Sydney' colonial past.

The archaeological resources in the Benevolent Asylum site, if present with good integrity, would meet the threshold for state significance.

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

The incomplete nature of the resource at the site means that the resource is unlikely to meet the threshold for significance under this criterion.

6.2 Statement of Archaeological Significance

The potential archaeological resource of 8-10 Lee Street has the potential to provide information to contribute to research themes associated with the development of colonial Sydney. In addition, the archaeological resource has the potential to enhance an understanding of the early site formation processes and landscape modifications, as well as the historic development of the local area from the early nineteenth century.

Physical evidence of the Benevolent Asylum (c.1819- 1901), as well as artefact assemblages from occupation deposits (contained within cesspits or rubbish pits) may have the potential to provide indirect insight into life at the asylum. Evidence from the archaeological resource such as personal

artefacts, have the potential to be compared with assemblages from benevolent asylums in the local vicinity and beyond, particularly the Liverpool Hospital and Hyde Park Barracks, whose historic developments are inextricably linked with the Benevolent Asylum. This comparison would contribute to addressing research questions relating to the treatment of the infirm and destitute through the operations of benevolent institutions as well as the material culture, social interactions and living conditions of such sites.

The potential archaeological resource within the site, if present with good integrity, is likely to have a high level of research potential and would meet the threshold for state significance (Figure 6.1).



Figure 6.1 Areas of Moderate and High archaeological potential may contain State significant archaeology with high research value.

7 Archaeological Research Design

Archaeological remains can enhance the historical record and as such make a contribution to an understanding of the history and settlement of a local area. The proposed development at 8-10 Lee Street, Haymarket will have an adverse impact on the potential archaeological resources of the site; the excavation of two basement levels will remove the resource entirely in the areas of Low, Moderate and High potential. As identified in this report, if present with good integrity, the archaeological resource has high research potential and has been assessed as having state significance. Although the preferred management strategy is to retain archaeological resources in situ, a proposed development makes this option impossible, in which case an archaeological strategy for managing the archaeological resources must be developed; an archaeological research design.

The methodology and proposed research questions provide a framework for archaeological investigations and for the analysis of the results and the management of the artefactual material recovered from the excavations.

7.1 Research Questions

The archaeological resources of any site are finite but have the potential to provide insights into everyday life that are not available from any other resource. To ensure that the research potential and significance is realised, archaeological investigations undertaken anywhere in the Site should aim to address substantive research themes.

Landscape & Environmental Archaeology

- Is there surviving evidence of the early local environment; early soils, fossil pollens and seeds?
- Is there surviving evidence of early land-use practices and what can this evidence tell us about the modification of the original landscape?

Structural Design and Material Culture

- What can the construction techniques, size, layout and form of buildings associated with the Benevolent Asylum tell us regarding their period of use and areas of activity?
- What can the contents of occupation deposits from beneath floors, wells, rubbish and/or cess pits (if present) tell us about the operations and practices of the Benevolent Asylum and the daily lives of its inmates, that may not be available from other sources?
- What can the artefact assemblage tell us about the minutiae of everyday life for the people working and living at the Benevolent Asylum? What do they tell us about population densities, gender and class?
- What information can be gleaned from a comparative analysis of the artefact assemblage of the Benevolent Asylum with artefact assemblages from similar sites? What are the similarities and differences in the nature of the artefactual material?

The above research questions are specific to the site and will inform the procedure for recording the archaeological resources during excavation, the recovery and storage of artefacts and provide a framework for the excavation. In addition, new questions are likely to arise during excavation and / or during the post-excavation analysis, which may provide additional insights into different aspects of the site that may not have been previously considered.

7.2 Archaeological Management

7.2.1 Primary and Secondary Excavation Directors

The nominated Primary Excavation Director for the site is Mike Hincks, AMBS Senior Historical Heritage Consultant.

The nominated Secondary Excavation Director for the site is Balazs Hansel, Urbis Associate Director.

The day to day management of the archaeological excavations will be undertaken by Primary Excavation Director, Mike Hincks and Secondary Excavation Director, Balazs Hansel. Site Directors Sam Richards, Urbis Heritage Consultant, and Lian Ramage, AMBS Senior Heritage Consultant will assist management of the site. Mike Hincks meets the Heritage NSW Excavation Director Criteria, has directed, managed and excavated extensively on State significant sites in NSW and has been approved on permits for complex State significant sites in Sydney and Parramatta, including managing the integrated historical and Aboriginal excavations for the State significant contact archaeology site at 7 Parramatta Square. In addition, AMBS Director of Historic Heritage Jennie Lindbergh will attend the site to provide high level guidance and advice regarding the management of the State significant resource, where this is required. This will ensure that significant archaeology is managed in accordance with Heritage Council requirements.

Key members of the team will include Guy Hazell, surveyor, who will set out the site grid, and survey all site features to contribute to the overall plan of the site in its entirety. Victoria Cottle and Madeleine Rodwell, AMBS Historic Heritage Consultants, will be assisting both the Primary and Secondary EDs in the day to day management of the site and oversee artefact management.

The archaeological investigations program will comprise:

- Testing and monitoring slab and overburden removal to determine the extent, integrity and potential significance of the underlying archaeology (Section 7.2.4).
- If archaeological remains are present with good integrity, open area stratigraphic excavation would proceed to salvage all archaeological remains within a defined area (Section 7.2.5).

7.2.2 Heritage Induction

AMBS will prepare a document that addresses the project scope, identifying the sensitivities of the site and the relevant heritage requirements of the project and will be presented to all on-site personnel. The induction will be approved by the Primary ED and presented by the Secondary ED to all on-site staff prior to excavation. It will be an illustrated, easy to understand hard copy outlining the main points and procedure, including:

- Description of the nature and heritage significance of the anticipated archaeological resource
- Understanding of the unexpected finds procedures
- Repercussions of any breaches to the approved archaeological strategy
- Maps showing location of anticipated archaeological features
- Photographs of the types of anticipated archaeological features

Additional toolbox meetings will be given each day, as required, to provide an overview and management of the anticipated archaeological resource for that day and in the event of unanticipated relics or features being exposed.

All archaeological works will incorporate both Aboriginal and historical archaeological investigations. A methodology that demonstrates how the investigations will be undertaken in tandem has been prepared by Urbis, and will be in place for the duration of the works. The methodology is reproduced in full below (section 7.2.2)

7.2.3 Aboriginal Archaeological Excavation Methodology

The current Excavation Methodology (EM) is informed by the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010)* (the 'Code of Practice'). The EM is further designed in light of the existing knowledge for the nature of the present and past environment within the subject area, including the depth of imported fill and topography.

In the event that the EM needs to be adjusted due to unforeseen circumstances, all necessary adjustments will be discussed with the Aboriginal site officer(s) and the Proponent.

The EM has identified three primary scenarios that that have the potential for the discovery of Aboriginal archaeological resources, including:

- Excavation of historical features in T1 and T2 (Lower Ground Floor)
- Removal of overburden and imported fill (Platform 0 zone and in relation to Devonshire Street Tunnel demolition) to identify the presence or absence of any original soil profile.
- Staged salvage excavation of original soil profiles (A horizon) in areas where the removal of overburden (Scenario 1) exposed any of those soil profiles.

Scenario 1: Excavation of historical features

This scenario will include the methodology of managing Aboriginal objects and archaeological resources that might be encountered during the excavation of historical features. The controlled investigation and recovery of Aboriginal objects from historical fill during historical archaeological excavation is highly important as it might shed light on the utilisation of the site by Aboriginal people during early colonial occupation.

The excavation methodology will follow the ARD and methodology provided below that will be further updated post-approval to align with detail construction programs provided by the proponent.

Should Aboriginal objects identified during the excavation of historical features and fill, the following methodology will be applied:

- Excavation of the feature will stop, and an archaeologist and Aboriginal site officer will assess the find and record the location using a real-time kinematic positioning system (RTK) or total station, record the find with photograph and description on pro-forma recording form.
- Should the find consist a single object, with inconclusive assessment of in-situ or disturbed context, the object will be removed, bagged-tagged using standard archaeological process and placed in a secure container on-site. Excavation of the feature will then proceed.
- Should the find consist of a more complex event, such as a knapping floor or cultural layer comprising artefact(s), hand excavation will proceed in consultation with the Aboriginal site officer on site to further expose the feature and allow more detailed understanding of the nature, spatial and vertical extent, and context of the find. The excavation will aim to remove the entire feature to address the relevant research questions. The Aboriginal object(s) and/or feature(s) will also be recorded on the context sheets of the historical archaeological excavation. Excavation will then proceed.
- Should the find assessed as possible archaeological signature of 'contact archaeology', excavation will stop, and discussion will take place with the participation of the aboriginal site officer, Excavation Director, and the archaeologist supervising the execution of the Aboriginal heritage consent conditions to identify the best approach to proceed. Notification of HNSW will also take place.
- Should the excavation of the identified Aboriginal objects/features continue into historical features identified as to be of potentially of State Significance, excavation will stop, and no

further excavation will be carried out until the Primary Excavation Director (PED) assesses the context of the find. The assessment should consider the relevant SSDA conditions for the context of uncovering and removing State Significant relics. Excavation will not recommence until the relevant decision is made by the PED.

Scenario 2: Removal of overburden and imported fill (Platform 0 zone and in relation to Devonshire Street Tunnel demolition) to identify the presence or absence of any original soil profile.

This scenario will include the monitoring of the removal of overburden and imported fill. The removal will be carried out by a medium-small size (5-14 t) machinery fitted with a flat bucket. The process will include the removal of 20-30 cm of fill at the time in an a given area and it will be monitored constantly and cross-checked with the known stratigraphy of the site and the layers of imported fill. The process will be repeated in larger areas until the bottom of the imported fill is reached and either remnant dune deposit/soils or underlaying bedrock are encountered. This process will be undertaken in two separate trenching locations within the Platform Zero zone. The exact location of each trench will be informed by geotechnical results to date.

Should Aboriginal objects or other archaeological resources such as concentration of shell or burnt features be located the removal of soil will stop and the following methodology will be applied:

- The monitoring archaeologist and Aboriginal site officer will assess the find and record the location using a RTK or total station, record the find with photograph and description on pro-forma recording form.
- Should the find be in disturbed context within the fill, it will be recovered, bagged, and tagged with a unique number, date and location, as per general archaeological practice and placed in a secure container on-site. Removal of fill will continue.
- Should the find be located in-situ, following the removal of the last section of the imported fill, in the original soil profile, it will be recorded by RTK, photographed, and the removal of topsoil will cease in that area. Hand clearing of the location will be undertaken.
- The identified feature and object will be then recorded and further excavated by hand applying methodology form Scenario 3 (staged salvage excavation).
- If the removal of fill uncovers remnants of the original soil profile with the absence of Aboriginal archaeological resources, machine excavation will stop on that level and continue in a spatial extent for the given work area utilising the above-described method. The exposed soil profile will be investigated further utilising the methods described under Scenario 3 staged salvage excavation.

Scenario 3: Staged salvage excavation of original soil

The staged salvage excavation scenario will be applied to areas where remnants natural soil profile is identified, and no historical features or fill are present.

For the staged salvage excavation scenario, the EM proposes to use the following two-stage method:

- Stage 1 Testing: archaeological test excavation utilising standard archaeological hand excavation of 1m by 1m test pits on a grid system in line with the requirements of the Code of Practice.
- Stage 2 Salvage: should test excavation uncover Aboriginal objects or other archaeological resources, a salvage excavation methodology will be applied to investigate and salvage those resources in line with the Code of Practice and archaeological best practice.

The Aboriginal archaeological excavation will be carried out in stages outlined below.

Step 1 – Test excavation

Following the removal of the fill, the surface of the original soil will be inspected for any Aboriginal objects and archaeological resources. Should Aboriginal object(s) or archaeological resources located, Scenario 1 will be applied. Should no Aboriginal object(s) or archaeological resources located, test excavation will proceed using hand tools and 1m by 1m pits in a grid system to cover the visible extent of original soil. Each 1m by 1m pit will have individual numbering according to their position on the grid.

The test excavation will include:

- The first test pit in each area will be excavated in 5 cm spits down to the sterile layer unless cultural layers are identified.
- Should no cultural layers be found, the rest of the pits will hand excavated in 10 cm spits.
- Each separate spit for every unit will be kept in labelled buckets to avoid crosscontamination between excavation units.
- Excavated soil will be dry sieved through 5 mm nested mesh sieves.
- Any archaeological material, including stone artefacts, animal bone, shell, charcoal, or other foreign material be found during the excavation or sieving, they will be bagged and labelled with a unique number based on the relevant pit, grid square and spit/stratigraphic layer.
- Standard archaeological recording including description of test pits and archaeological features and finds, photographic and section or plan drawings will be done where necessary during the excavation. Soil samples will also be taken for further analysis.
- Any archaeological material found in-situ will be recorded with x-y-z position within the test pit and also plotted with the RTK.
- Decision will be made in consultation with the Aboriginal site officer in relation to move to the next test pit or apply salvage methodology.
- Should the test excavation identify historical features and/or relics of potentially State significance, excavation will stop, and no further excavation will be carried out until the Primary Excavation Director (PED) assesses the context of the find. The assessment should consider the relevant conditions of the SSDA approval for the context of uncovering and removing State Significant relics. Excavation will not recommence until the relevant decision is made by the PED.

Step 2 - Salvage excavation

Should the initial test excavation of any 1m by 1m test pit produce more than 5 Aboriginal objects; exceptional object such as a backed artefact, remnants of knapping, hand axe; or cultural layers, including charcoal, burnt features or shells, the following methodology will be applied to salvage the identified archaeological resource:

- Original test pit will be extended by additional 1m by 1m sections to further investigate the spatial and vertical extent of the archaeological resource.
- Hand excavation will proceed either in 10 cm spits or following the extent of cultural layers.
- Each separate spit for every unit will be kept in labelled buckets to avoid crosscontamination between excavation units.
- Excavated soil will be dry sieved through 5 mm nested mesh sieves.
- Any archaeological material, including stone artefacts, animal bone, shell, charcoal, or other foreign material be found during the excavation or sieving, they will be bagged and labelled with a unique number based on the relevant pit, grid square and spit/stratigraphic layer.
- Standard archaeological recording including description of test pits and archaeological features and finds, photographic and section or plan drawings will be done where necessary during the excavation. Soil samples will also be taken for further analysis.

- Any archaeological material found in-situ will be recorded with x-y-z position within the test pit and also plotted with the RTK.
- Should the salvage excavation identify historical features and/or relics of potentially State significance, excavation will stop, and no further excavation will be carried out until the Primary Excavation Director (PED) assesses the context of the find. The assessment should consider the relevant conditions of the SSDA approval for the context of uncovering and removing State Significant relics. Excavation will not recommence until the relevant decision is made by the PED.

Recording of features and Handling of Aboriginal objects

Recording of the archaeological excavation and handling of Aboriginal objects will again be discussed with the RAPs before the start of the programme to ensure that the process is clear for all on site. The process will be informed by the Code of Practice.

7.2.4 Historical Archaeological Testing & Monitoring

Historical archaeological testing will occur in areas of Moderate and High potential to confirm the presence of intact deposits which is suggested by the geotechnical borehole logs from the site. Archaeological testing will also be undertaken in the area of Nil-Low potential within the footprint of the asylum main building. This will be done to confirm the assessment of Nil-Low potential and to confirm that no evidence of the main building remains within the site. The Primary Excavation Director will be present for all testing at the site.

Because the testing will be conducted in some areas where no known structures, works or features were located, it will not be possible to directly test for the survival of those kinds of objects. Instead, archaeological testing will focus on the deposits that were detected during the geotechnical coring, and will aim to establish their integrity, and the likelihood of objects of significance surviving in the vicinity. This will be done through an assessment of the soil profile, its modification, truncation or disturbance, sample sieving for background artefact scatters, and evidence of intact features within the areas of testing. Further archaeological management of those areas will be informed by the results of the testing.

If the testing finds that the deposits are heavily disturbed or truncated and that there are unlikely to be archaeological resources, relics, features or deposits in the areas under investigation, an Unexpected Heritage Finds Procedure (Section 7.2.6) will be implemented for the remainder of works in the area, and a program of archaeological monitoring may be recommended.

Where archaeological remains with good integrity are exposed within the Site, open area excavation will proceed following removal of the overburden and once the area has been made safe to salvage the archaeological remains.

Testing will be in five locations across the Upper Ground and Lower Ground Floors. Within the footprint of the Benevolent Asylum main building, two trenches (LGF T1 and LGF T2, Figure 7.1) will be excavated in the Lower Ground Floor to confirm that no remains of the main building survive within the site.

On the Upper Ground Floor, a 2m x 2m trench will be excavated in the location of High potential (UGF T5, Figure 7.1) to look for remains of the 1855 structure. The trench will be excavated from the level of Upper Carriage Lane. In T5 it will be possible to test directly for remains of the 1855 structure. However, the same assessment of the deposit will be undertaken as in the other trenches, which will enable comparison of the results between the testing locations.

Two 2m x 2m trenches will be excavated within the area of Moderate potential to investigate the nature of the remaining soil profile in that location, and assess the likelihood of survival of archaeological evidence of asylum activity (UGF T3 and UGF T4, Figure 7.1).



Figure 7.1: Archaeological testing locations across the site.

7.2.5 Open Area Stratigraphic Excavation

The extent that open area excavation will be required will not be known until the potential archaeology has been exposed with removal of slabs and overburden. Open area excavation will proceed once the site has been made safe. Excavations will be directed by the Primary ED, Mike Hincks, and assisted by Balazs Hansel (Secondary ED), Site Directors Sam Richards, Urbis Heritage Consultant, and Lian Ramage, AMBS Senior Heritage Consultant. Jennie Lindbergh, AMBS Director Historic Heritage will provide high level advice and guidance. The team may comprise up to 15 archaeologists, though this may increase or reduce in accordance with the site archaeology.

Excavation will be in accordance with the following methodology to ensure that all significant archaeological relics, features and deposits are appropriately managed and recorded:

- Site datum and grid will be established for the entire subject area in order to record all deposits, features and relics
- Occupation or underfloor deposits, if present, will be excavated within established grids and deposits below 100mm will be excavated using arbitrary spits or stratigraphic layers if identified and wet sieved
- Cess pits and rubbish pits will be excavated along tip lines (if identifiable)
- All footings and remains of built features and relics identified will be recorded using archaeological best practice, including:

- All information regarding the location, dimensions and characteristics of all recorded archaeological features and deposits will be recorded on pro-forma context sheets
- Digital photographs including JPEG and RAW of cleaned features
- Scale plans
- Elevations of features, if relevant
- Photogrammetry, if relevant
- Sequential numbering of features and deposits to facilitate the preparation of a Harris Matrix and artefact labelling
- Preparation and development of a Harris Matrix, to show stratigraphic relationships between all recorded archaeological features and deposits
- All information regarding the location, dimensions and characteristics of all recorded archaeological features and deposits will be recorded on pro-forma context sheets
- Soil samples will be taken of significant soils which may provide further insight into the indigenous and introduced flora of the subject area and also the diet of the historical occupants
- Samples of bricks and mortar will be collected for individual structures should they be identified

Human Remains

If potential human skeletal remains or unmarked burials are located within the Site, all works would cease immediately. The police would be informed immediately as human skeletal remains come under the jurisdiction of the State Coroner and the Coroners Act 2009 (NSW). Under s 35(2) of the Act, a person must report the discovery to a police officer, a coroner or an assistant coroner as soon as possible. If the remains are historic, Heritage Council of NSW will be informed in accordance with s146 of the Heritage Act 1977 and a management strategy for the burial developed. Following Heritage Council approval for work to proceed, a forensic anthropologist/archaeologist with experience with excavating historic human remains would lead excavations.

7.2.6 Unexpected Heritage Finds Procedure

An unexpected heritage find is an object or place that is discovered during the carrying out of the project and which may be a heritage item but was not identified in the EIS or Submissions Report or suspected to be present.

If unexpected historic relics or Aboriginal objects are exposed, work would stop in the affected area and an AMBS Historic or Aboriginal Archaeologist (as relevant) would be contacted to assess the integrity and significance of the exposed relic(s)/object(s). Unexpected relic(s)/object(s) that are exposed during works would be managed in accordance with the following procedure:

- If the suspected heritage find is assessed by the AMBS Historic/Aboriginal Archaeologist to have no significance and/or integrity, AMBS will provide written approval for work to proceed.
- Relics / objects assessed by the AMBS Historic/Aboriginal Archaeologist as having local significance will be managed according to the project HMP. Following AMBS' written approval that the find has been appropriately managed, work may resume.
- If the relic or object is assessed as having state heritage significance, the AMBS Historic/Aboriginal Archaeologist would inform the project team and Heritage NSW, in writing, with details of the nature, integrity and significance of the relic/object. An appropriate management strategy would be determined and implemented in consultation with Heritage NSW. AMBS would provide written approval for works to resume once all relics and/or areas of archaeological sensitivity with state heritage significance have been appropriately investigated and recorded.

• If the relic or object, on investigation, proves to be part of a feature or an archaeologically sensitive area, the AMBS Historic/Aboriginal Archaeologist would inform the project team and Heritage NSW, in writing, with details of the nature, integrity and significance of the relic to determine the appropriate management strategy, which may include open area salvage excavation. Works would not proceed until AMBS provides a clearance certificate affirming that archaeological investigations have been completed, artefacts retained for analysis, and that no relics remain in situ.

7.2.7 Sieving Strategy

Evidence of past activities is provided by artefacts recovered during archaeological excavation, in particular from occupation deposits. Occupation deposits with potential to allow for conclusions to be drawn as to standards of living and access to goods occur beneath floors, within cesspits, rubbish pits, wells or cisterns, and yard deposits. Occupation deposits would be wet or dry sieved, in accordance with the density of the soil matrix and the likely improved retrieval of significant artefacts.

Where relevant, sample sieving of deposits will be done to determine whether a deposit warrants sieving and if so, this should be wet or dry sieving.

If underfloor or occupation deposits are encountered, the deposit will be gridded into 1m squares. The deposit within each square will be excavated and sieved to ensure that all evidence of material culture is retrieved for analysis, no matter how small. The purpose of this process is to spatially map areas of activity as demonstrated in the material assemblage. Similarly, dense deposits from other structures or features such as cesspits and wells or cisterns will also be sieved, if this is deemed to be the best strategy for retrieving all possible artefacts.

7.2.8 Artefact Storage and Management

Artefacts will be cleaned, bagged and labelled in accordance with the archaeological context, and strategically sorted and stored at the AMBS office, Unit 14, 1 Hordern Place, Camperdown for further analysis. Artefacts will be processed and cataloguing will be undertaken using a specially designed Access database in line with prior AMBS and other excavations, specifically as undertaken by Casey & Lowe Pty Ltd. This will be included in the final archaeological report. The management of the artefact analysis will be overseen by AMBS Senior Historical Heritage Consultant Lian Ramage. Specialists will be engaged to provide advice on specific artefactual materials.

A lockable storage facility on site would be preferable for artefact storage during archaeological excavations. Initial post excavation storage of artefactual materials will be located at AMBS offices where recording and analysis will take place. Once the archaeological post excavation programme is completed the care, safe storage and management of all artefactual material is the responsibility of the proponent, Atlassian in perpetuity. Future management of the collection will be discussed with Heritage Division and the proponent and an appropriate repository identified in the post excavation reporting as per standard permitting conditions.

7.2.9 Final Archaeological Excavation Report

At completion of the archaeological investigation program, a final excavation report will be prepared, detailing the results of the fieldwork and post-excavation analysis. The report will be prepared in accordance with current heritage best practice and the requirements of a standard excavation permit

- An executive summary of the archaeological programme;
- Due credit to the client paying for the excavation, on the title page;
- An accurate site location and site plan (with scale and north arrow);

- Historical research, references and bibliography;
- Detailed information on the excavation, including the aim, the context for the excavation, procedures, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale photographs and/or drawings, location of repository) and analysis of the information retrieved;
- Nominated repository for the items;
- Detailed response to research questions (at minimum those stated in the approved Research Design);
- Conclusions from the archaeological programme. The information must include a reassessment of the site's heritage significance, statement(s) on how archaeological investigations at this site have contributed to the community's understanding of the site and other comparable archaeological sites in the local area and recommendations for the future management of the site.
- Details of how information about this excavation has been publicly disseminated, if relevant. For example, provide details about Public Open Days and include copies of press releases, public brochures and information signs produced to explain the archaeological significance of the site.

8 Managing the Archaeological Resource and Future Research

This HARD was prepared to assess the historical archaeological potential and significance of the Site at 8-10 Lee Street, Sydney. This assessment has identified that there is potential for archaeological relics to be present with good integrity and with the potential to be of state archaeological significance. The proposed development will remove all archaeological deposits; therefore, an archaeological excavation program is required to investigate and salvage archaeological relics, should they be present in line with *The Heritage Act 1977* and archaeological best practice.

Where there is an opportunity for inclusion of some of the artefactual material into the heritage interpretation for the project this would also require long-term care and management by Atlassian. Some examples of heritage interpretation methods include the re-use of excavated building materials, interpretative signage, and the display of a selected collection of artefacts recovered from excavations within the proposed development. Should substantial and significant structural remains associated with the Asylum be exposed, consideration should be given to redesigning the proposed building and integrating the in-situ remains into the site interpretation. An interpretation strategy will be developed post excavation should archaeological resources be present and materials salvaged.

The focus of research questions changes from generation to generation. Information gained during excavations, analysis of artefacts and the archaeology would make a significant contribution to ongoing and future research for students, archaeologists and historians and as such, the information should be made freely available. This would include ensuring a secure and accessible repository for the artefacts, to be available for further research.

Bibliography

Aird, W. V. (1961) *The Water Supply, Sewerage and Drainage of Sydney*. Sydney: Metropolitan Water Sewerage and Drainage Board.

AMAC (2016) Permit Application S60 Heritage Act NSW 1977. Archaeological Assessment, Research Design, Excavation Methodology & Heritage Impact Assessment: Footings [066], [073], [074] and [080], Lee Street Substation Site, Central Station, Sydney. Report for UGL Limited on behalf of Transport for New South Wales.

AMAC (2019) *Final Archaeological Report, Lee Street Substation Central Station, Sydney - Volume 1.* Prepared for Transport for New South Wales.

Annable, R. (2009) *Historical Notes on Central, Town Hall Square, Martin Place, Barangaroo-Wynyard, Pyrmont, Rozelle Stations*. Appendix 1 in Casey & Lowe (2009) *CBD Metro Environmental Assessment Technical Paper 4 – Non-Indigenous Archaeology*. Prepared for Sydney Metro.

Austral Archaeology & Godden Mackay (1997a) *POW Project 1995. Randwick Destitute Children's Asylum Cemetery – Volume 1, Main Report.* Prepared for the South Eastern Sydney Area Health Service, Heritage Council of NSW and the NSW Department of Health.

Austral Archaeology & Godden Mackay (1997b) POW Project 1995. Randwick Destitute Children's Asylum Cemetery. Archaeological Investigation – Volume 2, Archaeology, Parts 1 and 2. Prepared for the South Eastern Sydney Area Health Service, Heritage Council of NSW and the NSW Department of Health.

Australia ICOMOS. (2013). *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance*. Burwood, VIC: Australia ICOMOS.

Artefact Heritage (2018) Sydney Metro: Central Station Main Works – Station Box and Sydney Yards, Archaeological Method Statement. Report to Laing O'Rourke.

Benevolent Society (2020) *Our History*, viewed 25/2/2020 https://www.benevolent.org.au/about-us/our-history

Burritt, P.E. (1991) Historical Archaeology at the Royal Mint and Hyde Park Barracks.

Casey & Lowe Pty Ltd (2009) *Results of Archaeological Testing. Western Forecourt, Central Station.* Report to Sydney Metro.

City of Sydney (1997) The Central Sydney Archaeological Zoning Plan. Sydney: City of Sydney.

Davies, P., Crook, P. & Murray, T (2013) 'An Archaeology of Institutional Confinement, The Hyde Park Barracks, 1848-1886'. *Studies in Australasian Historical Archaeology, Volume 4.* Sydney: The Australasian Society for Historical Archaeology.

Gooden Mackay Logan (GML) (2009) *Liverpool TAFE, Archaeological Monitoring Report*. Report prepared for NSW Department of Commerce.

Gooden Mackay Logan (GML) (2010) Former Lidcombe Hospital Site, Heritage Precinct. Archaeological Monitoring and Test Excavation. Final Report. Report prepared for Australand Pty Ltd.

Godden Mackay Logan (GML) (2013) *Lidcombe Hosptial Site, Brooks Circuit and Pedan Lane. Historical Archaeological Excavation Report.* Report prepared for Australand Property Group.

Henry, F.J.J (1939) The Water Supply and Sewerage of Sydney. Sydney: Halstead Press Pty Ltd.

Heritage Council of NSW (2009) Assessing Significance for Historical Archaeological Sites and Relics.

Heritage NSW, Community Engagement, Department of Premier & Cabinet (Heritage NSW) State Heritage Inventories:

Sydney Terminal and Central Railway Stations Group <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?id=50 12230> Central Railway Station and Sydney Terminal Group <https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=48

Rappoport Pty Ltd & NSW Government Architect's Office (2013) *Central Station Conservation Management Plan*.

Rathbone, R. (1994) A Very Present Help, Caring for Australians Since 1813. The History of the Benevolent Society of New South Wales. Sydney: State Library of NSW Press.

SHOP & BVN (2019) The Sydney Tech Precinct, 8-10 Lee Street.

Sydney Metro (2019) *City & Southwest Newsletter: Central Station, October 2019.* Available from: https://www.sydneymetro.info/station/central-station> [Accessed 20/02/2020].

The Daily Telegraph (2 August 1906) *New Railway Station*, p. 4, viewed 19 February 2020, http://nla.gov.au/nla.news-article237638849.

Thorp, Wendy (1998) Historical Analysis Henry Deane Park, Lee Street, Sydney.

Urbis Pty Ltd (2019) SEARS Scoping Report 8-10 Lee Street, Haymarket. Prepared for Atlassian Pty Ltd.

Urbis (2020) Atlassian State Significant Development Application – Standard Text for Technical Reports 5 August 2020.

Weir Phillips Heritage and Planning (2019) *Heritage Impact Statement: Former Inwards Parcels Shed. Nos 8-10 Lee Street, Sydney.*

Wilson, G.C. (1983) *Archaeological Report Hyde Park Barracks, September 1982-1983*. Prepared for the Public Works Department of New South Wales.

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