Redfern North Eveleigh Precinct

Chief Mechanical Engineers Building

Historical Archaeological Assessment

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FINAL
December 2022

Document Information

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Local Government Area

City of Sydney Council

Cover Image

CME Building circa 1950. Source: Rapport 1997

Issue	Issue date	Version	Notes/Comments	Author	Review
1	September 2022	Draft Report	Client Review	Mikhaila Chaplin Sarah McGuinness	Jody Steele
2	December 2022	Final Report	For Submission	Sarah McGuinness	

This report has been prepared based on research by Curio Projects specialists. Historical sources and reference material used in the preparation of this report are acknowledged and referenced at the end of each section and in figure captions.

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Contents

Executive Summary

Project Summary

Curio Projects Pty Ltd (Curio) has been commissioned by Transport for NSW (TfNSW) to prepare a Historic Archaeological Assessment (HAA) to support a State Significant Development (SSD) Development Application (DA) No. SSD-39971796 for the heritage conservation and adaptive reuse of the former Chief Mechanical Engineer's Building (CME Building) in North Eveleigh, which is submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The purpose of this report is to identify whether or not the study area has the potential to contain 'relics' as defined under the NSW Heritage Act and whether or not the proposed development of the site would be likely to disturb or expose those relics (if present) and assess the archaeological research significance of those relics that may suffer impact.

Secretary's Environmental Assessment Requirements (SEARs)

The Department of Planning and Environment (DPE) has issued Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development. This report has been prepared to respond to the heritage-related SEARs, as set out in the following table.

SEAR	Response / Location in Report
20. Environmental Heritage *Where there is potential for direct or indirect impacts on the heritage significance of environmental heritage, provide a Statement of Heritage Impact and Archaeological Assessment (if potential impacts to archaeological resources are identified), prepared in accordance with the relevant guidelines, which assesses any impacts and outlines measures to ensure they are minimised and mitigated.*	1. Statement of Heritage Impact (SoHI) please refer to *Chief Mechanical Engineers Building—SOHI*, report prepared by Curio for TfNSW on behalf of TAHE. 2. Archaeological Assessment: this document

Recommendations

In accordance with the above conclusions, the following recommendations are made:

1. Archaeological Monitoring

   As subsurface excavations are proposed in areas assessed as having moderate and low-moderate potential to contain archaeological resources that may contain historical and research significance at a local level, it is recommended that archaeological management in the form of monitoring be carried out under a *s139(4) excavation permit exception*.

   a. ***s139(4) excavation permit exception***. A s139(4) excavation permit exception allows for archaeological test excavations under Exception 2(d) or monitoring under Exception 2(e) to confirm the presence of significant archaeological resources. However, it does not permit the removal of, or impact to, archaeological 'relics' of local or State significance as defined by the Heritage Act. Impacts to 'relics' are only permitted

under a *s140 excavation permit* (see below). While no application is required for a *s139(4) excavation exception;* an Archaeological Research Design (ARD), Archaeological Work Method Statement and Unexpected Finds Procedure must be prepared prior to works commencing and used to guide the archaeological program. Investigations must be carried out by a qualified archaeologist.

b. Should suspected relics be identified over the course of the works, works will cease immediately and Heritage NSW will be notified, in accordance with the Unexpected Finds Procedure.

2. Additional Works

Should any additional impacts to the proposed scope outlined in Section 6 be proposed, an addendum to this report will be required to assess the impacts.

1. Introduction

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1. 1. Introduction

1.1. The Purpose of this Report

Curio Projects Pty Ltd (Curio) has been commissioned by Transport for NSW (TfNSW) to prepare a Historic Archaeological Assessment (HAA) to support a State Significant Development (SSD) Development Application (DA) No. SSD-39971796 for the heritage conservation and adaptive reuse of the former Chief Mechanical Engineer's Building (CME Building) in North Eveleigh, which is submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The purpose of this report is to identify whether or not the study area has the potential to contain 'relics' as defined under the NSW Heritage Act and whether or not the proposed development of the site would be likely to disturb or expose those relics (if present) and assess the archaeological research significance of those relics that may suffer impact.

The CME Building is a state heritage listed building which will be adaptively re-purposed to celebrate the heritage significance of the existing building, whilst also providing a workplace.

This report has been prepared in reference to the following project documents:

- Arterra Design Pty Ltd, 2022, CME Lighting Plan
- Arterra Design Pty Ltd, 2022, CME Fire Services Plan
- Arterra Design Pty Ltd, 2022, CME Landscape Plan
- CCG Architects, 2022. Architectural Report
- CCG Architects, 2022. Drawing Set
- Curio Projects, 2022. *Chief Mechanical Engineers Building—Conservation Management Plan (DRAFT).*
- Curio Projects, 2022. *Chief Mechanical Engineers Building—Historical Archaeological Assessment.*
- Curio Projects, 2022. *Redfern North Eveleigh Precinct Renewal Project—Heritage Interpretation Plan: Chief Mechanical Engineers Building (DRAFT).*
- Curio Projects, 2022. *Chief Mechanical Engineers Building—Condition Report and Schedule of Conservation Works.*
- GHD, 2022, *CME Sanitary and Water Concept Sketch*
- GHD, 2022, *CME Mechanical Services Plan*

Additional heritage documents utilised for research purposes include the following:

- Curio Projects, 2022. *RNE Precinct- Paint Shop Sub-Precinct: Non-Aboriginal Heritage Study.* Prepared for TfNSW.
- Otto Cserhalmi + Partners, 2002. *Eveleigh Locomotive Workshops Conservation Management Plan*. Prepared for Sydney Harbour Foreshore Authority.
- Paul Rappoport Architect Heritage Consultant and Caldis Cook Group Pty Ltd, 1997. *Chief Mechanical Engineer's Building: Conservation Management Plan*. Prepared for State Rail Authority of NSW.
- AHMS, 2008. *North Eveleigh Historical Archaeology Impact Assessment, Archaeology Zoning Plan, and Impact Mitigation Strategy.* Prepared for The Redfern Waterloo Authority.

1.2. Site Identification

The CME building (subject site) is located at the northeast end of the Everleigh Railway Workshops (ERW) curtilage, bounded by Wilson Street to the north, the Scientific Services Building No. 1 to the

west; a car park and the railway line to the south; and terrace residences along Little Eveleigh Street to the east (Figure 1-1 and Figure 1-2Figure 1-2).

The site sits within the Paint Shop Sub-Precinct, located c. 1.7km southwest of Sydney's Central Business District (CBD). The Precinct (Figure 1-3) has frontages along its northern boundary to Wilson Street, Darlington – where the CME Building is located –, and frontages along its eastern boundary to Little Eveleigh Street, Darlington, whilst the western boundary abuts the Carriageworks Sub-Precinct (along the eastern facade of the Carriage Workshops building). The southern boundary of the Paint Shop Sub-Precinct is located along the main railway line between Redfern and Macdonaldtown Stations.

The surrounding context of the subject site is characterised by a mix of residential, educational, retail, and commercial uses, located within the suburbs of Darlington and Newtown to the north and northwest respectively, and Redfern to the east/northeast.

Several significant heritage items associated with the ERW complex are in other North Eveleigh Sub-Precincts west of the Paint Shop Sub-Precinct, including the Carriage Workshops and Blacksmith Workshops buildings within the Carriageworks Sub-Precinct, and the Clothing Store building in the Clothing Store Sub-Precinct.

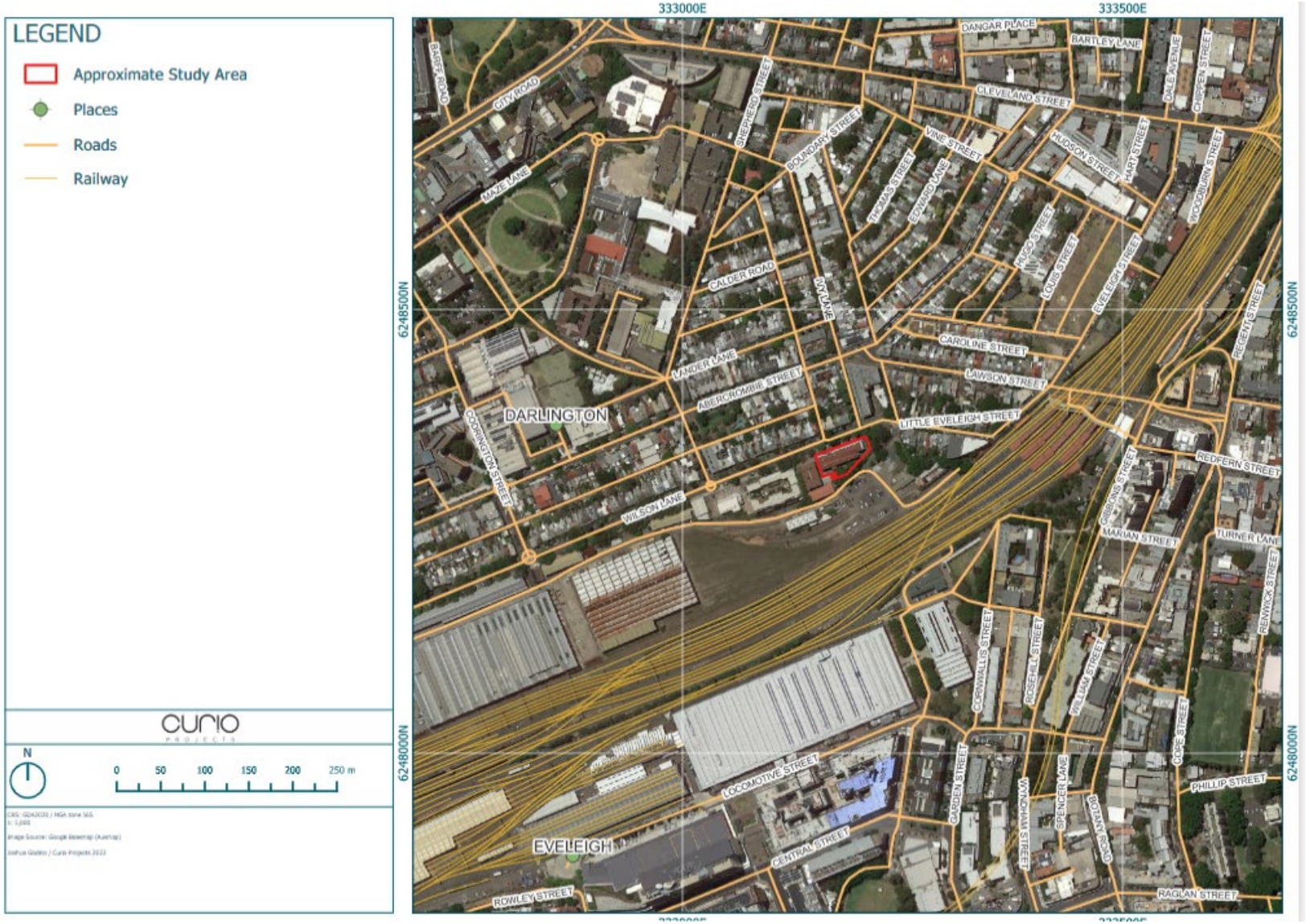

Figure 1-1: Regional context of the study area

Figure 1-2: Study Area outline in red (Source: Curio Projects)

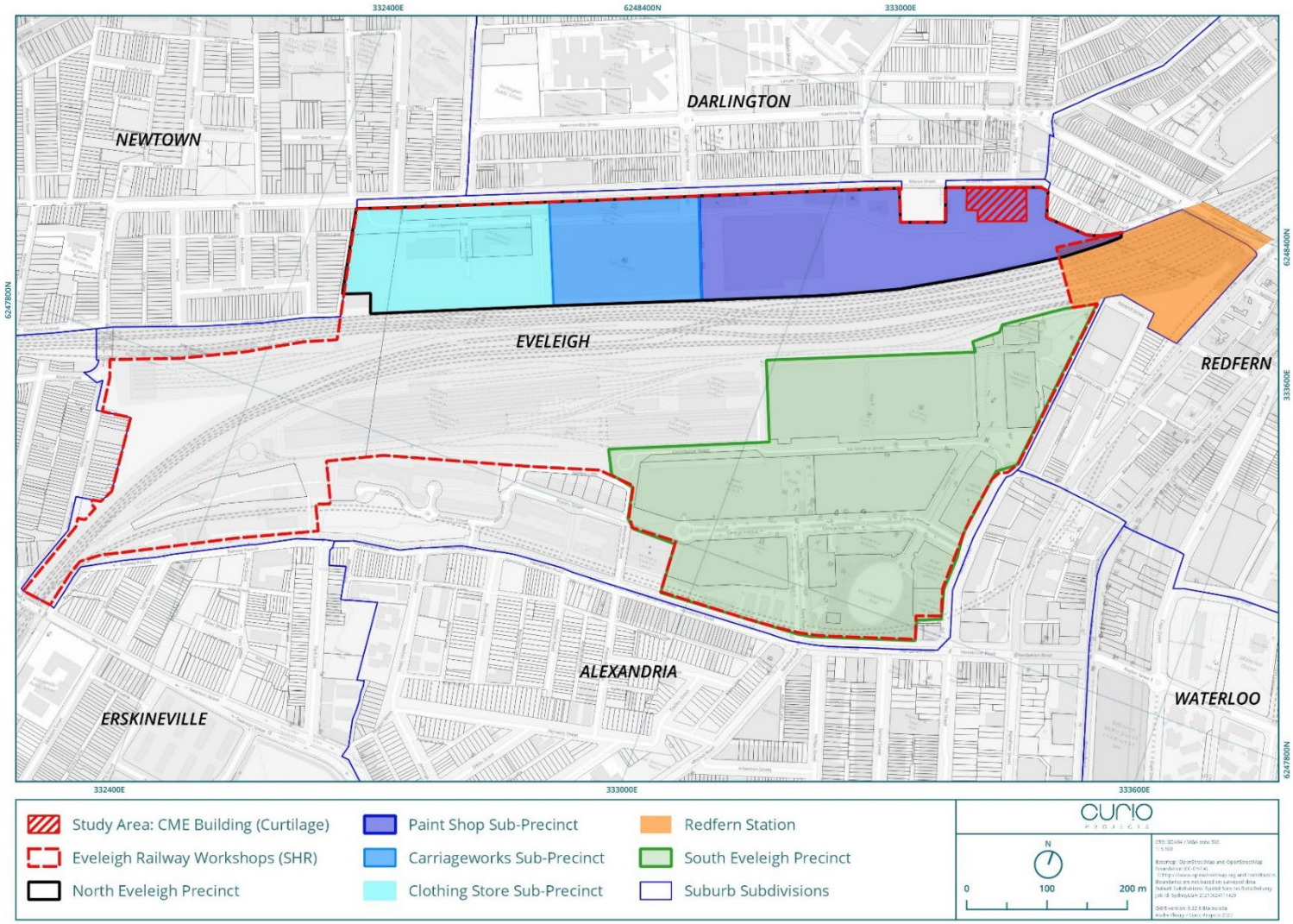

Figure 1-3: Study Area within wider Eveleigh Railway Workshop Precinct (Source: Curio Projects)

1.3. Limitations and Constraints

This assessment addressed the historical archaeological potential of the study area only. Aboriginal cultural heritage values are not addressed in this report (refer Artefact, 2022, *Redfern North Everleigh Precinct Renewal Aboriginal Cultural Heritage Study,* Report for TfNSW for an assessment of Aboriginal cultural heritage).

1.4. Authorship

The Historical Archaeological Assessment has been prepared by Sarah McGuinness, Senior Archaeologist and Cultural Heritage Specialist, Curio Projects. Senior review and input were undertaken by Jody Steele, Director of Curio Projects. Mapping has been prepared by Joshua Godino, Curio GIS Specialist.

2. Statutory Context

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2. Statutory Context

In NSW, heritage items and known or potential archaeological resources (non-Aboriginal) are afforded statutory protection under two principal pieces of legislation:

- Environmental Planning and Assessment Act 1979 (NSW) (EPA Act); and
- Heritage Act 1977 (NSW) (Heritage Act).
- National Parks and Wildlife Act 1974 (NSW) (NPW Act)

The study area and items of movable heritage are listed a number of statutory and non-statutory registers including the Register of National Estate and the National Trust of Australia Register. This section provides a summary of the local and State planning context for the CME Building with respect to its Aboriginal and non-Aboriginal heritage values. A detailed discussion of the site's statutory context is provided in the Non-Aboriginal Heritage Study report prepared for the project. (Curio Projects 2022)

2.1. Environmental Planning and Assessment Act (NSW) 1979

The NSW Department of Planning, Industry and Environment (DPIE) administers the EP&A Act, which provides the legislative context for environmental planning instruments made to legislate and guide the processes of development and land use. Local heritage items, including known archaeological items, identified Aboriginal Places and heritage conservation areas are protected through listings on Local Environmental Plans (LEPs), Regional Environmental Plans (REPs), and State Environmental Planning Policies (SEPPs). The EP&A Act also requires that potential historical archaeological resources are adequately assessed and considered as part of the development process, in accordance with the requirements of the Heritage Act (see relevant sections below for further on the Heritage Act).

2.1.1. State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021

From 1 March 2022, the State Environmental Planning Policy (State Significant Precincts) 2005 has been replaced by State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021 (SEPP 2021). The former ERW site is located within the Redfern-Waterloo Authority Sites State Significant Precinct under the SEPP 2021 (SEPP 2021, Appendix 3). Thus SEPP 2021 is the principle environmental planning instrument that applies to the entire former ERW site, including both the Redfern North Eveleigh Precinct as well as South Eveleigh. Part 2.2 and Appendix 3 (Redfern-Waterloo Authority Sites) of the SEPP sets out the zoning, land use and development controls that apply to the development of the site.

State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP) identifies various types of development and particular sites upon which certain development is defined as State Significant Development (SSD). Schedule 2 of the Planning Systems SEPP lists specific sites where development has a capital investment value of more than $10 million; works on those sites are state significant. Clause 2 of Schedule 2 'Redfern-Waterloo Sites' as a specific site. As the proposed adaptive reuse and conservation of the LES will have a capital investment value greater than $10 million, the future development application to seek approval for the proposed development will be classified as SSD and will be submitted to the Department of Planning and Environment (DPE) for assessment.

Several built items of the former ERW are individually identified as heritage items under SEPP 2021, as listed below:

- Locomotive Workshop
- New Locomotive Workshop

- Works Manager's Office
- Large Erecting Shop
- Carriage Workshops
- Blacksmith's Shop
- Paint Shop
- Scientific Services Building No. 1
- Chief Mechanical Engineers Office Building

2.1.2. City of Sydney Local Environmental Plan (LEP) 2012

The City of Sydney LEP 2012 provides local environmental planning provisions for land within the Sydney LGA. Clause 5.10 of the LEP 2012 sets out objective and planning controls for the conservation of heritage in the City of Sydney Council area, including the conservation of built heritage and archaeological sites.

As the CME Building, as part of the wider ERW, is subject to the overriding provisions of SSP SEPP 2021, the subject site is excluded from the City of Sydney LEP 2012 provisions. However, several Heritage Conservation Areas and heritage items, listed as items of local heritage significance under Schedule 5 of the LEP, are located outside of the SEPP 2021 boundary, but in proximity to the Paint Shop Sub-Precinct. These are summarised in Section 2.4.

2.2. NSW Heritage Act 1977

In NSW, heritage items are afforded statutory protection under the Heritage Act. Heritage places and items of particular importance to the people of NSW are listed on the NSW SHR. The Heritage Act defines a heritage item as a 'place, building, work, relic, moveable object or precinct'. It is responsible for the conservation and regulation of impacts to items of State heritage significance, with 'State Heritage Significance' defined as being of 'significance to the state in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item'.

The CME Building is included in the State Heritage Register as *Eveleigh Chief Mechanical Engineers Office and Moveable Relics* (SHR #01139, gazetted 2/4/1999[1]) (Figure 2-1) with the moveable relics listed as:

- Toilet bowl with counterweight seat (AA24)
- Wall mirror timber frame, 0.6/1.0 (AM06)
- Timber plan cabinet, 6 draws, 1.5/0.9/0.9 (PA08)

The subject site is located adjacent to, but not within, the curtilage of the Eveleigh Railway Workshops SHR listing (SHR #01140, 2/4/1999[2]) (Figure 2-2). The subject site is also located proximal to the Redfern Railway Station Group curtilage (SHR#01234, gazetted 2/04/1999)[3]. The boundaries of these in relation to the CME Building are shown in Figure 2-3.

[1] NSW Government State Heritage Inventory, *Eveleigh Chief Mechanical Engineers Office and Moveable Relics*, SHR Item, accessed August 2022, < https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5014147>
[2] NSW Government State Heritage Inventory, *Eveleigh Railway Workshops*, SHR Item, accessed August 2022, <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5045103>
[3] NSW Government State Heritage Inventory, *Redfern Railway Station group*, SHR Item, accessed August 2022, < https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5012154>

Figure 2-1: CME Building SHR Curtilage map. Source: State Heritage Inventory.

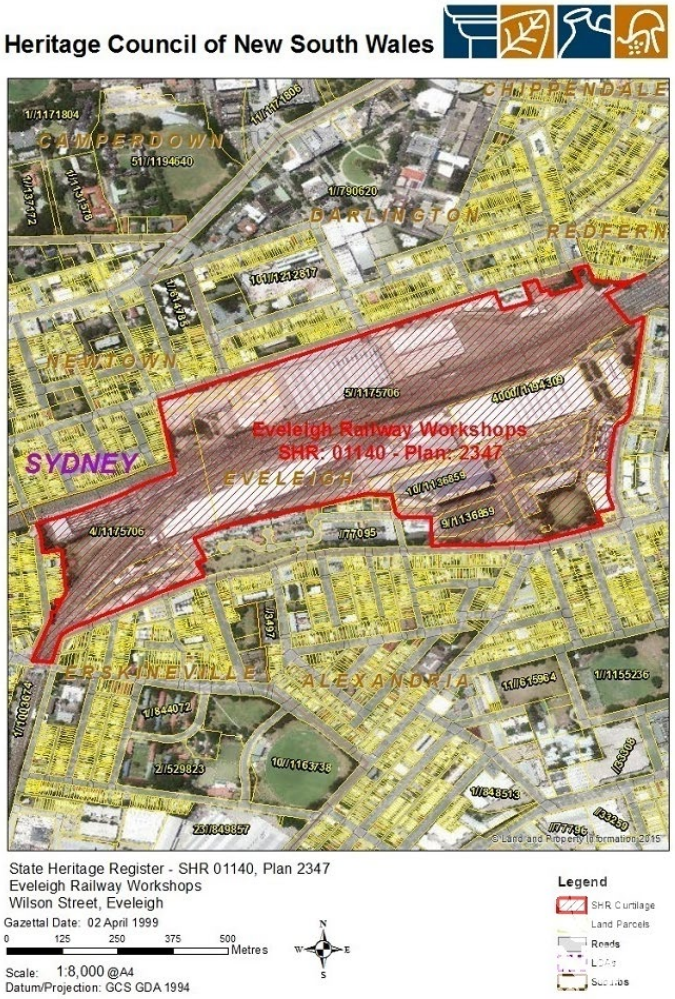

Figure 2-2: ERW SHR Curtilage map. Source: State Heritage Inventory.

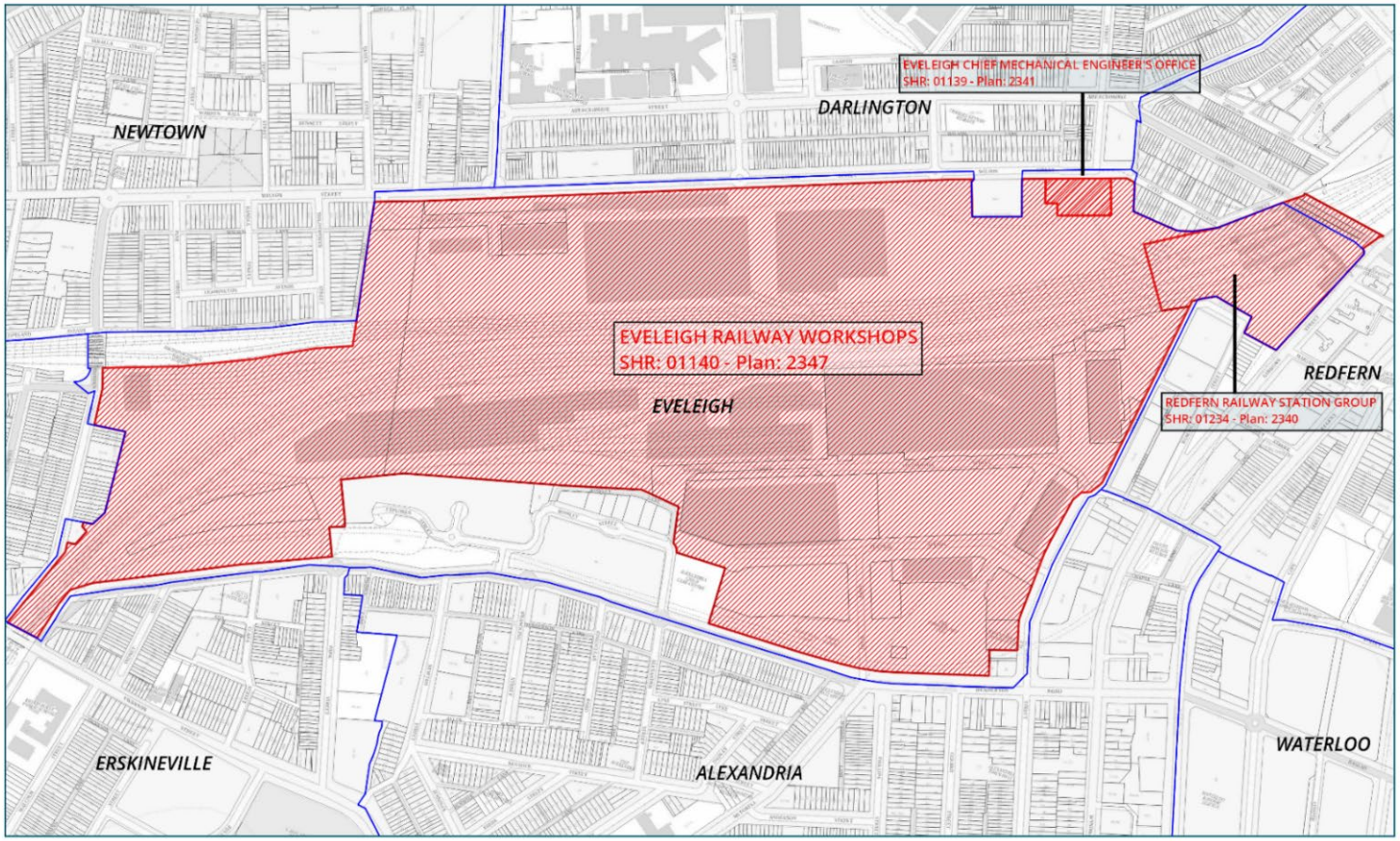

Figure 2-3: SHR curtilage for the CME Office (SHR no. 00139), the ERW (SHR no. 01140), and Redfern Railway Station Group (SHR no. 01234). Source: Curio Projects.

2.2.1. Section 170 Heritage and Conservation Register

Under Section 170 (s170) of the Heritage Act, government instrumentalities must keep a s170 Register which contains items under the control or ownership of the agency and which are or could be listed as heritage items (of State or Local significance).

The Eveleigh Chief Mechanical Engineers Office (SHI #4801126) is listed on the NSW Transport Asset Holding Entity (TAHE) (formerly State Rail Authority) s170 Register (managed by Sydney Trains/Transport for NSW on behalf of TAHE).

The CME Building It is not included in, although it is adjacent to, the ERW (SHI #4801102).[4]

Moveable heritage items formerly within the CME Building are likely included in the:

- RailCorp Moveable Heritage Collection, (Various SHI numbers)

2.3. Non-Statutory Heritage Registers

2.3.1. Register of the National Estate

The *Chief Mechanical Engineers Office* was included in the Register of the National Estate (RNE 5014147)[5] as were the *Chief Mechanical Engineers Office Moveable Relics* (RNE 5012069)[6], yet this listing no longer appears on the database. The building was also included in the description of the *Eveleigh Railway Workshops* (RNE 15903).[7]

2.3.2. National Trust

The CME Building is included in the National Trust's listing for the Eveleigh Railway Workshops (#57460, 24/3/1986).[8]

2.4. Heritage Items and HCAs in the Vicinity

Table 2-1 provides a summary of all statutory heritage listings both included within, as well as in the vicinity of, the CME Building, the subject site, illustrated in Figure 2-4.

Table 2-1: Summary of heritage listings within and in the vicinity of the subject site.

Item No.	Heritage Register	Item Name	Address
01140	SHR	ERW	Great Southern and Western Railway

[4] TAHE s170 Register, last updated 1 Sep 2021, accessed August 2022, accessible from <https://www.transport.nsw.gov.au/projects/community-engagement/sydney-trains-community/heritage-and-conservation-register>

[5] Australian Government, *Chief Mechanical Engineers Office (former)*, Register of the National Estate Archive, accessed August 2022, < https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=place_name%3Dchief%2520mechanical%2520engineer%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=1781>

[6] OCP Architects 2002, *Eveleigh Carriageworks CMP Vol 1*, p. 276.

[7] Australian Government, *Eveleigh Railway Workshops*, Register of the National Estate Archive, accessed August 2022, < https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;search=town%3Develeigh%3Bkeyword_PD%3Don%3Bkeyword_SS%3Don%3Bkeyword_PH%3Don%3Blatitude_1dir%3DS%3Blongitude_1dir%3DE%3Blongitude_2dir%3DE%3Blatitude_2dir%3DS%3Bin_region%3Dpart;place_id=15903>

[8] National Trust, *Eveleigh Railway Workshops* datacard.

Item No.	Heritage Register	Item Name	Address
01139	SHR	Eveleigh Chief Mechanical Engineers Office and Moveable Relics	Great Southern and Western Railway
01234	SHR	Redfern Railway Station group	Great Southern and Western Railway
I2245	SLEP 2012	Former McMurtrie, Kellermann & Co Factory including interiors	181 Lawson Street, Darlington
I1322	SLEP 2012	Terrace House "Waratah" Including Interiors	117 Lawson Street, Darlington
I517	SLEP 2012	Terrace Group Including Interiors	254-266 Abercrombie Street, Darlington
I157	SLEP 2012	Former "Galway Castle Hotel" and Residence Including Interior and Grounds	306 Abercrombie Street, Darlington
I520	SLEP 2012	Terrace Group Including Interiors	338-348 Abercrombie Street, Darlington
I2244	SLEP 2012	Former Jones IXL factory garage including interiors	2-10 Golden Grove Street, Darlington
I1979	SLEP 2012	St Michael's Church Group Including Building and their Interiors and Grounds	19-23 Golden Grove Street, Newtown
I52	SLEP 2012	St Paul's College Group, University of Sydney	9 City Road, Camperdown
I534	SLEP 2012	Terrace Group Including Interior	104- 123 Darlington Road, Darlington
I2252	SLEP 2012	Former F.W. Gissing factory including interiors	197-207 Wilson Street, Newtown
C1	SLEP 2012	Alexandria Park HCA	Alexandria
C18	SLEP 2012	Golden Grove HCA	Darlington/Newtown
C19	SLEP 2012	Darlington HCA	Darlington/Redfern
C44	SLEP 2012	Pines Estate HCA	Newtown
C45	SLEP 2012	Queen St HCA	Newtown
C56	SLEP 2012	Redfern Estate HCA	Redfern

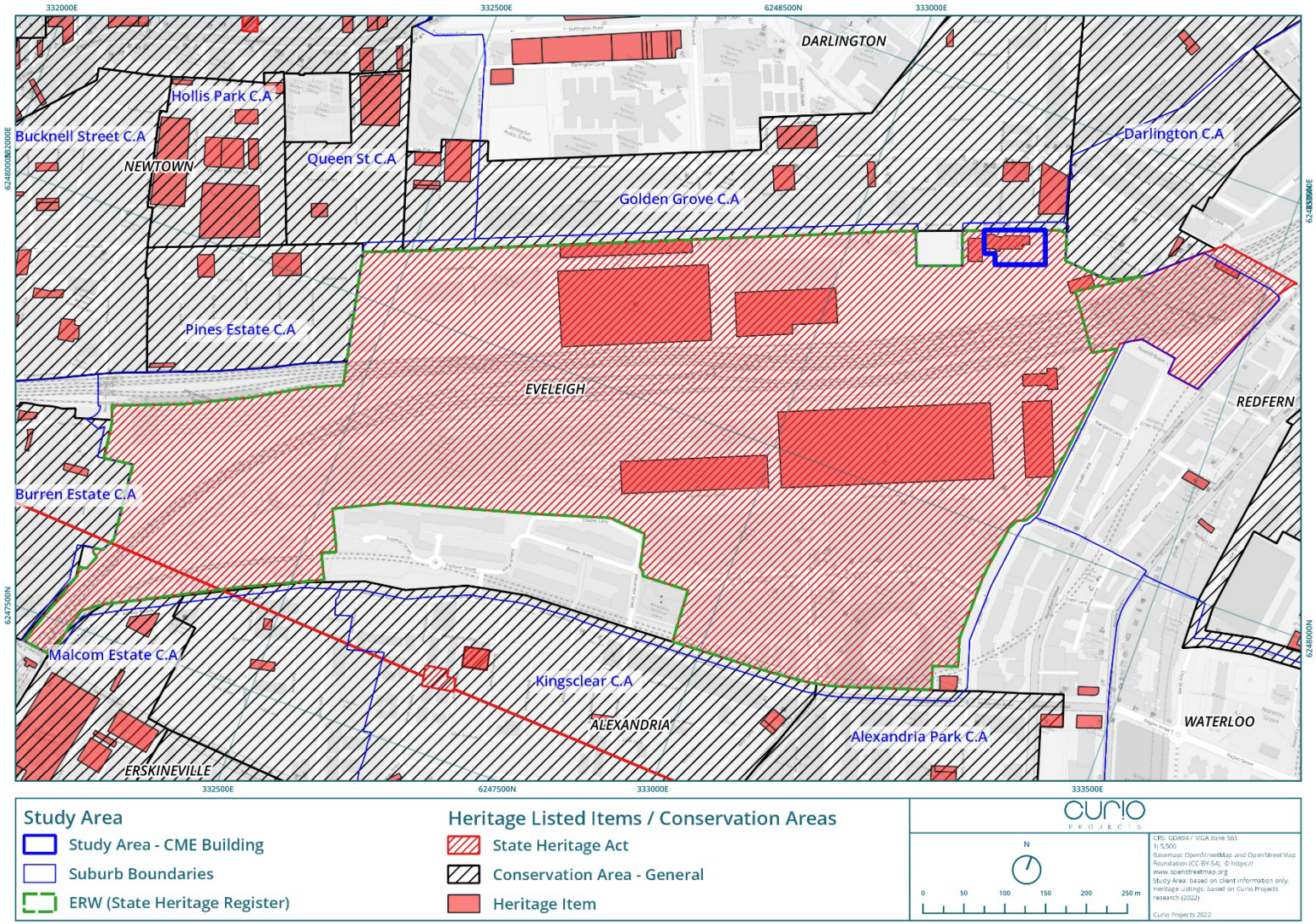

Figure 2-4: Heritage items and Conservation Areas in the vicinity of the subject site. Source: Curio Projects, 2022.

3. Historical Summary

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3. Historical Development of the Study Area

This chapter provides a brief timeline summary of the historical phases of use and development activity at the subject site to provide historical context. For a full historical overview, reference should be made to Conservation Management Plan[9] prepared by Curio (2022) for the site.

3.1. Aboriginal Ethnohistory

3.1.1. Pre-European Environment

Much of the evidence of traditional Aboriginal lifestyle and economy was disrupted in the early years of European colonisation and understandings of Aboriginal groups and their lifeways prior to European settlement is in part reliant on historical records and documents written by early European settlers.

Prior to the arrival of Europeans in Sydney Cove, the current study area would have formed part of the hunting and gathering grounds of the Eora. The Sydney region has two main language groups: Darug, with two main dialects—one spoken along the coast and another in the hinterland/Cumberland Plain region of western Sydney—and Tharawal, spoken to the south of Botany Bay[10]. The subject site is understood to be situated within the lands of the Gadigal people. According to early records of Governor Philip, the Gadigal lands stretched from "*...the entrance of the harbour, along the south shore, to the cove adjoining the settlement*"[11]. The traditional territory of the Gadigal is therefore recognised to extend along the southern side of the Sydney Harbour from South Head, west to approximately Darling Harbour (previously known as Cockle Bay), and south towards Botany Bay.

Aboriginal clans were associated with specific territories or places and were differentiated by different customs from one another. Areas associated with water sources were the most densely populated and communities would have travelled across the landscape as the seasons changed and the corresponding resources that became available in different locations.

As hunter-gatherers, the local Aboriginal communities living in the area would have pursued a mixed food economy, utilising and relying upon readily available and abundant natural resources. Sydney Harbour (known as Warrane or War-ran[12]), situated approximately 2.5 km north of the subject site, would have provided coastal marine resources including fish, shellfish, and crustacea which could be gathered from the sea, though the availability and abundance of resources likely changed seasonally[13]. Cockle Bay would have been an ideal location for fishing expeditions along the harbour via bark canoe, as well as the nearby landscape of Hawkesbury sandstone cliffs eroding into overhangs and rock shelters which would have been suitable for habitation. In contrast, the environment associated with locations further inland from the coast resulted in a reliance on the exploitation of possums, kangaroos, plant resources—including vegetable roots, berries and seeds—and freshwater resources such as eels and mullets[14].

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[9] Curio Projects, 2022. *Chief Mechanical Engineers Building—Conservation Management Plan.*

[10] Attenbrow 2010.

[11] Phillip, A., 1790 [1892], Letter from Governor Phillip to Lord Sydney, Government House, Sydney Cove, February 12th, 1790, in Historical Records of NSW vol. 1 no. 2 – Phillip 1783-1792, Government Printer, Sydney: 293-301 [1892:309]

[12] City of Sydney, 2013, *Barani Sydney's Aboriginal history*. https://www.sydneybarani.com.au

[13] Attenbrow 2010, p. 62

[14] Murray, R. and White, K., 1988, Dharug and Dungaree: The History of Penrith and St Marys to 1860. Hargreen Publishing Company in conjunction with the Council of the City of Penrith.

Early settlers noted a road linking Cockle Bay to Botany Bay that acted as an important corridor for trade and movement for Aboriginal people in early Sydney. The area along this corridor between Cockle Bay and Botany Bay is described in 1788 by Governor Arthur Phillip as being occupied by wood and, beyond that, a kind of heath sandy and full of swamps. The same area is later described in 1792 by Atkins as being associated with immense trees, lofty branches, flowering shrubs, and blossoms of vivid and beautiful colours[15]. The current subject site is located within this corridor and these early descriptions are consistent with contemporary Aboriginal understandings of the area's importance to past Aboriginal groups utilising the area. According to Professor Dennis Foley, an Indigenous Cultural Leader, for instance, the alignment of Cleveland Street (approximately 500m south of the subject site) follows a natural ridgeline that formed an old meandering walking track that was used by past Aboriginal people to access important areas within the surrounding landscape[16].

Figure 3.1: Yoo-long erah-ba-diang 1795 Farm Cove initiation ceremony: 'striking out the tooth'. Attributed to T Watling (artist), James Neagle (engraver). Source: National Library of Australia, Neagle, James. (1798). Yoo-long erah-ba-diang. (S11111/22)[17]

[15] Archaeological & Heritage Management Solutions (AHMS), 2015, Central to Eveleigh Corridor: Aboriginal and historical Heritage Review for UrbanGrowth NSW. Unpublished Report, p 13; Comber Consultants Pty Ltd, 2017, 244 Cleveland Street, Surry Hills – Aboriginal Cultural Heritage Report, p. 10

[16] Information obtained from notes taken by SJB architects following a conversation with Professor (Uncle) Dennis Folley regarding Aboriginal use of land in and around the study area. (Pers. Com. Between SJB architects and Professor (Uncle) Dennis Folley on 27 April 2022).

[17] Retrieved May 4, 2022, from http://nla.gov.au/nla.obj-143787504

Figure 3.2: Cockle Bay, now Darling Harbour (1819-1820). Source: Trove, available at https://trove.nla.gov.au/work/12335999

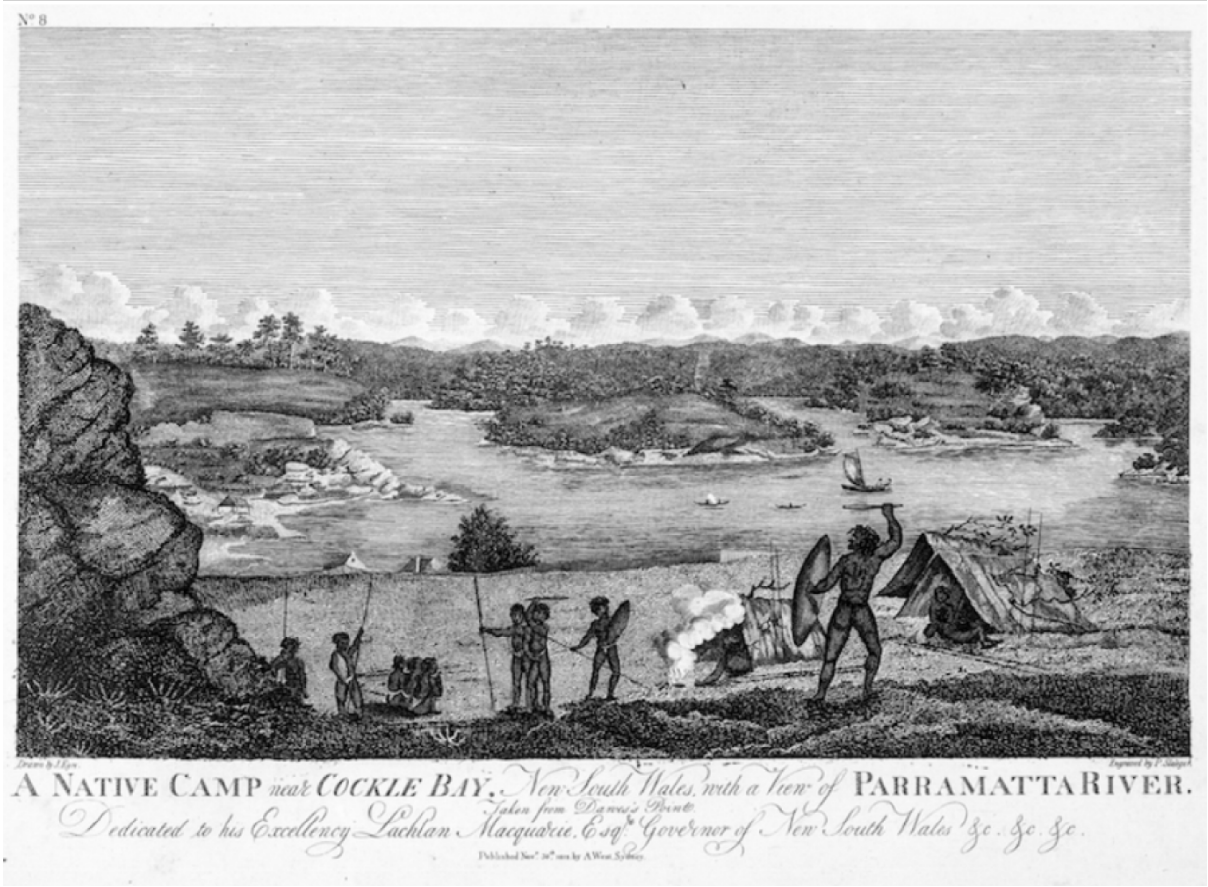


Figure 3.3: A native camp near Cockle Bay. Source: Trove, available at http://nla.gov.au/nla.obj-135782267

3.1.2. Post Contact History

At the time of the arrival of the First Fleet in January 1788, it is estimated that at least 1,500 Aboriginal people may have lived along the coastal region between Broken Bay and Botany Bay. The

arrival of the First Fleet devastated the lives and activities of Aboriginal people in the Sydney area, restricting access to areas traditionally used for hunting and gathering, shelter, and ceremonial purposes, while also introducing devastating diseases such as smallpox. It is estimated that almost half of Sydney's Aboriginal population died in the first smallpox epidemic recorded in the colony in 1789[18].

Initial interactions between early colonists and Aboriginal groups were peaceful and British settlers engaged in gift-giving aiming to encourage integration into the colony while also deterring any potential opposition to the establishment of the European settlement[19]. As the colony expanded, many of the original walking tracks used by local Aboriginal groups, including the east-west walking track which meanders along Cleveland Street, were adopted by the colonists and used as transport corridors. The expansion of the colony and limited meaningful dialogue between the British colonists and the local Aborigines resulted in increased conflict between settlers and the local Aboriginal people.

Aboriginal people who survived epidemics and displacement continued to live a semi-traditional life often on the margins of European settlement occasionally supplementing their resources with supplies from new settlers[20]. The Aboriginal population continued to decline and, by 1827, it was estimated that the population had declined to roughly a third of the original population that had existed at the time of the colony's establishment in 1788.

Despite their displacement, Aboriginal communities continued to utilise the land around the increasing spread of European colonisation. A watercolour painting by Joseph Lycett looking towards Sydney from Surry Hills in 1819 shows a small group of Aboriginal people camping on the margins of the colony demonstrating the continued use of the Sydney area by Aboriginal groups (Figure 3.4). The general location of the subject site is believed to have continued ceremonial use as noted in Artefact 2022:

> *Today's Belmore Park and Central Station were important cultural grounds for ceremonial practice during the 1790s, with David Collins describing a 'clear spot between the town and the brickfield' being utilised for one such ceremony in December 1793.[21] Collins noted the continuous use of this space as a ceremonial site, noting that the Aboriginal community 'derived so many comforts and so much shelter in bad weather' at the site.[22] Moore Park, south-east of the subject site, was another key place for continuing cultural practices; colonists would travel to watch 'payback rituals' take place in the area, where Aboriginal people would resolve grievances through ritual and punishment.[23] Until the mid-1800s, the area of Prince Alfred Park (known then as Cleveland Paddocks) was an Aboriginal campsite where Gadigal lived until the coming of the railway in the 1850s. As the first railway*

[18] Hinkson, M. & Harris, A., 2010, Aboriginal Sydney: a guide to important places of the past and present, 2nd ed, Aboriginal Studies Press Canberra.
[19] Karskens, G., 2016, Phillip and the Eora. Governing race relations in the colony of New South Wales. Sydney Journal, Vol 5, No 1. 39–55. pp. 43-44
[20] Murray and White 1988
[21] Collins, 1798, *An Account of the English Colony in New South Wales*, Volume 1, T. Cadell Jun and W. Davies, London
[22] Collins, 1802, *An Account of the English Colony in New South Wales from its First Settlement in January 1788 to August 1801,* Volume 2, T. Cadell Jun and W. Davies, London
[23] Cox Inall Ridgeway, 2021, *Central Precinct Renewal Project: Consultation Report for Aboriginal Heritage Interpretation Strategy*. Prepared for Transport for NSW

terminus at the Cleveland Paddocks was constructed in 1855, the Aboriginal community was dispersed from the campground[24].

The presence of a flaked glass artefact from an archaeological site located on the corner of Mountain and Smail Streets at Ultimo (Mountain Street Ultimo; AHIMS ID# 45-6-2663) and situated approximately 900m to the north of the current subject site indicates that land adjacent to Blackwattle Creek continued following the arrival of Europeans and provides evidence for the adaptation and use of new European materials for the production of artefacts[25].

Figure 3.4: Sydney from Surry Hills 1819. Watercolour by Joseph Lycett showing Aboriginal group camping. Source: State Library of New South Wales [a928334 / ML 54][26].

3.2. Early Land Grants and Development

The area that makes up the subject site as well as the wider suburb of Eveleigh was home to several Land Grants in Sydney's early history. The section of land that now forms part of Eveleigh was granted to John Davis in 1794, however, the grant was cancelled before Davis could claim the property. Following this, James Chisolm, a Scottish soldier, merchant and landowner, arrived in the colony in 1790 with the NSW Corps and was granted a 62- acre land in 1822 within the area known today as Eveleigh. [27]

[24] Artefact, 2022, *Redfern North Eveleigh Precinct Renewal, Aboriginal Cultural Heritage Study*. Prepared for Transport for NSW

[25] Dominic Steele Consulting Archaeology (DSCA), 2003, Final Aboriginal Archaeological Excavation Report. Quadrant Development Site, Broadway and Mountain Streets, Sydney, NSW, Containing NPWS Site #45-6-2629 and Associated Areas of PAD. Report to Australand Holdings Limited and College Square Residential Pty Ltd.

[26] Retrieved May 4, 2022, from https://archival.sl.nsw.gov.au/Details/archive/110327850

[27] OCP Architects, 2022. *Eveleigh Railway Workshops Overarching Conservation Management Plan*: 24

Chisholm cleared areas of his estate to use as farming allotments and built 'Calder House' in the northeast corner of the estate (previously located west of the subject site) sometime between 1820 to 1830.[28] After the death of Chisholm in 1837, his family continued to live at Calder House until 1855 and, following the establishment of the Eveleigh Railway Workshops (ERW), the building was used as a residence for the Locomotive Works Manager and Chief Mechanical Engineer of the ERW until it was destroyed in a fire in 1923 and its remains later demolished in 1924.[29]

Located directly north of Chisholm's estate was a 52-acre land grant given to William Hutchinson, an ex-convict and successful businessman, in 1819. In the same year, a 95-acre land grant was given to William Chippendale, an early free settler and land holder, located east of the Chisholm estate. From the 1830s onwards, the Eveleigh-Redfern area was continuously subdivided into various farmyards and estates and, in the 1850s, the Hutchinson and Chippendale estates were themselves divided-up for residential developments. The modern suburb of Redfern encompassed much of the subdivided Redfern Estate, in which ownership was retained by the Redfern family until the early 1840s.

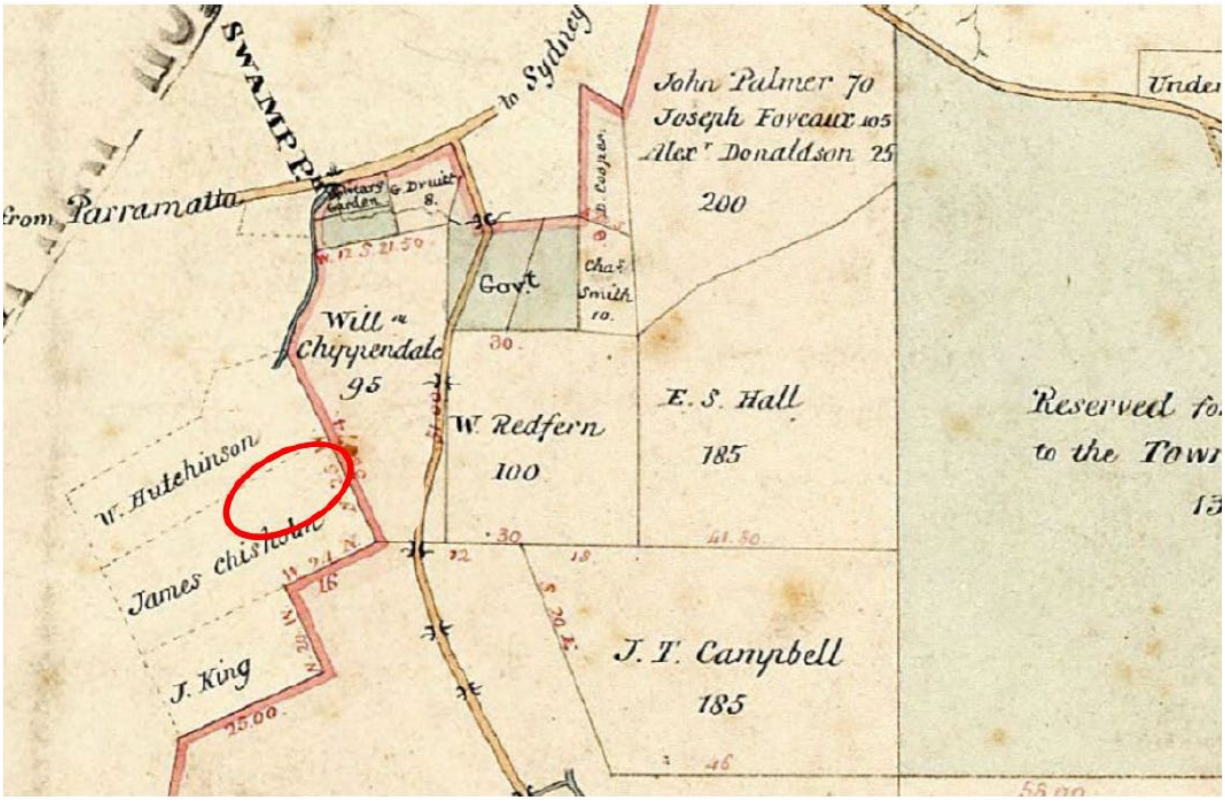


Figure 3.5: Undated map of Parish of Alexandria, early land grants. General area of the CME Building indicated in red. Source: Historical Lands Record Viewer

3.3. Eveleigh Railway Workshops

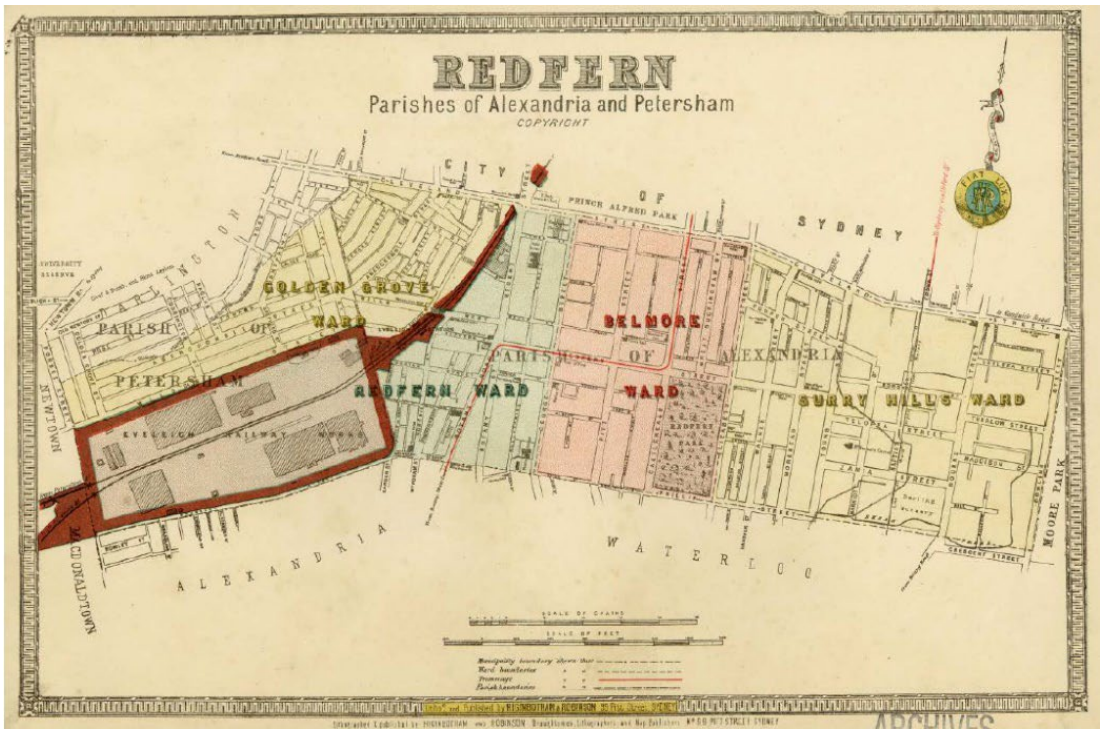
After Sydney's first railway line from the city to Bathurst was completed and opened in 1855, the growth and demand for rail infrastructure and transportation dramatically increased within a short space of time.[30] The small groups of rail workshops at the original Sydney Terminal yards on Devonshire Street, consisting of corrugated iron sheds and a two-storey pattern and turning

[28] Sources vary regarding the exact date of original construction of the Calder House cottage, reporting variously from c.1820 to the late 1830s.
[29] OCP Architects 2017b, *North Eveleigh West- Conservation Management Plan*.
[30] OCP, 2002. *Eveleigh Carriageworks Conservation Management Plan*: 34

workshop, could not support the ever-growing needs of Sydney's increasing suburban traffic[31]. Because of this, recommendations were made from at least 1875 for a larger site purpose-built for the maintenance of rolling stock.

In 1879, the government purchased the Chisholm estate for a compensation price of 100,000 pounds and agreed to the construction of the workshops at Eveleigh in 1880. The ERW thereafter opened sequentially throughout 1887 as buildings were completed, with the Locomotive Workshops on the southern side of the railway line first—Bays 1-4 opening first closely followed by Bays 5-15—and later in the same year the opening of Bays 16-25 of the Carriage Workshops on the ERW's northern side.[32] This division split the workshops in two, with the Locomotive Workshops to the south and the Carriage Workshops to the north. The reasoning behind the split of the complex was to allow the two different facilities to operate independently of one another, thus avoiding interference with rail traffic, but close enough to allow for communication between the two workshops.[33]

The gradual decline of the workshops from 1945 occurred due to a number of compounding factors including the effects of World War II, the post-war boom and new Sydney suburbs opening up to satisfy housing needs.[34] Other elements contributing to the decline of the workshops included the dramatic increase in motor vehicle sales that lessened railway traffic, and electric carriages being introduced, which were built with steel rather than timber like in Eveleigh and were, therefore, better suited to other workshops like Chullora. As materials and technologies improved, the turn around time of repairs lessened, which led to smaller numbers of vehicles passing through Eveleigh. By 1973, the State Rail Authority decided that, due to poor productivity at the ERW, it was time for it to close. By 1989, all work at the ERW had ceased and the complex closed for good.



[31] Ibid: 85
[32] Godden Mackay Logan 2013, *Australian Technology Park CMP Vol.1*, p.10-12
[33] OCP Architects, 2022. *Eveleigh Railway Workshops Overarching CMP*: 28-29
[34] OCP 2002a

Figure 3.6: Undated Parish of Alexandria and Petersham Map of Redfern. Highlights of the resumption of land by the Government for the ERW. Source: State Library of NSW, 1172084

3.3.1. South Eveleigh

Using some of the most advanced technology of its era, the Locomotive Workshops in South Eveleigh became a key player in the growth of Australian industry and infrastructure. From its inception in 1887, the facility played a large part in the development of the NSW railway network. The South Eveleigh site comprised four primary structures, each responsible for a different aspect of locomotive construction and maintenance.[35] [36]

The four main structures of the South Eveleigh Workshops were:

- Locomotive Workshop: The largest and arguably the most important structure in South Eveleigh, made up of 16 equally sized bays, iron trusses and columns, and a corrugated iron-roof. Here the individual parts of the locomotives were manufactured and maintained, with engines being constructed in Bays 6-9. This workshop originally consisted of two separate structures, separated by a laneway in what is now Bay 4a.
- Large Erecting Shop: Built in 1899, it was here the individual parts manufactured in the Loco Workshops were assembled to create a functioning locomotive engine. Engines would also be both repaired and eventually dismantled here, making the LES a kind of 'hospital' for locomotives, as the location for their birth, care, and death.
- New Locomotive Shop: This ultra-modern workshop was built in 1908 for the manufacturing of new locomotive engines solely on-site, as opposed to merely assembling, maintaining, and repairing locomotives imported from Great Britain.
- Engine Running Sheds: These sheds could hold up to 126 engines at a time, and were responsible for cleaning, repairing, and servicing. The building was demolished in the 1920s to make way for the engine dive.[37]

[35] OCP Architects, 2022. *ERW Overarching CMP*: 28-29
[36] Note that a number of other buildings central to the operations of the workshops have since been demolished, including the Foundry, Wheelpress Shop, the Pattern Shed and the Smith's Shop.
[37] Simpson Dawbin, 2003. *Large Erecting Shop CMP*: 52

Figure 3.6: View of the Locomotive Workshop before 1910, looking southwest. Source: State Rail Authority Archives, State Archives NSW, c53214-15923-NID601/1

3.3.2. North Eveleigh

While the South Eveleigh Locomotive Workshop built and maintained the NSW Railways locomotive engines, the North Eveleigh Carriage Workshop was responsible for the construction and maintenance of the train carriages that the locomotives would tow behind them. North Eveleigh also notably housed the highest-level administrative staff for the whole ERW, although both workshops had individual Works Managers on their respective sides of the railway tracks.

The primary buildings located in North Eveleigh consisted of:

- Carriage Workshop: Built in 1887 as the primary workshop for constructing and maintaining carriages and wagons. The workshops now make up the main building of the 'Carriageworks' cultural precinct
- Paint Shop: After construction and/or repair, carriages would be sent over a traverser to the nearby Paint Shop, which was built in 1887, for painting, polishing, and varnishing. All further beautifications and outfitting would also take place in the Paint Shop, after which the carriage was placed back onto its original undercarriage via crane and made ready for return or introduction to the railway system.[38]
- Blacksmith's Shop: Built in c.1907-1909, the Blacksmith's shop (opposite the Carriage Workshop) was responsible for creating the carriage and wagon parts that would then be constructed in the main Carriage Workshop.
- Chief Mechanical Engineers Building (CME): The office of the Chief Mechanical Engineer, built in 1887, was the primary administrative building for the whole ERW, as it was under his supervision that both the Railway Workshops operated. The building also housed offices for ordinary engineers, overseers, inspectors and various clerical staff.
- Scientific Services Building: Located directly west of the CME, this building was constructed in 1916 and contained laboratories for railway-related testing and research, such as material and design testing.[39]
- Stores 1 & 2: Located west of the Carriage Workshops and built in 1883 were the facilities for movement, handing and storage of goods relating to the Railway Workshops.[40]

[38] OCP, 2002. *Eveleigh Carriageworks Conservation Management Plan*: 109
[39] OCP, 2002a. *Eveleigh Carriageworks Conservation Management Plan*: 69
[40] Curio Projects, 2022. *RNE Paint Shop Sub Precinct Non-Aboriginal Heritage Study:* 45

Figure 3.7: View from Cornwallis Street across rail line to the south eastern end of Carriage Works. South Eveleigh Managers Office and Tower in the foreground, undated. Source: OCP CMP 2002

The following timeline in Table 3.1 provides a key historical summary relevant to the North Eveleigh precinct development.

Table 3.1: Historical Timeline for North Eveleigh

Year	Event
1855	NSW first rail line constructed, bisecting Chisholm land at Eveleigh
1884	Majority of North-eastern Fan of Tracks laid
1887	Carriage Workshops building and Chief Mechanical Engineers Office (Stage 1) constructed
c1888	Paint Shop constructed
1899	Large Erecting Shop (South Eveleigh) completed
c1890	System of steam pipes constructed below the floor in the Paint Shop
1892	Union negotiation led to the workshops being closed on Saturdays
c1901	Traverser No. 1 installed between Carriage Workshop and Paint Shop, following removal of earlier steam Ground Traversers from Bay 17 and 23 of Carriage Workshops Building.
1907	Carriage and Wagon Blacksmith's Shop constructed north of Carriage Workshop Building
c1912	Signal and Telegraph Branch Workshop constructed Northern Paint Shop Extension (former Suburban Car Workshops) constructed. Painting function relocated from 1887 Paint Shop into new extension.
C1913	Compressor House constructed
c1913/14	Construction of southern footbridge over railway line connecting North and South Eveleigh and the western end of Redfern Station, allowing workmen to cross rail tracks more safely
1914-15	New Stores Building constructed in western end of North Eveleigh complex
1915	Traverser No. 1 between Carriage Workshop and Paint Shop extended
c1916	Single storey strong room/laboratory constructed west of CME Office (precursor to Scientific Services Building No.1)
1917	"Great Strike" following the introduction of the Taylor card system at Railway Workshops
c1922	Carriage Lifting Crane constructed adjacent to southern elevation of Paint Shop in the west Scientific Services Building No. 1 constructed (incorporating c.1916 single storey building in same location)
1923-24	Calder House vacated due to poor condition[41] (previously used as CME/Works Manager Residence), burns down 1924
1924	Air-driven spray-painting equipment installed in Paint Shop.
1925-27	Quadruplication of Illawarra Line, electrification of suburban rail lines, construction of Illawarra dives.
1935-36	Air compressor plant in Compressor House upgraded with addition of a 750 cubic feet/minute electric air-compressor
1937	Chullora Workshops opened
1930s	Large, corrugated iron shed housing Trimming Shop constructed in former location of Calder House

[41] Godden 1986: 79

Year	Event
1950s	Introduction of steam locomotion
1963	Last steam locomotive used to haul passenger service in NSW Atlas Copco compressor installed in Compressor House (Atlas Copco aftercooler added in 1968)
1966	Scientific Services Building No. 2 constructed
1986	Suburban Car Workshops set up in former Paint Shop extension
2008	Concept Plan approved for the redevelopment of the North Eveleigh Precinct
2020	Sydney Trains temporary site office established in Fan of Tracks area in Paint Shop Sub-Precinct as part of Redfern Station Southern Access and Concourse upgrade project.
2021	Transport undertake SSP study to reassess requirements and updates to 2008 Concept Plan for Paint Shop Sub-Precinct.

3.3.3. Redfern Station

What is now known as Redfern Station was originally known as 'Eveleigh Station' and constructed in c1886-1887. This was the second 'Eveleigh Station' replacing an earlier building constructed 200 meters to the west in 1876, and the site was only officially renamed 'Redfern Station' in 1906.[42] From its inception, Redfern Station had a close functional connection with the ERW up until its closing in the 1980s and was heavily used by the workers of the entire ERW for their daily commute. The station underwent several extensions over the years, adding new platforms as well as a steel footbridge at the station's southern platform end providing access between North and South Eveleigh, as well as providing a shortcut route over the railway line for pedestrians and students.[43] The footbridge was demolished in c1996 followed by the final closure of the ERW.[44]

Surviving examples of the interconnection between the station and the Workshops remain in the 'Elston's Sidings', located at the western end of the station platforms in North Eveleigh and the remains of the footbridge footings in North Eveleigh, both near the subject site. The Telecommunications Equipment Centre (TEC), located west of Platform 1 and adjacent to the sidings, was built in 1912 as a workshop to facilitate signaling between both sides of the ERW, as well as the railway system as a whole.[45] Elston's Sidings, the TEC, and the remaining footbridge footings showcase the close relationship between North Eveleigh and Redfern Station and demonstrate the importance of viewing the structures collectively within their heritage context.

In c1999, Redfern underwent a significant upgrade to its northern end including the construction of a new footbridge and stairways. The Redfern Riots in 2004 caused significant damage to the station's Lawson Street ticket office and heritage building, which prompted the windows to be bricked up and then later reinstated with iron barring to prevent any future damage.[46]

[42] Curio Projects, 2020. *Redfern Station Conservation Management Plan:* 66
[43] Ibid: 40
[44] Curio Projects, 2020. *Redfern Station Conservation Management Plan:* 67
[45] Ibid: 64
[46] Tonkin Zulaikha Greer, 2021. *Redfern Station Upgrade HIP*: 16

Figure 3.8: Overhead Booking office at Redfern Station, view from Platform 1, 1916. Source: SLNSW, FL8961177

3.4. Chief Mechanical Engineers Building (CME Building)

The Chief Mechanical Engineers (CME) Building was constructed in 1887 in the northeastern corner of North Eveleigh along Wilson Street and built on the highest area of land within the Eveleigh Railway Workshops precinct, offering an important key view line from the CME Building across the ERW landscape.

The CME Building, initially known as the Locomotive Engineers Office and later the General Managers Office, was established to house offices of the Chief Mechanical Engineer under whose supervision the entire ERW operated. Additionally, the building was used as an office space for engineers, overseers, inspectors, and professional clerical staff of the ERW until its closure with the workshops in 1989.[47] The building continued to house office spaces for administration staff until the early 2000s after which the building was vacated.

> *On the western side of the main lines will be situated Locomotive Engineers Offices, a two-storey building, 100 feet x 50 feet, containing offices for the Locomotive Engineer, Locomotive Overseer, Locomotive Inspector and the professional and clerical staff, &c., in connection with the department. From the position of the building, it commands a good view of the whole of the yard. (1882 Annual Report)* [48]

The CME building underwent numerous modifications over the years, alongside the ERW growth and continued expansion. The current CME building is mostly unaltered since the 1920s and still includes the fabric of the 1887, 1900 and 1920 structural phases. The original external heritage fabric has

[47] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 31
[48] Railways and Tramways of NSW Annual Report, 1882.

been maintained, although an addition to the building in 1900, which was grafted onto the structure's eastern wall, would have affected the original fabric, and two fires in 1902 and 1908 are likely to have resulted in modifications.[49]

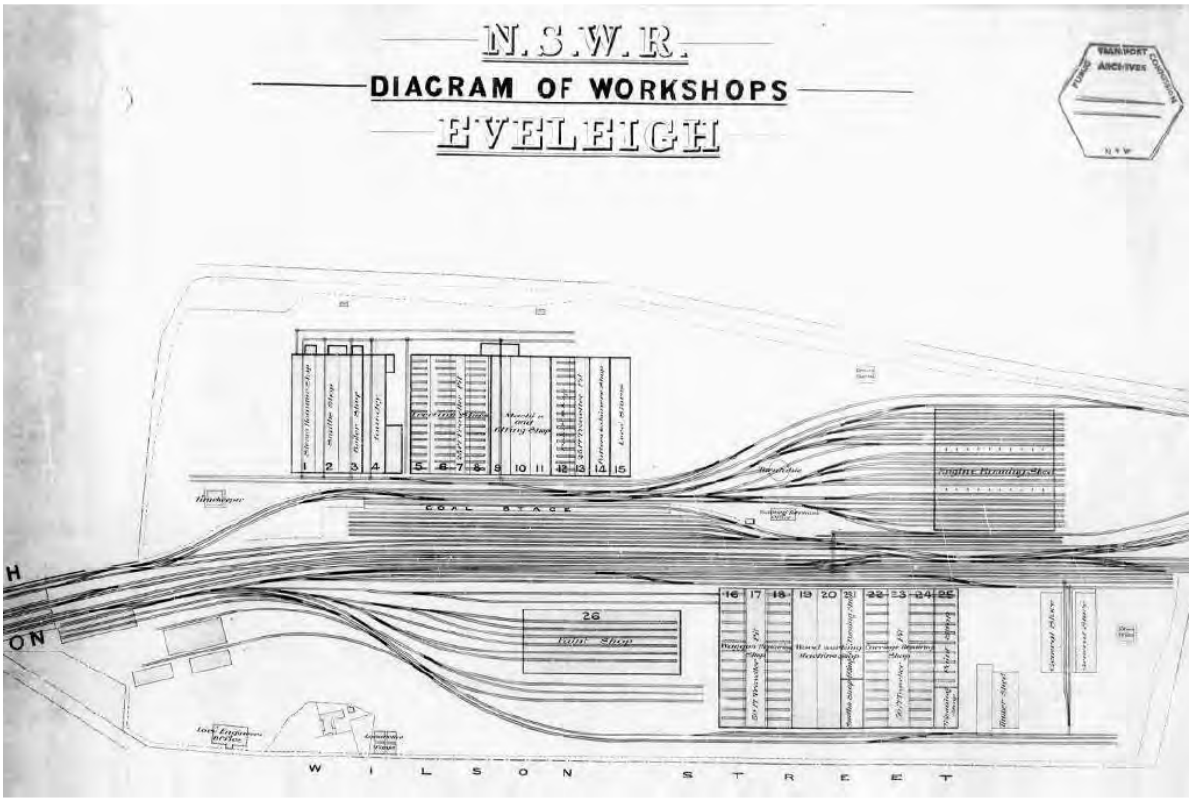


Figure 3.X: NSW Railways Diagram of Eveleigh Workshops, 1887. General location of the CME Building circled in red. (Source: NSW State Records, R5601117)

Figure 3.5: Phases of Construction: Ground Floor Plan. Source: Curio Projects, 2022.

[49] Curio, 2022. RNE Paint Shop Sub Precinct Non-Aboriginal Heritage Study: 51

Figure 3.6: Phases of Construction: First Floor Plan. Source: Curio Projects, 2022.

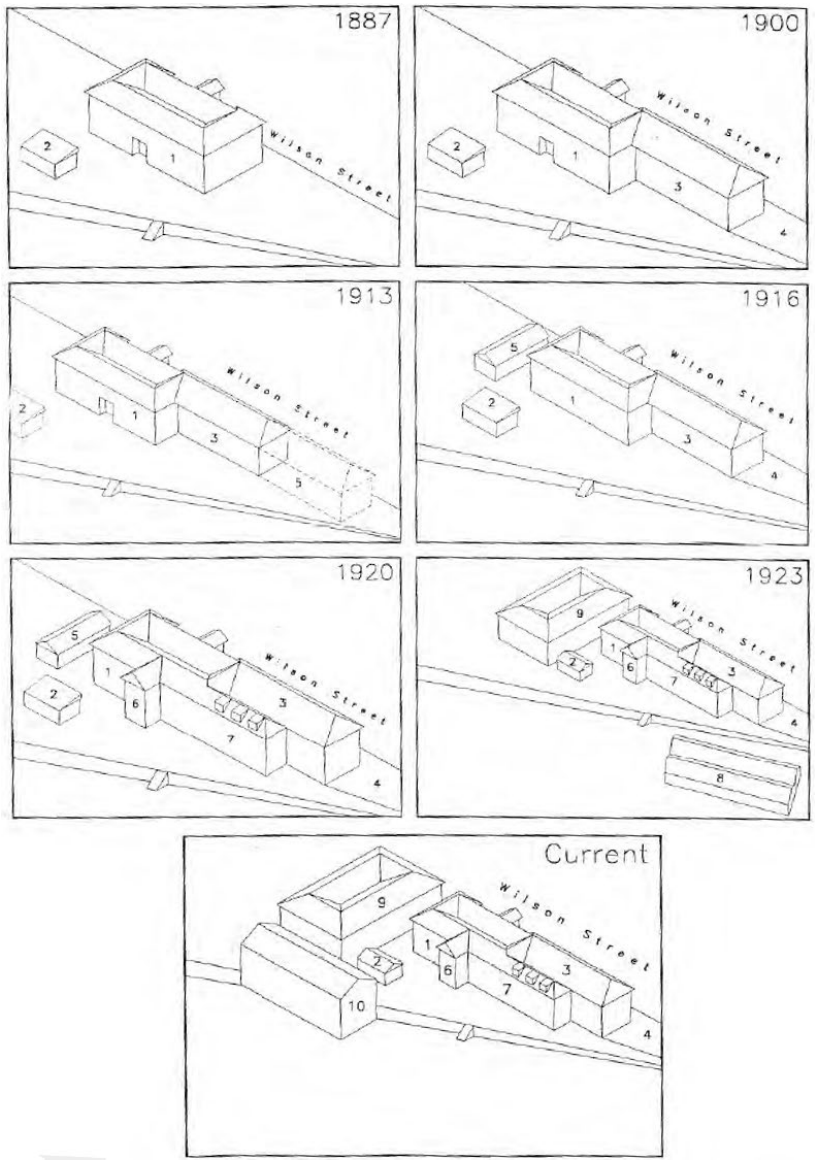


Figure 3.7: Illustrative scheme of the evolution of the CME Building since construction. Source: Rappaport & Caldis Cook Group, 1997

3.4.1. 1887: Construction

The 1887 construction of the Chief Mechanical Engineers Building included timbe r tongue-and-groove floorboards on timber joists and bearers, a ceiling rose in every room and a total of 16 fireplaces[50]. The moulded timber architraves, skirting blocks and glazed fanlights were built above most doors, with detail given to the offices in the main corridors. Ceilings dating to the 1887 construction are believed to have been made up of lathe and plaster[51].

The Chief Mechanical Engineers Office in the original 1887 construction was in Room G4, the first room to the east of the CME Building's southern entrance. Room G2A housed the office of the Assistant CME during the 1887 phase and later was used as a laboratory for X-Ray equipment[52].

Whilst the ERW was still in operation, the employees (up to 3,500 workers during the workshops peak period) would use the southern entrance of the CME Building for access to the Pay Office (Room G1), located at the western end of the building, to collect their wages weekly.[53] The door at Room G1 includes a vertically sliding window and ledge within one of the door panels that was used to deliver these pay packets to the employeers.[54] The Pay Office would have stored a large amount of paperwork and records.

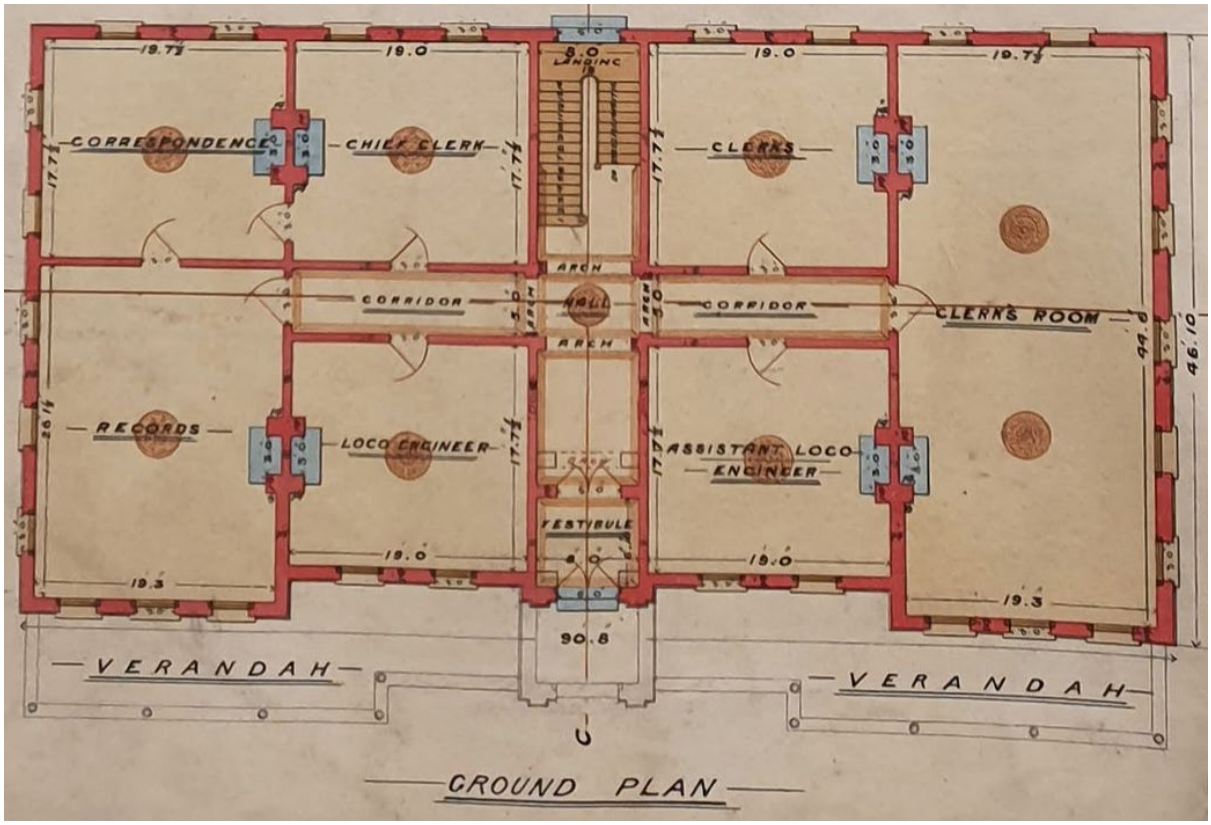


Figure 3.8: Ground Floor plan of the original 1887 construction of the CME Building. Source: Rappaport & Caldis Cook Group, 1997

[50] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 26 & 27
[51] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 28
[52] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 40, 64
[53] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 41
[54] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 45

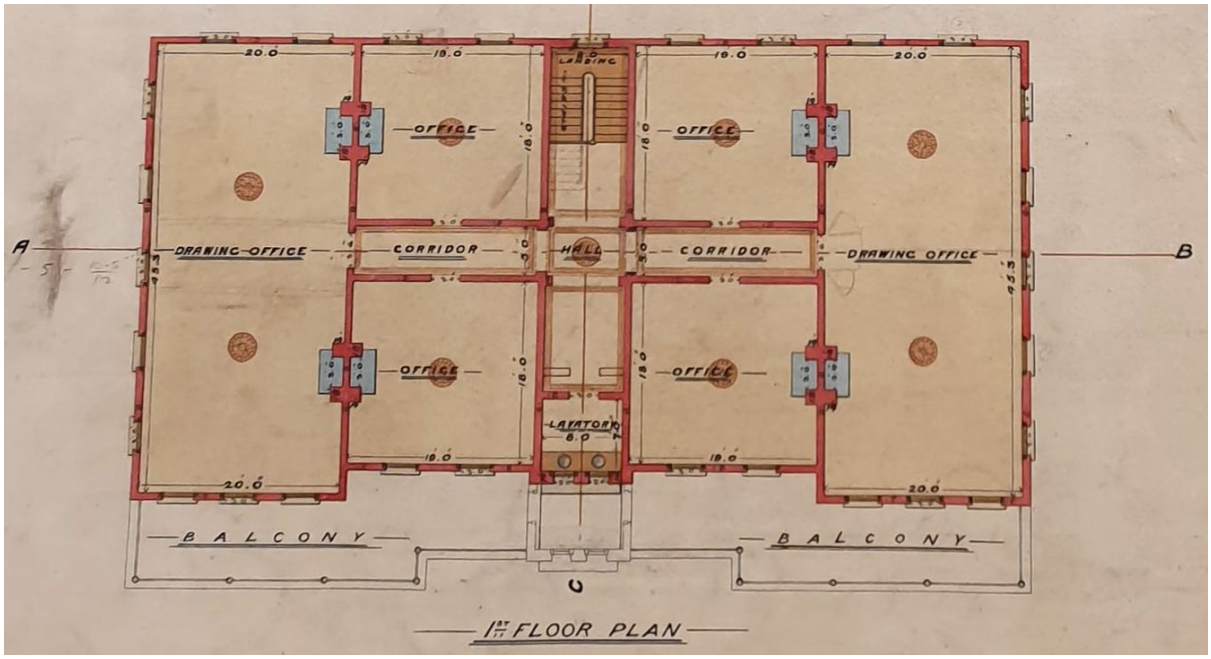


Figure 3.9: First floor plan of the original 1887 construction of the CME Building. Source: Rappaport & Caldis Cook Group, 1997

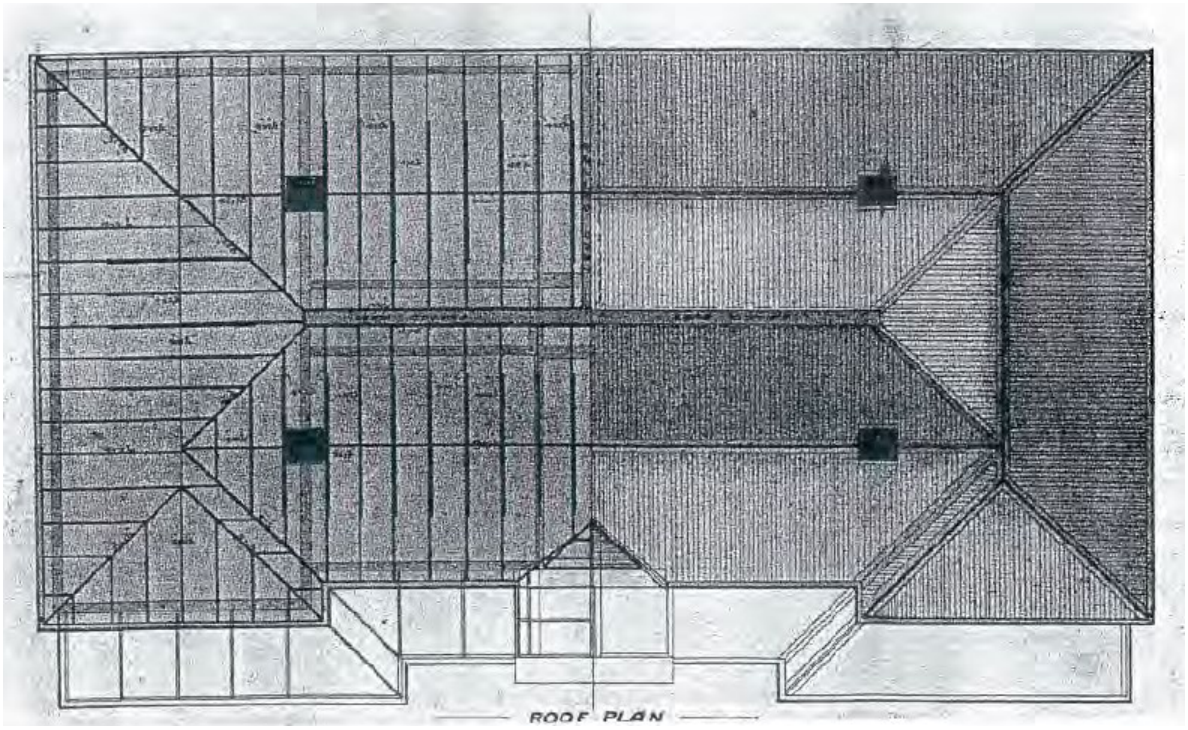


Figure 3.10: 1887 construction of the CME Building roof plan which include details of the cut away section of the roof truss timbers. Source: Rappaport & Caldis Cook Group, 1997

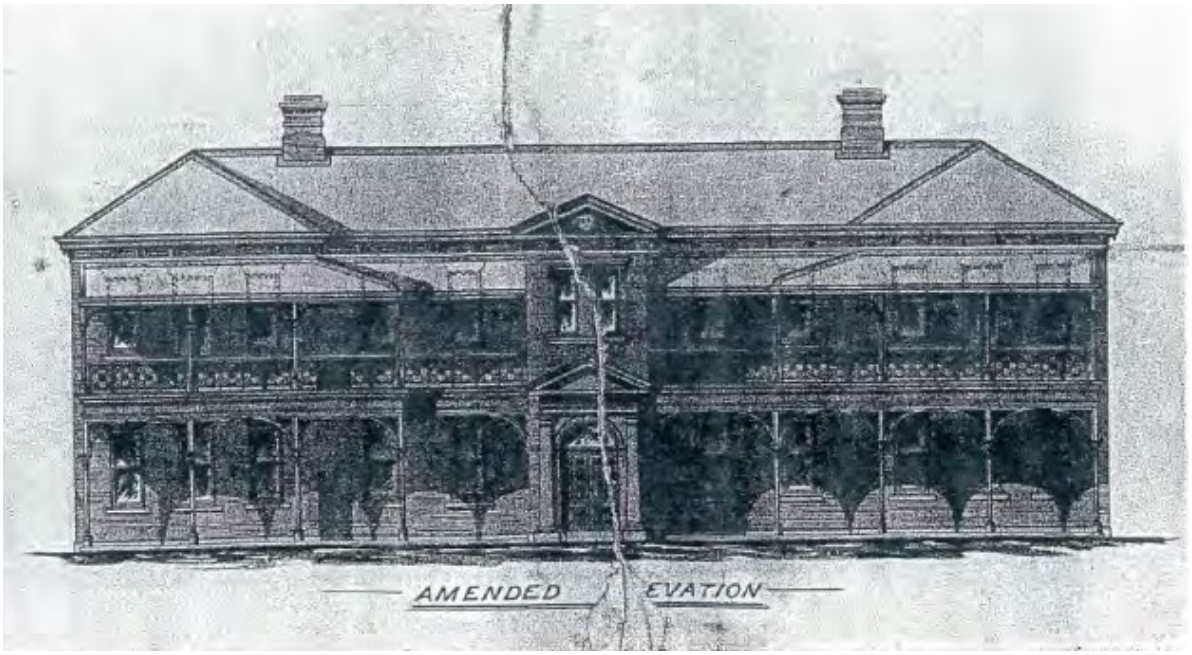


Figure 3.11: Original 1887 construction amended plan that show the balconies and verandah. Source: Rappaport & Caldis Cook Group, 1997

Figure 3.12: Image of the 1887 construction of CME Building in 1893 from Wilson Street. Source: 'Eveleigh: A Populous Suburb of Sydney' (Source: Australian Town & Country Journal, 4 March 1893, p. 27.

3.4.2. 1900: Addition

The 1900 addition involved an eastern extension of the CME Building and was designed and constructed to be sympathetic and consistent with the original 1887 construction. The windows, roof, and balcony match the original building, and internally the doors match the original building. The 1900 addition reflects the rapidly growing NSWGR due to the rising population of rail users and the need to provide facilities to cope with this increase.[55]

Changes undertaken for the 1900 addition include the widening of the corridors on both levels, fireplaces moved to the northern perimeter, paint additions to the balcony, as well as the introduction of plumbing, electrical, gas and telecommunications services.[56]

The 1900 addition also included a large room on the first floor Room F6A which was entirely allocated to be a drawing office for designs, as opposed to the previous use of the entire first floor for this purpose.[57] An isolated office Room F5B located to the west of this new large drawing office was potentially used as an office for the Drawing Office Supervisor and contained a full height glazed screen to have a wider view of the drawing room.[58]

The 1900 addition also relocated the office space of the Chief Mechanical Engineer, moving to Room G10 of the building's eastern ground floor. This new CME office included a larger office space, a private entrance along Wilson Street and a private lavatory that became the first indoor toilet in the building. The Chief Mechanical Engineers desk is believed to have been located in front of the bank draws facing west.[59] The Assistant CME's office was similarly relocated to the eastern end of the ground level of the CME building, in either room G6 or G7.[60]

From the 1900 addition of the CME Building also came the creation of a new and well-maintained garden located east of the building, which was maintained until the 1990s. While this garden is still present to some degree in the current era, it only contains a select few ferns, trees and grass lawns.

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[55] Rappoport & Caldis Cook Group,1997. *Chief Mechanical Engineers CMP*:
[56] Ibid
[57] Ibid
[58] Rappoport & Caldis Cook Group,1997. *Chief Mechanical Engineers CMP*: 31
[59] Ibid
[60] Ibid

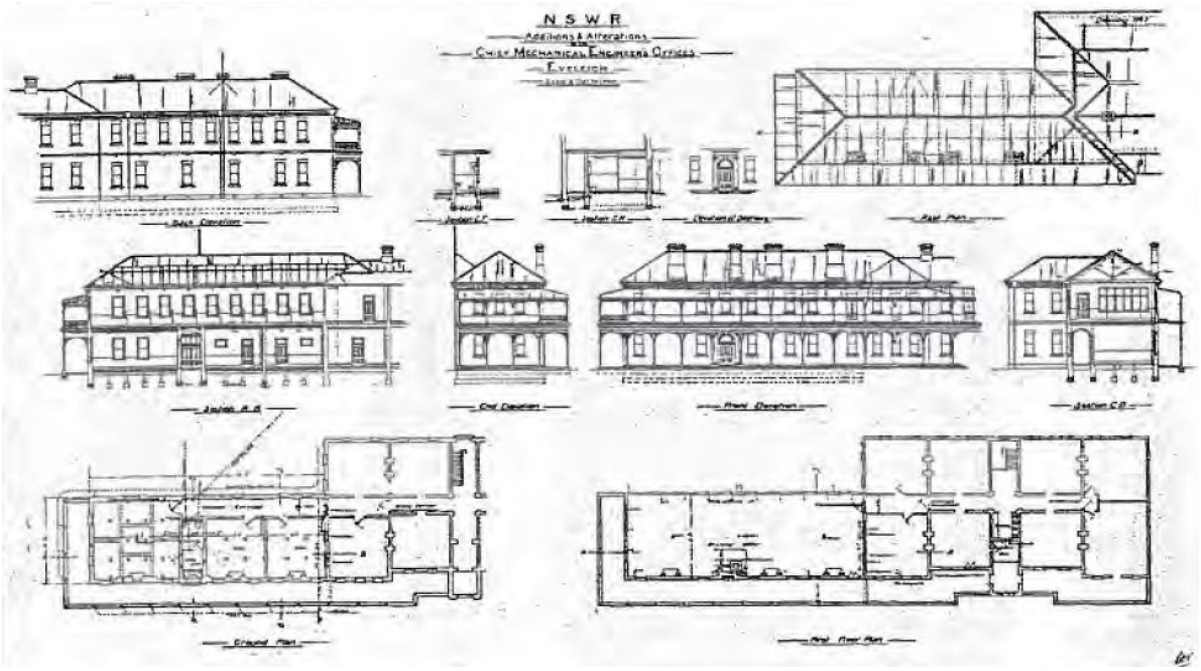

Figure 3.13: Plans, sections and elevations of the 1900 addition showing the sympathetic treatment of the extended façade to that of the original 1887 construction. Source: Rappaport & Caldis Cook Group, 1997

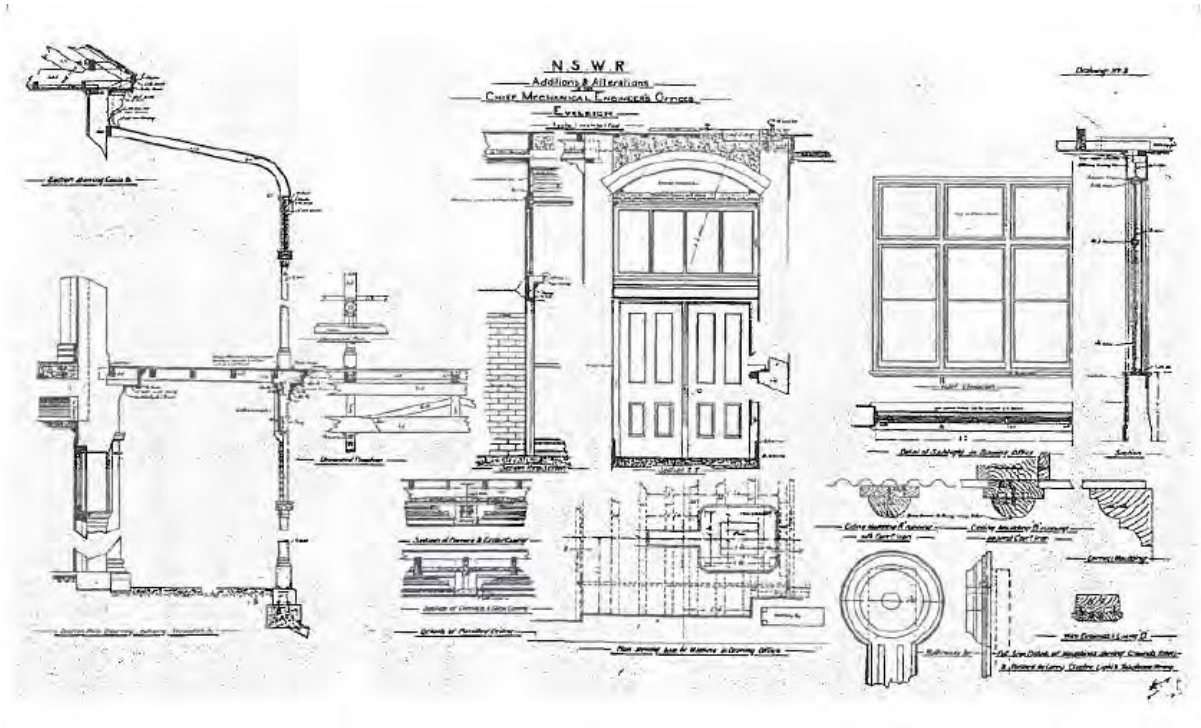

Figure 3.14: Detailed drawing of the Chief Mechanical Engineer's new entrance as part of the 1900 addition. Source: Source: Rappaport & Caldis Cook Group, 1997

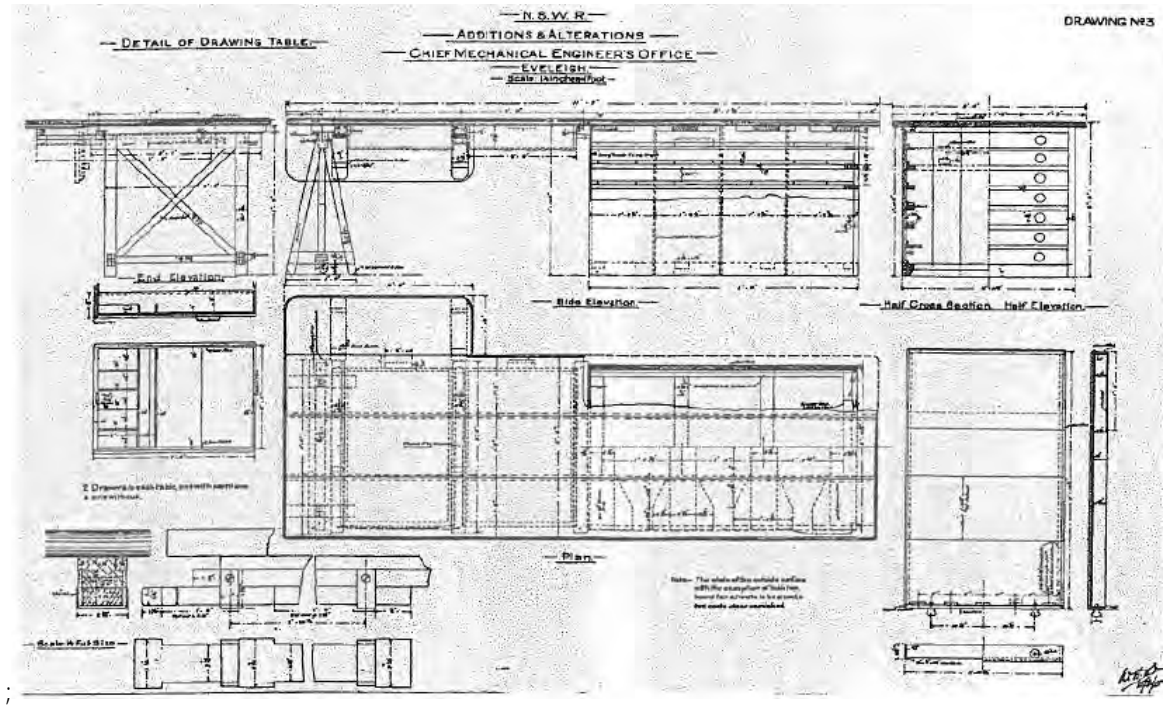

Figure 3.15: Detailed drawing of the 1900 addition drawing table design which were extensively used on the first floor of the CME building. Source: Rappaport & Caldis Cook Group, 1997

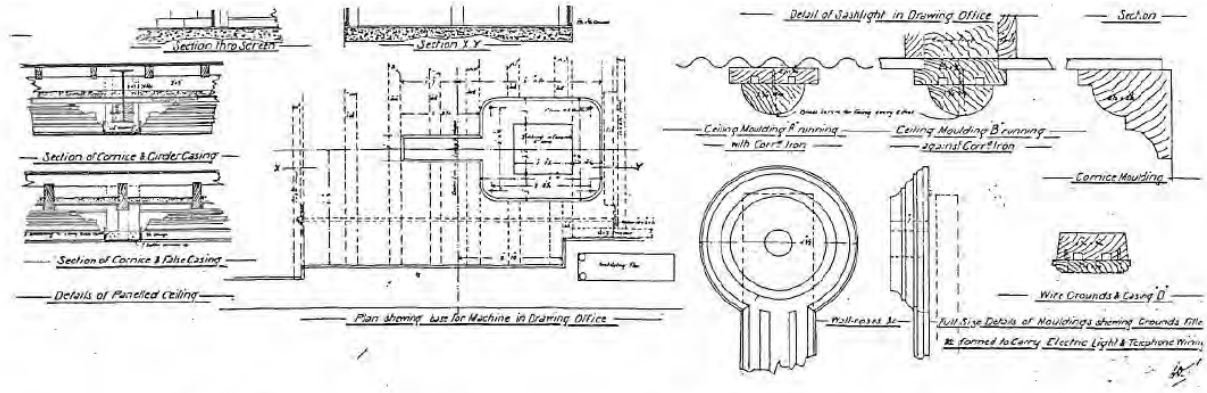

Figure 3.16: Details of numerous ceiling framing, cornice and bulkhead details as part of the 1900 addition to the CME building. Details of the corrugated iron ceilings for the general officers and pressed metal ceiling for the CME's office. Source: Rappaport & Caldis Cook Group, 1997

3.4.3. 1913: Addition (Cancelled)

An eastern extension was proposed in 1913 to be constructed in the location of the current CME gardens. This proposal was rejected and was never executed, likely due to boundary limitations caused by its close proximity to the site's eastern border. These 1913 additions would have included a new CME office, toilet and entranceway with another three new drawing rooms.[61]

[61] Rappoport & Caldis Cook Group,1997. *Chief Mechanical Engineers CMP*: 33

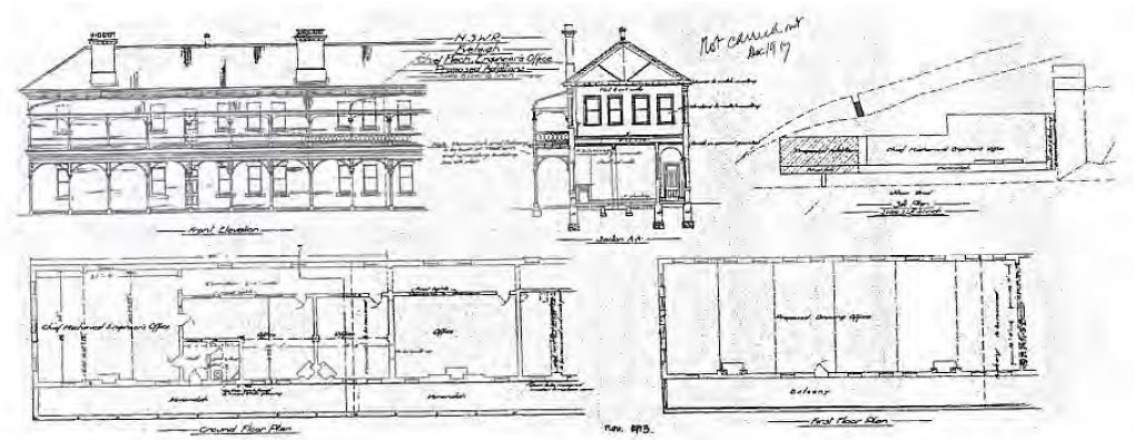

Figure 3.17: Drawings of the 1913 addition that was cancelled. Source: Rappaport & Caldis Cook Group, 1997

3.4.4. 1920: Addition

The final 1920 addition of the CME Building included several new facilities, such as an enlarged drawing office, three new general offices, a new exit, as well as the first indoor female toilets and two additional male toilets on the ground floor at the southern entrance to the building.[62] The inclusion of female toilets in the 1920 phase highlights the increase in female staff and their role in the administration side of the ERW within the CME Building. The increase in facilities also demonstrates the growth in general staffing of the building due to the expansion of operations at the ERW.

The three additional offices were constructed on the ground floor as part of the 1920 addition in the southeast of the building Rooms G12, G13, and G14. The drawing office on the first floor Room F6A was also expanded to the southeast to create three alcoves with skylights.[63] The skylights were likely added due to the need for more natural light for the drawing tables.

Three years after the 1920s addition was completed, an entirely new separately housed drawing office was constructed, demonstrating the dramatic increase in work and need for accommodation during this period.

[62] Rappoport & Caldis Cook Group,1997. *Chief Mechanical Engineers CMP*: 34
[63] Rappoport & Caldis Cook Group,1997. *Chief Mechanical Engineers CMP*: 35

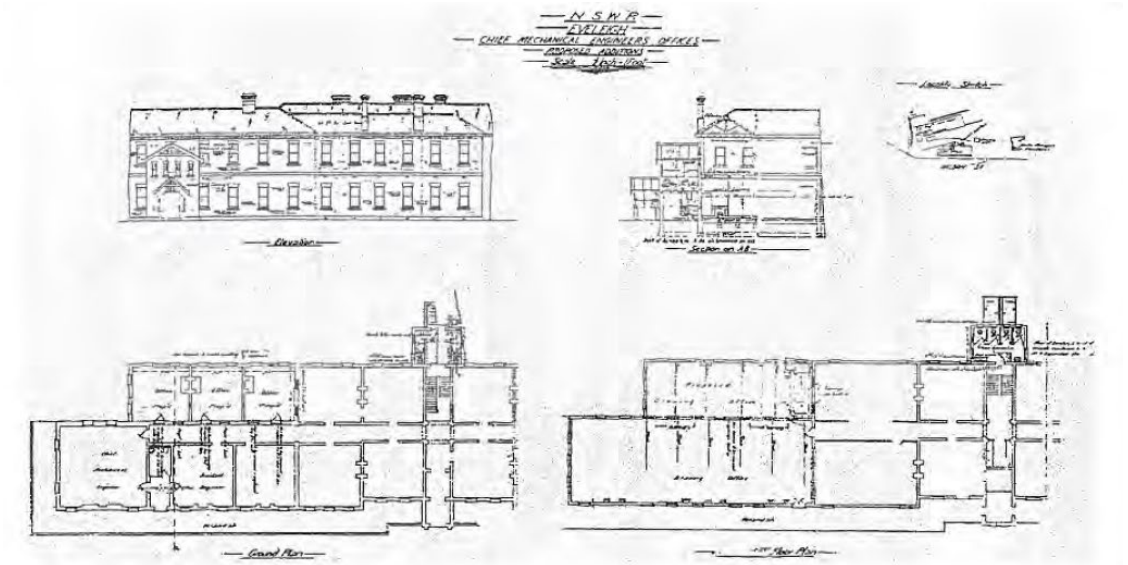

Figure 3.18: Plans of the 1920 addition which included the construction of three skylights over the drawing office, now Room 21. Source: Source: Rappaport & Caldis Cook Group, 1997.

Figure 3.19: Sun Tiy Sang in his Gardening Truck, in front of the CME Building in 1925. Note the High Fence on top of a concrete footing. Source: State Library of NSW, PXA 1284 - 9Bv78Xm9

Figure 3.20: Eastern elevation, entrance driveway and gardens of the CME Building, c.1950. Source: Rappaport & Caldis Cook Group, 1997

3.4.5. Role of the CME Building within the ERW

The Chief Mechanical Engineer was the highest authority at the ERW and ultimately oversaw and managed the entire site from the CME office. The CME himself was, as head of the State Railways' Mechanical Branch, ultimately responsible for the design, construction, maintenance, and care of all operating rolling stock within the entire NSW railway system.[64] Other responsibilities included testing new materials and systems that were appropriate for use in the railways, establishing and building new railroads across NSW, and reporting and monitoring the performance of rolling stock. [65]

The CME Building not only housed the Chief Mechanical Engineer of the ERW but also their subordinate engineers, assistants, and clerks. These engineers would spend their time designing new locomotive or carriage blueprints and technologies in the drawing room, as well as testing materials or designs in the Scientific Services Building. Several of these mechanical engineers who worked at the CME building would make huge contributions to the railway system and would be responsible for the industrial and infrastructural growth and development of NSW and Australia as a whole. Such achievements included improving the capability of locomotive performance, speed and hauling ability, as well as the creation and implementation of designs for state-of-the-art locomotives and carriages across Australia.[66] In the 1920s, as electrification continuously became more advanced, Eveleigh engineers worked on revising their understanding of electrifying the railway system and would later be instrumental in the introduction of dieselisation to the state's trains.

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[64] Ibid
[65] Rappoport & Caldis Cook Group,1997. *Chief Mechanical Engineers CMP*: 14
[66] Rappoport & Caldis Cook Group,1997. *Chief Mechanical Engineers CMP*: 91

The CME building also appears to have served as the pay office for the North Eveleigh Carriage Workshop, serving a similar function to the Works Managers Office on the ERW's southern side. This room also plays an important role in Australia's history when, at around noon on the 10th of June 1914, a robbery heist took place near the building's pay office on Wilson Street. Taking place on the workshop's fortnightly payday, the two robbers targeted the pay boxes as they were being transferred from the nearby bank to the CME Building via a horse drawn wagon. The Eveleigh Paymaster Frederick Charles Miller and his colleague were robbed at gunpoint by a pair of masked gunmen, who took one of two boxes and sped away in an automobile. A reward of £400 was later posted by the police for information about the identity of the men who were later caught. The heist shocked the entire nation for its sheer audacity, being done in broad daylight on a busy road, and involved the first recorded use of a 'getaway car' in Australian history.[67]

Figure 3.21: Mr R. Hill on his retirement showing staff of CME Building, 1961. Source: State Archives & Records, NRS-22469-1-7-H611142

[67] Rachel Hollis 2022, 'Robbery Under Arms – The Eveleigh Heist 1914' *NSW State Archives and Records.* Accessed from: https://www.records.nsw.gov.au/archives/magazine/galleries/eveleigh-heist

Figure 3.22: The Drawing Office, Chief Mechanical Engineer's Department, 1903. Source: Australian Town and Country Journal, 4 March 1893.

Figure 3.23: Mr J Scoular, Chief Draughtsman in his office, 1903. Source: Australian Town and Country Journal, 4 March 1893.

The following section highlights some of the key individuals that worked in the CME building from its construction up until its closure in 1989. These include men that held the position of Chief Mechanical Engineer as well as some other leading Railway men that spent time in the building for a significant part of their career.

Table 1.1: Chief Mechanical Engineers and Assistant Chief Mechanical Engineers of ERW

Name	Role	Year
Mr William Thow	Chief Mechanical Engineer	1889-1911
Mr Ernest Edward Lucy	Chief Mechanical Engineer	1911-1932
Mr Walter Russell	Assistant Chief Mechanical Engineer	1918-1920
Mr A. D. J. Forster	Assistant Chief Mechanical Engineer	1920-1925
Mr Harold Young	Chief Mechanical Engineer	1932- 1950
Mr W.H. Armstrong	Chief Mechanical Engineer	1951 - 1956
Mr C. Cardew	Assistant Chief Mechanical Engineer	1955-1963
Mr F. P. Heard	Chief Mechanical Engineer	1956-1966
Mr W. Waite	Chief Mechanical Engineer	1966-1973

Mr William Thow (CME 1889-1911)

Like many of the administrators and skilled professionals working in Australia in the latter parts of the 19th century, Mr Thow came to Australia from the United Kingdom.[68] In 1876, Thow was given the position of Locomotive Engineer for the State of South Australia, before being offered the same position in NSW in 1889, succeeding a Mr Midelton. Thow was thereafter the first person to be given the title of 'Chief Mechanical Engineer', as the position name was changed upon his appointment. As Chief Mechanical Engineer, Thow was responsible for all the Locomotive, Carriage and Wagon Workshops in NSW, with his office located in the Chief Mechanical Engineers Office in Eveleigh.[69] Aside from his several travels to England and America for railway development research, Mr Thow was well known for his heavy focus on the potential for electrification. This was a development that he was largely able to see through after 22 years as the CME, being present for the earliest conversions from steam to electric locomotives before the task fell to his successor.[70]

[68] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP: 94*
[69] Ibid.
[70] NSW Railways, 1920. *New South Wales Railway and Tramway Magazine,* 1st December 1920.

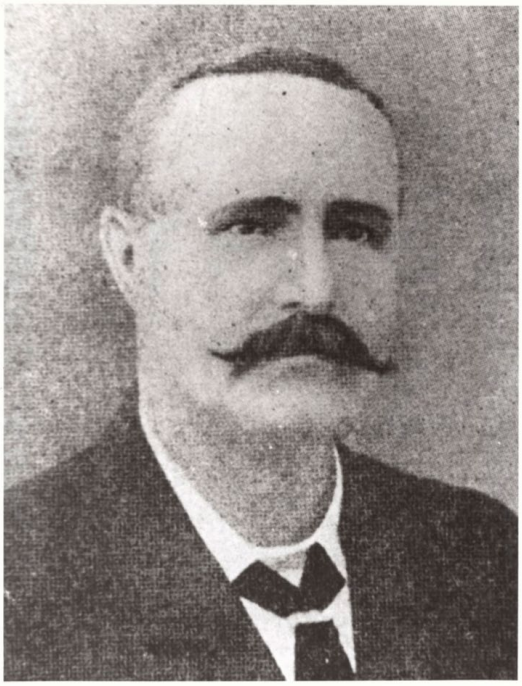

Figure 3.24: Photograph of William Thow, First Chief Mechanical Engineer (1889-1911) NSW. Source: State Archives & Records NRS-17420-2-3-343/000

Mr Ernest Edward Lucy (CME 1911-1932)

Ernest Edward Lucy originally hailed from the United Kingdom and began work for NSW Railways in 1906 as the Assistant Chief Mechanical Engineer under Mr Thow. Lucy was given the top position in 1911 after the latter's retirement and would himself retire from the position in 1932, after 22 years of service.[71] Ernest Lucy served as CME for some of the most productive and eventful years of the ERW, having control over 16,000 men and supervision over 26,000,000 miles of track at its peak. Similarly, the beginnings of electrification, so valued by his predecessor Mr Thow, was greatly expanded under Mr Lucy with the introduction of mainstream electric trains throughout the state. This Golden Age was not without its problems, however, and Mr Lucy was also responsible for managing the railways during the collapse of infrastructure transportation during the Great Strike of 1917, the devastating effect of the First World War, as well as the beginnings of the Great Depression in the 1930s.[72]

[71] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 95
[72] D. Burke, 1986. *Man of Steam – E E Lucy – Gentlemen Engineer in the Great Days of the Iron Horse*

Figure 3.25: Photograph of E. E. Lucy, Chief Mechanical Engineer. Source: State Archives & Records, 17420-2-3-343/001

Mr A. D. J. Forster (Assistant CME 1920 to 1925)

Alfred Foster was born in Sydney and grew up in the suburb of Paddington. After attending Fort Street Public School, Foster signed up as an apprentice at the ERW in 1906. The next year he won the jubilee scholarship for the University of Sydney, enabling him to study mechanical engineering. Graduating with honours in 1911, Forster was given the chance to travel overseas for a year to acquire experience, all expenses paid, as part of an extension to his scholarship. He would spend a further three years working around Europe as an inspecting engineer for the NSWGR.[73] At the outbreak of the first world war in 1914, Forster had just left Germany, narrowly avoiding the hostilities and was prevented from enlisting by the NSW Director-General of Public Works, citing his value as a skilled engineer. After working on the Metropolitan Railway Construction Branch in Sydney as Chief Assistant and being credited with much of the surveyal, location choice and design of the city, eastern, and western suburbs line, Forster was once again sent overseas to observe rapid transit operations in England and America in 1917, before being given the position of Assistant CME in 1920.[74] In 1925, Forster was only 35 and was promoted to the position of Railway Commissioner, the youngest man to be given the position in history.[75]

W.H. Armstrong (CME 1951 to 1956)

Bill Armstrong started his career in the NSW Railway Department in 1908, beginning as a fitter and turner apprentice.[76] By 1933, Armstrong had risen to the role of Divisional Locomotive Superintendent at Goulburn and was promoted to Assistant CME under H. Young in 1936. When Young was forcibly retired in 1950, Armstrong was subsequently promoted to the position of CME at the age of 59. Armstrong was the first CME to come from within Australia, instead of the United

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[73] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 97
[74] D. Burke, 1986. *Man of Steam – E. E. Lucy – Gentlemen Engineer in the Great Days of the Iron Horse*
[75] Smith's Weekly, *The Man of the* Week, 10 January 1925: 2
[76] Daily Telegraph, 13 Dec 1950, p.19: And Eveleigh Stories

Kingdom, which represented an important development in Australia's abilities as an industrialised nation and a statement of its growth.[77]

Figure 3.26: W.H Armstrong, Chief Mechanical Engineer from 1951 to 1956. Source: NRS-17420-2-3-343/004

Mr C. Cardew (Assistant CME 1955 to 1963)

Con Cardew began his career in NSW Railways in 1924 as a draftsman, 3rd class at the Eveleigh Railway Workshops, working in the CME building. Cardew was highly interested in the possibilities of the steam engine and was ultimately the man behind several important improvements to the designs implemented at Eveleigh. Examples include the 'Cardew Blower Ring', the 'automatic release cylinder drain cock' and the 'Cardew Track Depression Indicator', the latter of which helped to identify holes in the road to be filled by fettlers. These innovations highlight the kind of important work that the CME produced and their potential for widespread use and implementation in the transport system in NSW.[78]

Mr Cardew served as Assistant Chief Mechanical Engineer from 1955 until his retirement in 1963 and ultimately worked in the CME building for close to 40 years, serving under four of its Chief Mechanical Engineers. These included E. E. Lucy, H. Young, W. Armstrong, and finally F. Heard.[79]

[77] Eveleigh Stories, *The Chief Mechanical Engineer*.
[78] Rappaport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP: 98*
[79] ibid; Australian Railway Historical Society, 1973. Bulletin No. 432.

Figure 3.27: Mr C.R. Cardew, Assistant Mechanical Engineer, in Room 27 C.M.E [Chief Mechanical Engineer] Building. Source: State Archives & Records, NRS-22469-1-5-H580924

Mr W. J. Wait (CME 1966 to 1973)

Mr W. J. Wait served as the Works Manager at Cardiff NSW from at least 1956 [80] before being promoted to the position of Assistant CME from at least 1962.[81] As was the custom, on the retirement of Mr Heard in 1966, Wait was subsequently promoted to CME proper, a role that he would hold for seven years[82]. Mr Wait was the final person to hold the title of Chief Mechanical Engineer before the position was terminated in 1973 and split into the General Manager, Workshops and General Manager, and Mechanical and Electrical Equipment Branch.[83] The CME Office Building in Eveleigh thereafter became known as the office of the General Manager, Workshops.[84]

[80] NSW State Archives*, Portrait - Mr Wait - Works Manager Cardiff,* NRS-22469-1-3-H560198
[81] NSW State Archives, *Portrait of Assistant C.M.E Mr Waite, NRS-22469-1-8-H621131*
[82] NSW State Archives, *W WAIT CHIEF MECHANICAL ENGINEER 11-3-66 TO 30-10-73 ASSOCIATE COMMISSIONER AND DIRECTOR OF ENGINEERING 1-11-73 TO 1976,* NSW, NRS-17420-2-3-343/007
[83] NSW State Archives, Mechanical Branch [Railways] 01-07-1890 to 01-1973, AGY-1193
[84] Godden 1990; Godden 1986 Vol1 Background, p. 13

Figure 3.28: W. Waite, the last Chief Mechanical Engineer from 1966 until the position's termination in 1973. Source: NRS-17420-2-3-343/007

3.4.6. Decline and Closure of CME Building

In 1934, the NSW State Railways began preparations for the construction of a new building to house nearly all the railway administrative staff in a single location in order to unify the various railway branches and departments previously scattered throughout the city.[85] In 1936-37, the Chief Mechanical Engineer and his direct administrative staff were officially relocated from the CME Building to the newly constructed 'Railway House' (later known as Transport House), located on York Street directly above the underground entrance to Wynyard Station.[86] This move signified the beginning of a decline in Eveleigh's prestige within the NSW Railway Mechanical branch.[87]

Despite the relocation of the CME and his staff, the Assistant Chief Mechanical Engineer retained an office in the CME Building until at least 1958.[88] As second-in-command of the entire NSW Railways Mechanical Branch, the Assistant CME was the direct superior of the various Divisional Locomotive Superintendents across NSW and thus still held a tremendous amount of authority and influence.[89] The retention of the Assistant CME in the CME Building highlights that the office was still among the key administrative hubs of the NSW Railways, despite being largely overtaken by workshops like Chullora.

This retained importance would not last forever and, in 1973, the Mechanical Branch of the NSW Railways, which the Chief Mechanical Engineer and his subordinates oversaw, was officially abolished.[90] In June 1974, a new re-organised branch was created, now known as the Workshops Branch, which focused on extensive modernisation of the railway system via the addition of new

[85] Wagga Wagga Express 1934, *250,000 Building,* 26 May 1934: 6.
[8686] The Labor Daily 1936, *Named "Railway House",* 6 March 1936: 10.
[87] National Advocate, *Off Abroad*¸ 11 January 1936: 4.
[88] NSW State Archives 2022, *Mr C.R. Cardew, Assistant Mechanical Engineer, in Room 27 C.M.E [Chief Mechanical Engineer] Building,* NRS-22469-1-8-H621237 | NRS-22469-1-5-H580924.
[89] NSW State Archives 2022, *Mechanical Branch [Railways] 01-07-1890 to 01-1973,* AGY-1193.
[90] Ibid.

tools, buildings, machines, and amenities.[91] This coincided with a decision by NSW Railways to begin the closure of the Eveleigh Railway Workshops themselves, indicating a shift in direction by the railway administration as well as the beginning of the end for the CME Building.[92]

By 1980, the most senior position in the new Workshops branch, previously the Chief Mechanical Engineer, was now the *General Manager of Workshops* whom the various individual Railway Workshops around NSW reported to.[93]. However, the decentralised structure of the new branch gave far more autonomy and accountability to each individual workshop as a business unit, meaning the position of General Manager had had far less prestige and practical authority than previous decades.[94] The CME Building in Eveleigh subsequently became known as the office of the *General Manager of Workshops* until at least 1986when the position of General Manager, Workshops was held by Mr G Baird.[95] At this time, the entire ERW were beginning to slowly close down and staff were relocated throughout the railway system. This only further highlighted that the General Manager of Workshops and his engineers were becoming increasingly redundant.[96]

This gradual decline concluded in 1989 when the ERW officially closed with the majority of locomotive and carriage construction and maintenance moving towards an even more decentralised system based on private contractors bidding for tenders.[97] The entire Workshops Branch itself was now redundant and subsequently abolished, leading to the end of the position of General Manager of Workshops.[98]

The CME Building Itself remained in the hands of the State Rail Authority until at least 1997 and was retained as an office building for Railway administration staff before finally being closed sometime in the early to mid-2000s.[99] Some of the building's exterior structures, such as the former drawing office, have since been demolished.[100]

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[91] NSW State Archives 2022, *Workshops Branch [I] 01-07-1973 to 01-1980,* AGY-1646.
[92] OCP, 2022. *Eveleigh Railway Workshops Overarching Conservative Management Plan*: 38
[93] NSW State Archives 2022, *Workshops Branch [II],* AGY-2034.
[94] Ibid.
[95] Godden, 1990. *Eveleigh Railway Workshops, Vol1 – Background*:13
[96] Curio Projects, 2022. *LES Non-Aboriginal Heritage Study*: 40
[97] Heritage Group, 1995. *State Projects Eveleigh Railway Yards Locomotive Workshops Conservation Management Plan:* 22
[98] NSW State Archives 2022, *Workshops Branch [II],* AGY-2034.
[99] Paul Rappaport Architects 1997, *CME CMP: 4,* 103, 122 - 223*;* NSW Heritage 2022, *Eveleigh Chief Mechanical Engineers office and movable relics.*
[100] Paul Rappaport Architects 1997, *CME CMP:* 8. & Angus Donald 2012, *Chief Mechanical Engineer's Office & Scientific Services Building: Statement of Heritage Impact:* 8-18

Figure 3.29: Railway House in 1946, which housed the CME and his staff from 1936 onwards. Source: NSW State Archives - NRS-21573-2-1-PR374_A

3.4.7. Recent History of the CME Building

The CME Building appears to have been abandoned after its closure sometime in the 2000s. Over time, the building's interior and exterior fell into disrepair and degradation as it continued to be left empty and exposed to the elements.[108]

The *Central to Eveleigh Urban Transformation and Transport Program*, starting in 2016, began the task of restoring the exterior of the building, including repainting and repairing the brick walls, balcony, windows, latticework, and connection to utilities. This restoration was finalised in 2017 and allowed for the complete restoration of the exterior of the site, although the interior of the CME remains dilapidated and deteriorating.[109]

In 2021, TfNSW began the task of updating the 2008 Paint Shop Precinct Concept Plan which included a potential redevelopment of the CME Building for commercial use. This redevelopment aims to include further restoration and conservation works, several upgrades of amenities, lighting and security, as well as the removal of any hazardous materials.[110]

3.5. Summary

A summary of the historical development of the study area is presented in Table 3-2, with a composite plan of the construction phases of the CME building outlined in Figure 3-30.

Table 3-2: Historical Summary

Year	Event
To 1788	Pre-European environment and early Aboriginal occupation
1822	Part of James Chisolm Estate (total 62 acre land grant)
1855	NSW first rail line constructed, bisecting Chisholm land at Eveleigh
1881	Annual Report describes the planning of the future CME Building
1887	Chief Mechanical Engineers Building constructed (Stage 1) and CME toilet block constructed
1889	First Chief Mechanical Engineer (Mr. William Thow) was appointed
1900	Chief Mechanical Engineers Building (Stage 2) addition; garden east of CME Building established.
1902	Fire broke out in CME Building
1908	Fire broke out in CME Building
1911	Mr. Ernest Edward Lucy appointed Chief Mechanical Engineer
1918	Mr. Walter Russel appointed Assistant Chief Mechanical Engineer
1913	Chief Mechanical Engineers Building addition planning phase (later cancelled)
c1916	Single storey strong room/laboratory constructed west of CME Office (precursor to Scientific Services Building No.1)
1920	Chief Mechanical Engineers Building (Stage 3) addition
c1922	Scientific Services Building No. 1 constructed (incorporating c.1916 single storey building in same location)
1923	The standalone Drawing Office Building was established just south east of the CME Building
1923-24	Calder House vacated due to poor condition[101] (previously used as CME/Works Manager Residence), burns down 1924
1932	Mr. Harold Young appointed Chief Mechanical Engineer
1936-1937	CME and direct administration staff relocated to Transport House located on York St
1950s	Introduction of steam locomotion
1951	W.H Armstrong appointed Chief Mechanical Engineer
1955	Mr. C. Cardew appointed Assistant Chief Mechanical Engineer
1956	Mr. F.P. Heard appointed Chief Mechanical Engineer
1966	Scientific Services Building No. 2 constructed, and Mr. W. Waite appointed Chief Mechanical Engineer
1973	Mechanical Branch of NSW Railway officially abolished and Mr. W. Waite steps down from role as Chief Mechanical Engineer
1974	Workshops Branch established
c1980	Newly appointed position of *General Manager of Workshops* established, making the Chief Mechanical Engineers position redundant.

[101] Godden 1986: 79

Year	Event
1986	CME Building no longer the office of the *General Manager of Workshops,* position held last by Mr G Baird.
1987-1989	Closure of ERW. CME Building still used as an office space
1995	The Drawing Office structure was completely demolished
1997	CME Building still used as an office space for administrative staff
Mid to early 2000s	CME Building left empty after the offices relocated off site
2008	Concept Plan approved for the redevelopment of the North Eveleigh Precinct
2016	Restoration work on the exterior of the CME Building took place as part of the *Central to Eveleigh Urban Transformation and Transport Program*. Works were completed in 2017.
2021	Transport undertake SSP study to reassess requirements and updates to 2008 Concept Plan for Paint Shop Sub-Precinct.
2022	TfNSW seeking specialist advice to prepare the building for sale for commercial use. Works include restoration and conservation works, CBCA and DDA upgrades, hazardous materials removal, amenities, and kitchen upgrades, building lighting, security upgrades, air conditioning and a lift fit out

Figure 3-30: Composite plan showing different phases on development across the RNE area, with the CME study area shown in red. Source: AHMS 2008, p30 with Curio markup

4. Physical Analysis

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4. Physical Analysis

This chapter provides a detailed summary and physical analysis of the existing structures and features within the study area, as well as context and overview of the immediate surroundings, including places of importance essential to the understanding of the physical context of the site.

4.1. The Redfern North Everleigh Precinct

The RNE Precinct is delineated to the north by Wilson Street and to the south by the railway corridor (Figure 1-3).

4.1.1. The Chief Mechanical Engineers Building

The CME building is located along Wilson Street in the north-western corner of the Paint Shop Sub-Precinct and immediately to the east of the Scientific Services Building No. 1 (Figure 4-1).

The CME Building is a two-storey brick building with a bullnose verandah on three sides supported by cast-iron columns with iron lace friezes for the capital brackets and iron lace balustrades (Figure 4-3 and Figure 4-4). The building has been modified and extended numerous times since its initial construction in 1887.

The s170 Register provides the following description of the CME Building.

> *"The building is a very fine late Victorian railways office on a scale above all other such structures in the State. The building reflects the importance of the railway engineers in the development of the State and its closeness to the Eveleigh workshops (mainly under the control of the Mechanical Branch) indicates the confidence in railway construction. The building is in a style not often seen in Sydney and is a rare survivor. More often this form of building is in evidence in the country where the pressure of development is less. It is an important element in the town and streetscape of Wilson Street, Chippendale, particularly its closeness to the railway workshops."*[102]

To the east of the CME Building is an area originally reserved for gardens, which is currently unkempt and contains several mature trees in association with the CME Building (Figure 4-9, Figure 4-10, Figure 4-14 and Figure 4-19). The eastern garden area ground surface is 20-30cm higher than the Wilson Street level (Figure 4-11 and Figure 4-12) which appears to be have been cut down during the road construction.

Located along the eastern boundary of the CME building gardens is a private vehicular accessway which would have been one of the main pedestrian thoroughfares for the Eveleigh railway workers moving north to south across the site and connected to the bridge (Figure 4-13).

Modern security fencing has been constructed around the perimeter of the CME Building, dividing the original garden area from the building along its eastern elevation (Figure 4-7, Figure 4-11, Figure 4-12 and Figure 4-16). The 1997 CMP describes the surrounding modern fence line and altered curtilage of the CME building as having:

[102] S170 Register, Eveleigh Chief Mechanical Engineers Office

"...effectively redefined the curtilage of the buildings. It has had the effect of limiting access into and from the site and has severed the garden from its connection to the building. The fundamental connection of the CME building to the workshops below has also been severed.

The purpose of this new fence is primarily concerned with security. Several electronically operated gates within it are linked to a close circuit TV monitor that allows the receptionist of the building to examine the prospective entrants. An intercom system is also linked to these gates. The location of the security fence has been completely altered the original curtilage of the site and pays little attention to the historical user patterns in terms of approaches, departures and general movement around the site.

Photographic evidence indicates that for some time in the past, the Wilson Street frontage has been neglected. Although the new security fence along Wilson Street is certainly an improvement, it is out of keeping with the original sandstone gateposts and Main Entry gate."[103]

A below-floor inspection underneath the CME building was conducted in 2017 by Timber Inspection.[104] This identified that there is limited clearance below the ground-floor level and the soil surface and that the original ground level was largely unimpacted by the construction of the CME (Figure 4-17 and Figure 4-18).

Figure 4-1: The study area in red, with the CME building in green and the Scientific Services building indicated in blue. Source: EthosUrban 2022 with Curio markup

[103] Rappoport, P 1997, *Chief Mechanical Engineer's Building, 327 Wilson Street, Chippendale. Eveleigh Locomotive Workshops, Conservation Management Plan*, Prepared for State Rail Authority of NSW: 83
[104] Timber Inspection, 2017, *Termite Inspection Chief Mechanical Engineers Building,* Report for OCP Architects

Figure 4-2: View south-west of the Chief Mechanical Engineer's office from Wilson Street (Source: Curio 2021)

Figure 4-3: Front door of CME Building along Wilson Street (Source: Curio 2021)

Figure 4-4: Western corner of CME Building including western façade and northern first level terrace (Source: Curio 2021)

Figure 4-5: View southeast of the northern façade and verandah of the CME Building along Wilson Street and CME gardens (Source: Curio 2021)

Figure 4-6: CME Exterior view north of the southern and western building facades (Source: Curio 2021)

Figure 4-7: Southwestern view along southern façade, modern security fence along the CME curtilage in left of image (Source: Curio 2021)

Figure 4-8: View west across the southern façade of the CME Building. Scientific Services Building No.1 visible in the background (Source: RPS Group)

Figure 4-9: Area east of the CME Building, once associated gardens were originally located (Source: Curio 2021)

Figure 4-10: North eastern view of CME gardens and flag pole from the first-floor verandah (Source: Curio 2021)

Figure 4-11: Southern view of the CME Building Gardens along Wilson Street (Source: Curio 2021)

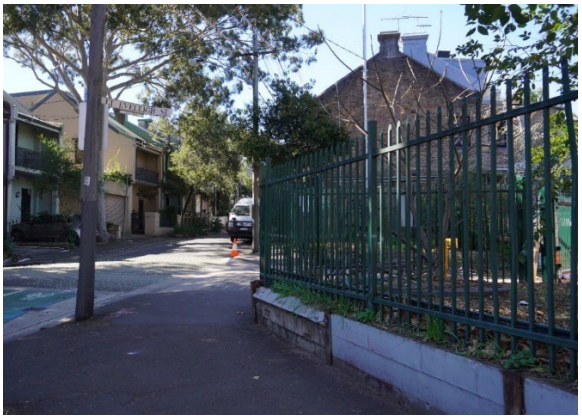

Figure 4-12: The north-eastern corner of the Paint Shop Sub-Precinct at the corner of Wilson and Eveleigh Streets, view north (Source: Curio 2021)

Figure 4-13: Driveway and vehicular access point to the CME Building at the eastern boundary of the Paint Shop Sub-Precinct (Source: Curio 2021)

Figure 4-14: Northwestern view facing towards the CME building from railway level (Source: Curio Projects 2021)

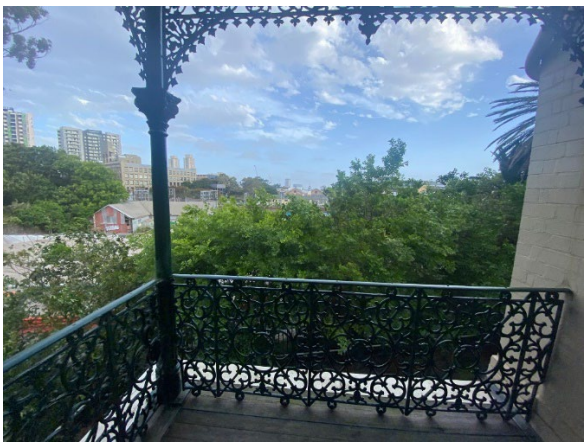

Figure 4-15: View from CME Building level one verandah along eastern façade facing south toward South Eveleigh (Source: Curio 2021)

Figure 4-16: Northern view of security fence between the CME Building and gardens (Source: Curio 2021)

Figure 4-17: Detail of underfloor. (Source: Timber Inspection 2017)

Figure 4-18: Detail of underfloor. (Source: Timber Inspection 2017)

Figure 4-19: View to eastern elevation of CME Building, area of original gardens now mostly bare in foreground (Source: Curio 2021)

5. Historical Archaeological Assessment

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5. Historical Archaeological Assessment

5.1. Introduction

The extent to which physical remains of past occupation may survive across any site is dependent on two main factors: firstly, the nature of the archaeological resource; and secondly, the nature and extent of subsequent development and modifications at a site that may have impacted the deposition or conservation of the archaeological resource. While each subsequent phase of development and occupation may contribute new deposits and features to the archaeological record, it may also remove or disturb deposits and features associated with previous phases of occupation.

Context and information for this section regarding historical archaeological context and potential for the CME study area, has been primarily drawn from the Archaeological Assessment and Zoning Plan report for North Eveleigh, prepared in 2008 by AHMS, and the Redfern North Everleigh (RNE) Precinct Non-Aboriginal Heritage Study, prepared by Curio in 2022. The Curio Heritage Study updated the 2008 assessment where applicable in accordance with work undertaken since 2008, as well as in the context of best practice and archaeological guidelines current as of 2022.

5.1.1. Methodology

'Relics' vs 'Works'

In the management of historical archaeology at within the RNE Precinct, it is appropriate to consider and acknowledge the archaeological management process and approach that has been applied with success to the South Eveleigh Precinct, during Mirvac's redevelopment of the Precinct (former ATP) since 2015.

Consultation between Curio Projects and Heritage NSW archaeologists in 2015-2016 in relation to the management of historical archaeological resources within the South Eveleigh Precinct, focused substantially on discussions involving how to address, define, and differentiate between the nature of archaeological 'relics', and in or below ground remains or structures pertaining to existing structures and heritage buildings. This resulted in the following definition being established and adhered to for the management of 'relics' vs 'works' throughout South Eveleigh redevelopment works.

> *In situ industrial archaeological resources (such as roadways, railway tracks, tram tracks, kerbstones, culverts, milestones, remnant flues, and other related below-ground infrastructure) are managed and defined by Heritage NSW as 'works', as opposed to as archaeological 'relics' (as defined by the relics provision of the Heritage Act).*

For example, this approach was applied in the consideration and management of the remnant Foundry walls at South Eveleigh, which, while sections of the former building remained on the site following demolition of the bulk of the building in the 1990s as part of the ATP development, were above ground remnant fabric, and not an archaeological deposit. The Foundry walls were thus subject to archival recording prior to removal, with remnant fabric to be retained and stored where possible for potential use in an interpretative context at a later stage of the development. A similar approach was applied to the management and recording of features uncovered in the floor of the Locomotive Workshops once the modern concrete floor poured as part of the 1990s ATP development had been removed.

It is considered appropriate that a consistency of approach be applied to the management of archaeological resources within the RNE Precinct. Therefore, it is proposed that a similar differentiation between 'relics' and 'works' (where relevant) be applied to the CME study area, as while both relics and works may have the potential to be present, the way in which they are required to be managed may differ.

Archaeological potential

The potential for archaeological resources to survive in a landscape is significantly affected by the historical use of a site past ground disturbing activities. The following assessment of archaeological potential is based on the definitions presented in Table 5-1 and Table 5-2.

Table 5-1: Definitions of Archaeological Potential

Archaeological potential	Definition
High	A site where there is known occupation associated with the historical phase and proceeding ground disturbance has been minimal
Moderate	A site where there is some potential for archaeological relics associated with the historical phase to survive, though they may have been subject to some disturbance
Low	A site that has either been subject to little or no known historical development, or where levels of disturbance are so high that they may have removed all evidence of former structures. Unexpected or highly truncated/disturbed archaeological resources may survive, though this is unlikely
Nil	A site where there has been no known historical development or where impacts are significant, such as the construction of deep basements

Table 5-2: Definitions of Levels of Historical Disturbance

Level of Disturbance	Definition
Low	The site or feature has not been subject to activities that would have a major impact on the survival of archaeological remains. Archaeological evidence may be largely intact.
Moderate	The site or feature has been subject to some activities that may have impacted on the survival of archaeological remains. Archaeological evidence may survive, however it may be disturbed.
High	The site or feature has been subject to activities that are likely to have impacted on the survival of archaeological remains. Little archaeological evidence may survive, or it may be substantially destroyed.

Archaeological Significance

Determining the significance of a potential archaeological resource is carried out by utilising a system of assessment under seven criteria outlined in the 2013 *Burra Charter of Australia*.[105] In 2009, the Heritage Council of NSW endorsed criteria developed specifically to assist archaeologists determine the significance of archaeological sites and relics in consideration of the thresholds of

[105] Australia ICOMOS, 2013, Burra Charter

significance at a local of State level.[106] Definitions of archaeological significance are presented in Table 5-3.

Table 5-3: Definitions of Archaeological Significance

Criterion	Definition
Archaeological Research Potential NSW Heritage Criterion E	Archaeological research potential is the ability of archaeological evidence, through analysis and interpretation, to provide information about a site that could not be derived from any other source, and which contributes to the archaeological significance of that site and its 'relics'.
Associations with individuals, events, or groups of historical importance NSW Heritage Criteria A, B, D	Archaeological remains may have associations with individuals, groups and events which may transform mundane places or objects into significant items through their relationship with important historical occurrences.
Aesthetic or technical significance NSW Heritage Criterion C	Whilst the technical value of archaeology is usually considered as 'research potential' aesthetic values are not usually considered to be relevant to archaeological sites. This is often because until a site has been excavated, its actual features and attributes may remain unknown. It is also because aesthetic is often interpreted to mean attractive, as opposed to the broader sense of sensory perception or 'feeling' as expressed in the Burra Charter.
Ability to demonstrate the past through archaeological remains NSW Heritage Criteria A, C, F & G	Archaeological remains have an ability to demonstrate how a site was used, what processes occurred, how work was undertaken and the scale of an industrial practice or other historic occupation. They can demonstrate the principal characteristics of a place or process that may be rare or common.

[106] Heritage Branch Department of Planning, 2009, p11

5.2. Previous Archaeological Assessments

The following archaeological investigations focusing on archaeological resources have been carried out that are inclusive of the study area and will be used to inform this assessment of archaeological potential:

- Austral Archaeology, 2000, *Archaeological Assessment of the Eveleigh Carriage Workshops Site*, report prepared for NSW Department of Public Works
- Australian Heritage Management Solutions (AHMS), 2008, *North Everleigh Precinct Archaeological Zoning Plan*
- Paul Irish, 2008, *Preliminary Aboriginal Heritage Assessment: Two portions of the North Eveleigh site,* report prepared for Redfern Waterloo Authority.
- Curio Projects, 2022, *RNE Non-Aboriginal Heritage Study.* Report for TfNSW.
- Artefact, 2022, *Redfern North Everleigh Aboriginal Cultural Heritage Study*, Report for TfNSW.

5.2.1. 2000 Archaeological Assessment of the Everleigh Carriage Workshops site (Austral Archaeology)

In 2000 Austral Archaeology conducted an archaeological assessment of the Everleigh Carriage Workshops (ECW) site.[107] They identified three main areas where buildings had been demolished and were likely to have some archaeological potential.[108] The assessment did not identify archaeological potential within the CME Building and immediate surrounds, although one of the areas of archaeological potential (Area 1 in Figure 5-1 below) is located in direct proximity to the CME study area.[109]

Figure 5-1: Areas of archaeological potential as identified in Austral 2000, with the CME study area indicated in red. Source: Austral 2000 with Curio markup.

5.2.2. 2008 Archaeological Zoning Plan (AHMS)

An Historical Archaeological Assessment and Archaeological Zoning Plan (AZP) was prepared for the North Eveleigh Precinct by AHMS in 2008 as part of the development of the 2008 concept plan.[110] The objectives of the AZP included:

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[107] Austral Archaeology 2000, *Archaeological Assessment of the Eveleigh Carriage Workshops Site*, report prepared for NSW Department of Public Works

[108] Austral Archaeology 2000, *Archaeological Assessment of the Eveleigh Carriage Workshops Site*, report prepared for NSW Department of Public Works, Figure 1, p. 14.

[109] Austral Archaeology 2000, *Archaeological Assessment of the Eveleigh Carriage Workshops Site*, report prepared for NSW Department of Public Works, Figure 1, p. 23.

[110] AHMS 2008

- Identify any potential relics indicated at the site, their likely extent, integrity, heritage significance and archaeological potential
- Define areas of historical archaeological potential with high, moderate, and low heritage significance within the site
- Identify areas that may have potential to contain Aboriginal sites or objects
- Make recommendations for future management of potential relics indicated at the site based on graded levels of significance and archaeological potential

The 2008 report identified three main building phases of the CME building (Figure 5-2). The assessment also found that the CME area had Aboriginal archaeological potential but that it was unlikely for historic relics below the existing buildings (Figure 5-3). The assessment concluded:

> *Potential historical relics within this area may include services and garden features associated with the Chief Mechanical Engineers Office and the Scientific Services building. Given that both of these buildings were constructed (post 1886) after the introduction of tongue in groove floor boards, it is unlikely that occupation deposits would be present below the floors of these buildings.*[111]

Figure 5-2: Detail of composite map showing three main stages of CME building construction. Source: AHMS 2008, p30

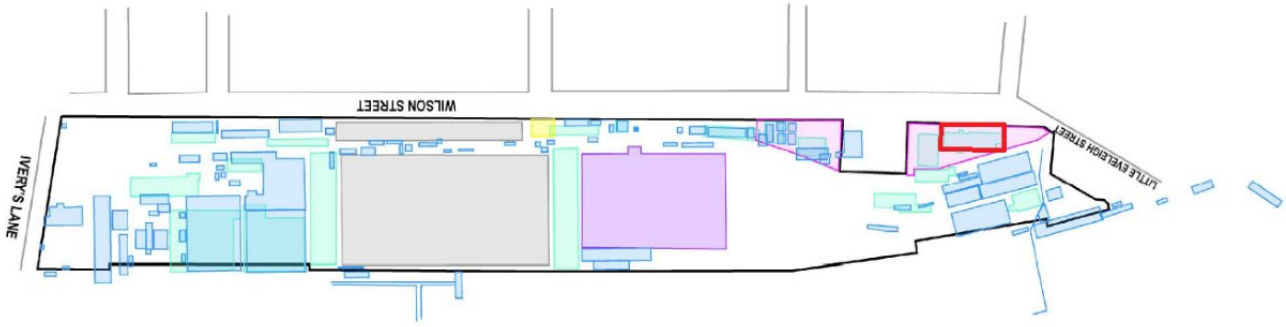

Figure 5-3: 2008 AHMS Archaeological Zoning Plan for the Paint Shop Sub-Precinct, with the CME study marked up in red. The zoning plan identified Aboriginal archaeological potential across the whole CME area (shown in purple) and existing buildings with no-subfloor archaeological potential (in green). Source: AHMS 2008 with Curio markup

5.2.3. Paul Irish 2008 Preliminary Aboriginal Heritage Assessment

[111] AHMS 2008, p. 41

In March 2008 Paul Irish conducted a preliminary Aboriginal Historical Assessment for land including the CME Building and surrounding gardens, which at the time were located as part of Lot 4, DP862514.[112] The assessment was prepared as the study area had not been subject to significant subsurface excavation and could have Aboriginal archaeological potential.[113]

> *The subject lands have not undergone this massive excavation. However they have been impacted by the construction/installation of large buildings (e.g. the Chief Mechanical Engineers Office building), hard stand surfaces, subsurface infrastructure and garden landscaping east of the Chief Mechanical Engineers Office building. It would be considered unlikely that such impacts would not have resulted in the complete disturbance, if not removal, of all original topsoil.[114]*

The conclusions of the study were:

- *The subject lands are completely historically disturbed and do not retain any Aboriginal archaeological potential.*
- *The subject lands do not require further archaeological investigation, such as the preparation of a formal Aboriginal Cultural Heritage Impact Assessment.*
- *On archaeological grounds, the subject lands do not have significance to Aboriginal cultural heritage.*
- *This recommendation is supported by the Metropolitan Local Aboriginal Land Council[115]*

5.2.4. Curio 2022 Redfern North Everleigh Non-Aboriginal Heritage Study

Curio prepared a Non-Aboriginal Heritage Study for the entire RNE Precinct to provide overarching recommendations with respect to the management of the heritage values and archaeological resources within the Precinct.

The assessment found that the natural ground level across much of the RNE Precinct was previously excavated during the initial development of the Carriage Workshops in the 1880s in preparation for construction of the railway complex buildings and connecting rail tracks. Additional excavation at the railway level of the site likely occurred in subsequent years for continuing development and growth of the railway workshop facilities, rail line, and access. Areas believed to have been unaffected by these subsequent excavation events include some areas along the Wilson Street level, including the CME study area.

It was concluded that much of the RNE area, inclusive of the CME study area, has potential for archaeological deposits to be present in a sub-surface capacity, comparable to the features encountered within previous archaeological monitoring and excavation works at North and South Eveleigh. The CME area specifically, was found to have a moderate potential for historical archaeological deposits to be present.

5.2.5. Artefact 2022 Redfern North Everleigh Aboriginal Cultural Heritage Study

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[112] Paul Irish, 2008, *Preliminary Aboriginal Heritage Assessment: Two portions of the North Eveleigh site*, report prepared for Redfern Waterloo Authority
[113] Paul Irish, 2008, p. 2.
[114] Paul Irish, 2008, p. 4.
[115] Paul Irish, 2008, p. 6.

Artefact prepared an Aboriginal cultural heritage study for the RNE Precinct (inclusive of the CME building) to assess the Aboriginal cultural heritage values and archaeological potential for the study area.

The assessment identified an area of Potential Archaeological Deposit (PAD: RNE-PAD001) to the immediate east of the CME building (exact location redacted) that has low to moderate potential to contain Aboriginal archaeological resources. The assessment found that:

> *There does not appear to be sufficient evidence to state that the construction of the Chief Mechanical Engineer's Building will have resulted in significant disturbance let along soil removal to the majority of RNE-PAD001. Rather, the only likely soil disturbance present in RNE-PAD001 is the garden landscaping east of the CME building. No evidence was observed to suggest that this landscaping was of a reductive nature that would significantly disturb local soils.*[116]

The assessment concluded that all other areas within the Precinct beyond RNE-PAD001 (including the CME study area) have a nil to low potential to contain Aboriginal archaeological resources, with test excavation recommended if any impacts are proposed.[117]

5.2.6. Summary of findings in relation to the study area

Previous assessments inclusive of the study area have identified conflicting conclusions regarding the archaeological potential of the CME area. Overall, the study area has been assessed to:

- Have been subject to focused areas of disturbance through ground levelling and construction but is likely to contain overall intact subsurface contexts
- Have nil to low potential to contain Aboriginal cultural heritage archaeological deposits
- Have some potential to contain historic archaeological relics associated with the construction and industrial use of the CME building

5.3. Historical Overlays

An assessment of the historical context and identified occupation and building phases of the study area, as well as a detailed examination of historical maps and plans can aid in the preparation of an archaeological predictive model for an area. Figure 5-4 to Figure 5-7 below overlay historic plans with the study area to identify any major building phases or structures within site.

As illustrated in the overlays, the study area remained undeveloped until the construction of the CME building in 1885. No structures were noted within or in direct vicinity of the study area prior to this period. The overlays also depict the extension of the CME building in the 1920s, as outlined in the historical context.

The historic mapping does not depict any outbuildings or ancillary structures within the study area boundary.

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[116] Artefact, 2022, *Redfern North Everleigh Aboriginal Cultural Heritage Study,* Report for TfNSW, p62
[117] Ibid, p65

Figure 5-4: 1855-1865 Trigonometrical Map of the City of Sydney, showing no structures within the study area during this period. Source: City of Sydney Archives AS-1042

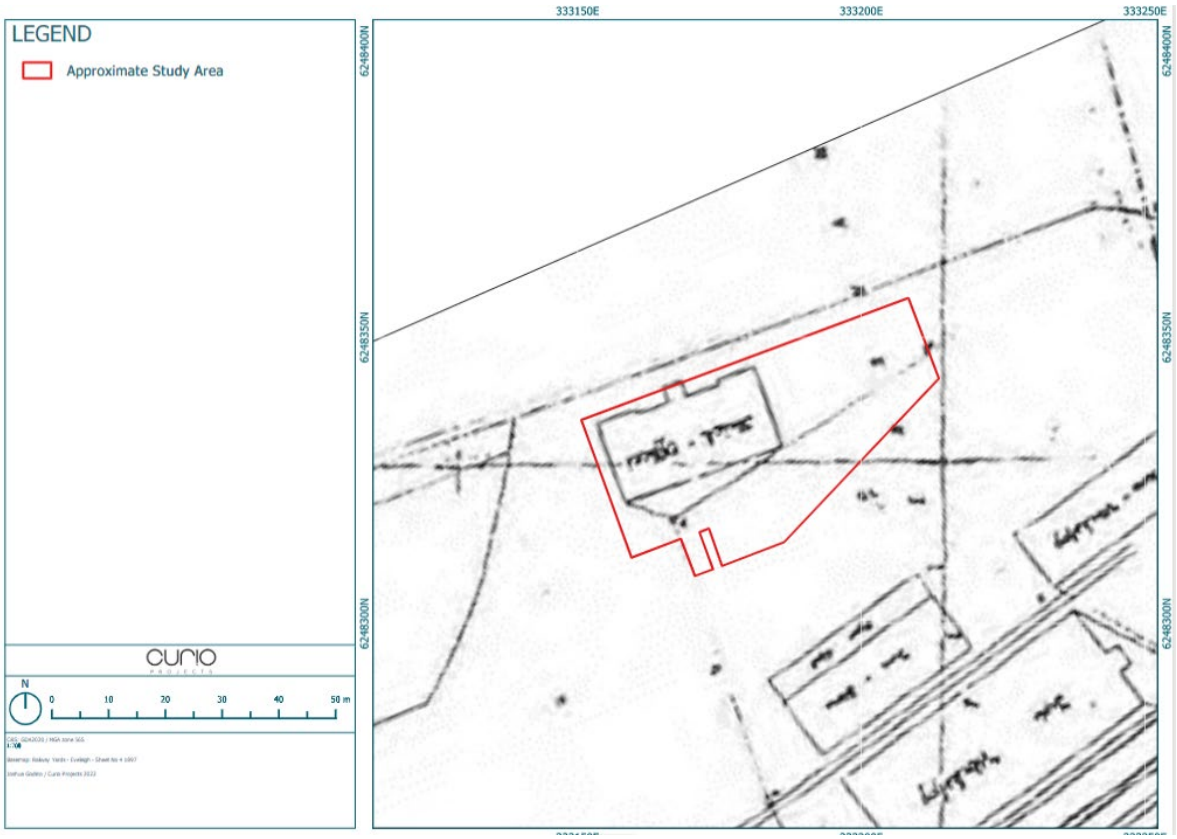

Figure 5-5: 1897 City of Sydney Map, showing the original CME building within the study area. Source: http://nla.gov.au/nla.obj-231330629

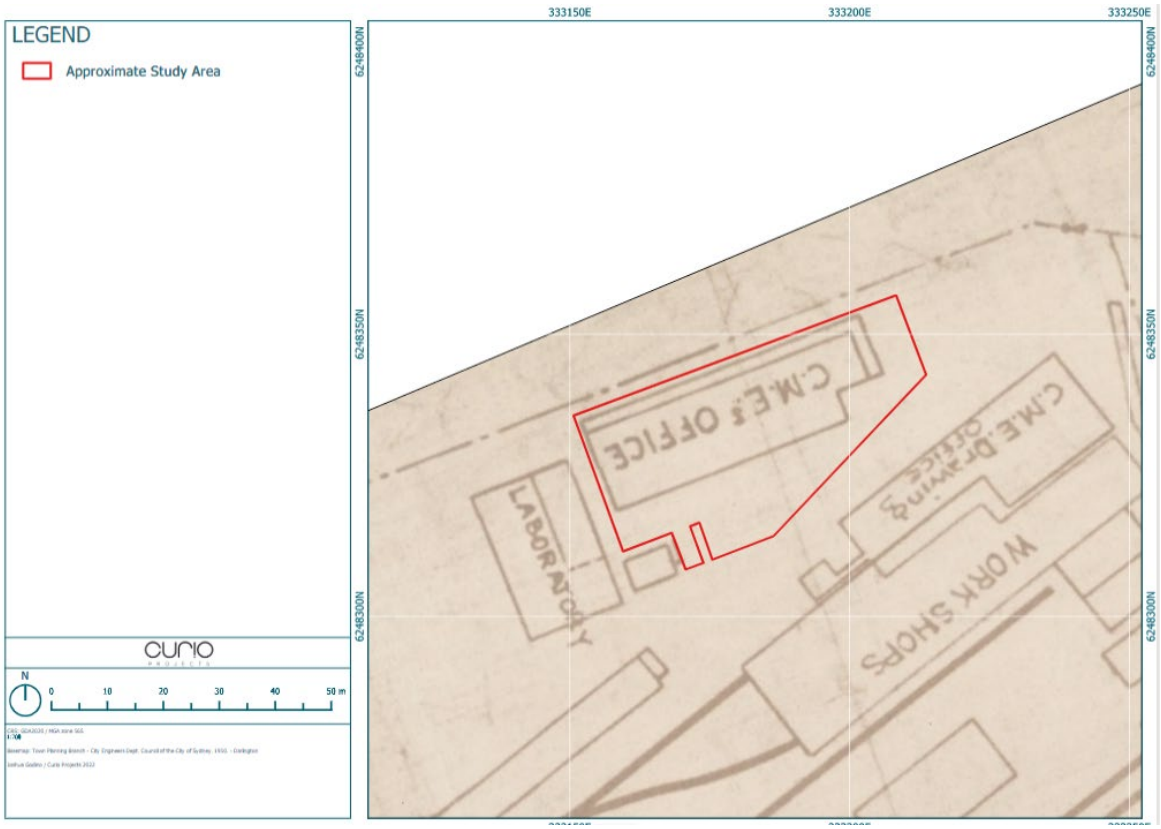

Figure 5-6: 1924 City of Sydney Ward Map showing extended CME building within the study area. Source: City of Sydney Archives A-01002700

Figure 5-7: 1950 Civic Survey showing the CME building within the study area. Source: City of Sydney Archives AS-1041

5.4. Known Impacts

Much of the RNE area was significantly impacted by ground levelling and excavation throughout much of the 20th century, however the area around the CME study area is considered to largely reflect the original ground surface and not been subject to significant impact.[118]

Nonetheless, construction of Phase 3 and Phase 4 buildings in the study area may have disturbed, truncated or removed ephemeral evidence of Phase 1 and Phase 2 land use such as refuse deposits, landscape modification or unrecorded structures associated with Calder House and the John Chisholm Estate.

While the first known buildings in the study area continue to occupy the study area footprint, various minor periods of demolition and construction have occurred that may have impacted any Phase 3 and Phase 4 ancillary buildings that were not captured on the historical plans.

5.5. Summary of post-1788 land use

As illustrated in the historical context and mapped historical overlays, the study area has been subject to four primary post-1788 land use phases, as presented in Table 5-4. Potential archaeological evidence of these post-1788 land use development and activities are also summarised in the table.

The extensions of the CME building identified in the overlays are presented in Figure 5-8 below to illustrate the compiled development history of the study area. This corresponds to the known development history of the building, as outlined in Section 3.

Table 5-4: Summary of development in the study area and associated potential archaeological resources.

Occupation phase	Known land use and development	Potential archaeological resources
Phase 1 1788-c1822 Post-European arrival	Unknown use. Possible vegetation clearance for grazing and informal development on the outskirts of the primary Sydney settlement.	Ephemeral evidence of informal land use such as clearing of vegetation (tree boles), landscape modification, informal development and animal grazing.
Phase 2 John Chisolm Estate 1822- 1885	Vacant lot associated with Calder House and the John Chisholm Estate.	Ephemeral evidence of informal land use such as clearing of vegetation (tree boles), landscape modification, informal development and animal grazing. Potential for ancillary informal structures associated with Calder House not captured on historic plans. May include brick or stone footings, brick or stone cesspits, yard surfaces comprising of compacted earth, stone or brick flagging or paving, discreet refuse pits, or postholes associated with sheds or informal structures.

[118] AHMS, 2008, p31

Occupation phase	Known land use and development	Potential archaeological resources
Phase 3 Construction of first rail line 1885- 1887	Construction of the first rail line adjacent to the study area. Study area potentially used for materials storage.	Ephemeral evidence of railway construction or storage or materials associated with this phase of construction. Potential for informal structures such as sheds, workers accommodation or fencing. May include brick or stone footings, brick or stone cesspits, yard surfaces comprising of compacted earth, stone or brick flagging or paving, discreet refuse pits, postholes associated with sheds or informal structures, machine pits, foundations, rail lines or other industrial infrastructure.
Phase 4 Chief Mechanical Engineers Building 1885-Early 2000s	Construction and use of the CME building, including various phases of building extension.	Utilities, concrete slabs, paved surfaces, gardens, infrastructure, concrete or brick footings associated with Phase 4 building or extensions.

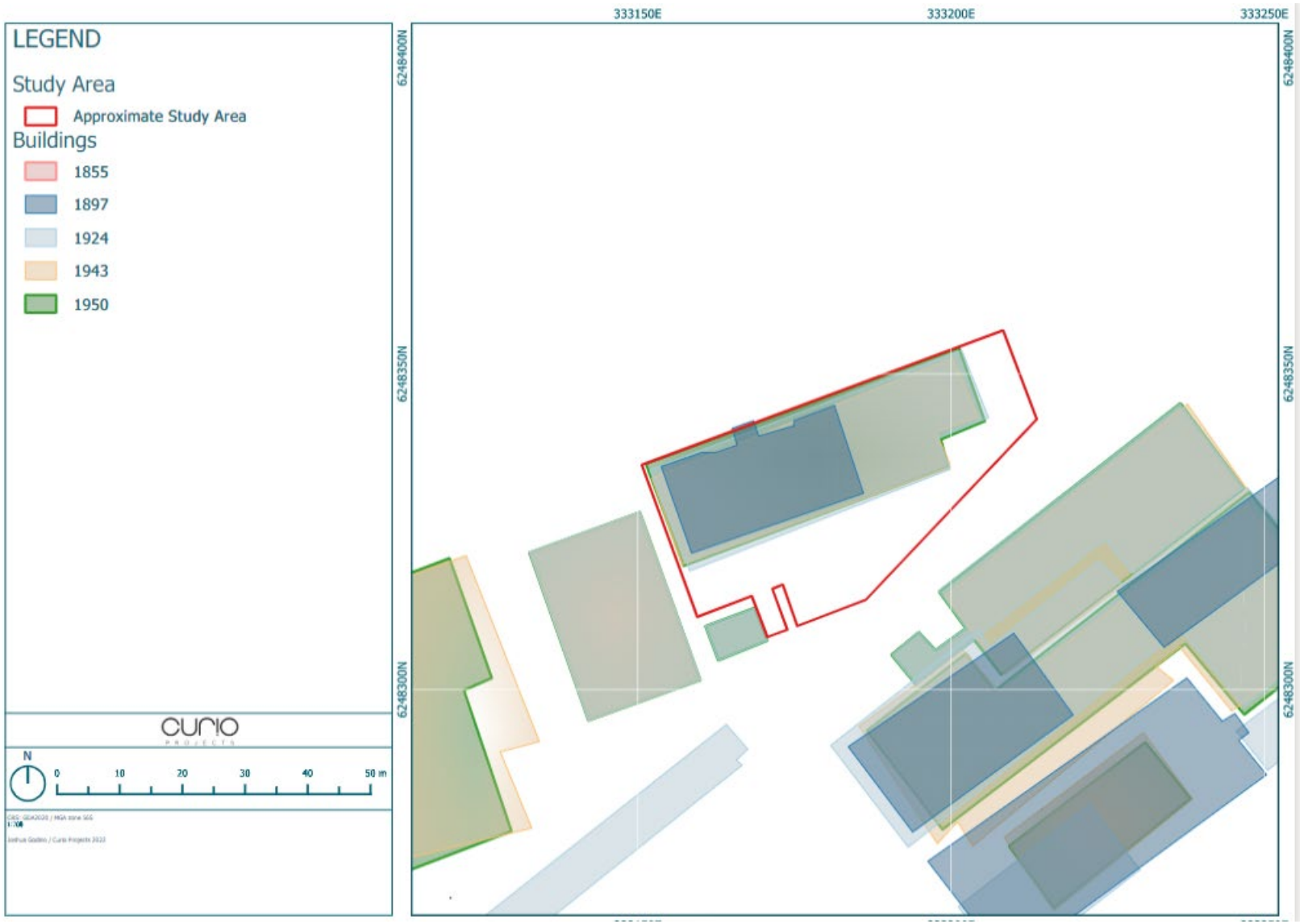

Figure 5-8: Compilation overlay showing identified extension of the CME building from the 1850s to 1950s. Source: Curio 2022

5.6. Archaeological Potential

5.6.1. Assessment of Archaeological Potential

Table 5-5 presents an assessment of archaeological potential, guided by previous investigations, known occupation and impacts in the study area.

Table 5-5: Archaeological assessment

Occupation phase	Assessment of Archaeological Potential
Phase 1 1788-c1822 Post-European arrival	Based on known land use and development, there is nil potential for archaeological evidence of Phase 1 occupation to survive in the study area. Archaeological resources associated with this period would be highly ephemeral and fragile, for example tree boles associated with land clearing and are unlikely to have survived later development activities.
Phase 2 John Chisolm Estate 1822- 1885	Based on known land use and development, there is nil to low potential for archaeological evidence of Phase 2 occupation to survive in the study area. Archaeological resources associated with this period would be highly ephemeral and fragile, for example tree boles associated with land clearing or postholes associated with fencing and are unlikely to have survived later development activities.
Phase 3 Construction of first rail line 1885- 1887	Based on known land use and development, there is low to moderate potential for archaeological evidence of Phase 3 occupation to survive in the study area. Archaeological resources associated with this period may be ephemeral such as postholes from fencing, or may be more durable such as abandoned rail infrastructure such as machine pits or rail line or artefact bearing deposits associated with rail workers.
Phase 4 Chief Mechanical Engineers Building 1885-Early 2000s	Based on known land use and development, there is moderate potential for archaeological evidence of Phase 4 occupation to survive in the study area. An archaeological resource associated with this phase is likely to be industrial and durable in nature, such as utilities, buildings footings from extensions, machine pits, concrete slabs or paved surfaces.

5.7. Assessment of Archaeological Significance

The following assessment of archaeological significance is based on known occupation and development in the study area.

Table 5-6: Assessment of Archaeological Significance

Occupation phase	Assessment of Archaeological Significance
Phase 1 1788-c1822 Post- European arrival	In the unlikely event that potential archaeological resources associated with the Phase 1 were encountered in the study area, they are unlikely to meet the threshold for local or State significance under any of the NSW Heritage Criteria. Potential archaeological resources would be highly ephemeral in nature and represent ubiquitous land use activities such as vegetation clearing and the erection of fences. Potential Phase 1 archaeological resources are unlikely to reach the threshold for local or State significance.
Phase 2 John Chisolm Estate 1822- 1885	In the unlikely event that potential archaeological resources associated with the Phase 2 were encountered in the study area, they are unlikely to meet the threshold for local or State significance under any of the NSW Heritage Criteria. Potential archaeological resources would be highly ephemeral in nature and represent ubiquitous land use activities such as vegetation clearing and the erection of fences. Potential Phase 2 archaeological resources are unlikely to reach the threshold for local or State significance.
Phase 3 Construction of first rail line 1885- 1887	Archaeological evidence of Phase 3 such as artefact bearing deposits may have significance under Criteria A and D under the NSW Heritage Criteria at a local level, depending on their integrity and context. Structural evidence of Phase 3 not associated with artefact bearing deposits would be considered 'works' under the Heritage Act. Potential Phase 3 archaeological resources may reach the threshold for local significance or may be considered 'works' under the Heritage Act.
Phase 4 Chief Mechanical Engineers Building 1885-Early 2000s	Archaeological evidence of Phase 4 would not meet the threshold for local of State significance under any of the NSW Heritage Criterion. Development of this phase of the study area is well documented through cartographic recordings and the extant CME building. Potential Phase 4 archaeological resources are unlikely to reach the threshold for local or State significance.

5.7.1. Summary of Archaeological Potential in the Study Area

This assessment has found that the study area has the following non-Aboriginal potential and significance. The location of areas containing archaeological potential are illustrated in Figure 5-9.

- Phase 1
    - Nil potential to contain archaeological resources associated with Phase 1 occupation. If encountered, these remains are unlikely to reach the threshold of local or State significance.
- Phase 2
    - Nil to low potential to contain archaeological resources associated with Phase 2 occupation. If encountered, these remains are unlikely to reach the threshold of local or State significance.

- Phase 3
    - Low to Moderate potential to contain archaeological resources associated with Phase 3 occupation. If encountered, these remains may reach the threshold of local significance or may be considered 'works'
- Phase 4
    - Moderate potential to contain archaeological resources associated with Phase 4 occupation. If encountered, these remains are unlikely to reach the threshold of local or State significance.

Overall, the study area has been found to have moderate archaeological potential associated with Phases 3 and Phase 4, however potential archaeological resources associated with these phases are unlikely to reach the threshold of local or State significance or may be considered 'works' under the Heritage Act.

Figure 5-9: Phase 3 and Phase 4 Low-moderate archaeological potential of the study area indicated in green, with existing building shown in orange.

6. Proposed Works

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6. Proposed Works

6.1. Proposed Development

This application seeks consent for the heritage conservation and adaptive reuse of the CME Building, which includes:

- Internal and external heritage conservation works to make the building suitable for adaptive reuse, including painting, repairs and refurbishment of the existing building (primarily internally) and installation of services to support future usage for offices or the like
- Building upgrades to ensure compliance with the Building Code of Australia, including accessibility and fire safety requirements
- Removal of any hazardous building materials
- Minor landscaping works

No significant additions (except those necessary to facilitate the introduction of new services, amenities and equitable access)) or substantive demolition of external heritage fabric is envisaged as part of the project. Internal changes comprise the removal of some internal walls and alterations to building fabric to create suitable spaces and compliant paths of travel.

The scope relevant to this HAA is outlined in the following sections, with all technical scope documents provided in Appendix 1. A summary of subsurface impact is outlined in Table 6-1 and on Figure 6-6.

Table 6-1: Summary of subsurface impacts

Impact	Depth of Subsurface Impact	Location of Impact
Excavation of ground surface below floor level for termite protection	300mm	Building footprint, excluding Rooms G3C, G8, G9, G18, G19 and G20
Removal of existing piers	600mm	Building footprint, excluding Rooms G3C, G8, G9, G18, G19 and G20
New footings	600mm	Building footprint, excluding Rooms G3C, G8, G9, G18, G19 and G20
Termite Protection	300mm	Building footprint, excluding Rooms G3C, G8, G9, G18, G19 and G20
Accessible Ramp	300mm	Wilson Street main entry
Garden and new fence along Wilson Street	300mm	Wilson Street
In ground water tank	2000mm	South-eastern corner
Tree removal	1000mm	Wilson Street
Various services	800mm	Across study area

6.1.1. Architectural Works

The relevant scope of works for architectural works comprises:

- Removal of existing piers below floor level
- New footings at 600m excavated depth across ground floor (excluding Rooms G3C, G8, G9, G18, G19 and G20) (Figure 6-1)
- 300mm depth excavation of ground surface below floor level for termite protection (excluding Rooms G3C, G8, G9, G18, G19 and G20)

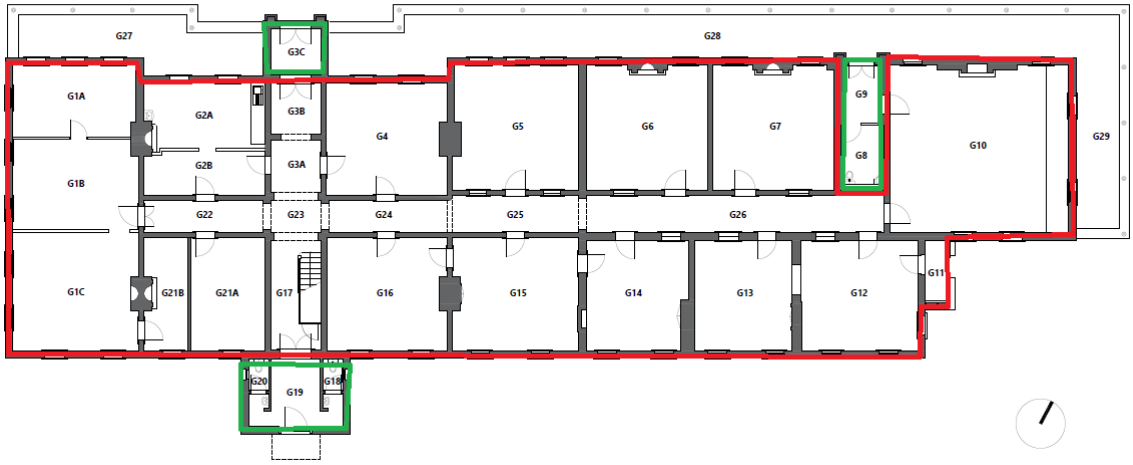

Figure 6-1: Architectural scope of works, with rooms to have subsurface reduction indicated in red and rooms with concrete floors and no impact in green. Source: Curio 2022 with markup

6.1.2. Landscaping

The scope of works for landscaping (Figure 6-2) comprises:

- new accessible walkway to be provided from Wilson Street to CME building main entrance
    - Will include slight grading of existing ground surface
- new accessible building entry/step ramp to be provided at Wilson Street frontage
- existing gateway and flanking pillars to be retained and maintained as the main entry to facility
- boundary fence to Wilson Street to be replaced
- existing weed species and tree regrowth to be removed
- new garden bed (rear of the site) to be provided which is to include raised sandstone edging, with existing asphalt to be removed.
- area around existing palm tree is to be replenished with topsoil and planted with hardy groundcovers.
- in-ground water tank to be provided within the south-eastern portion of the site behind the existing CME building
- In-ground water tank on south-eastern corner
- Removal of small *Celtis australis* (European Hackberry) tree north-east of CME building
- Excavation for stormwater pits

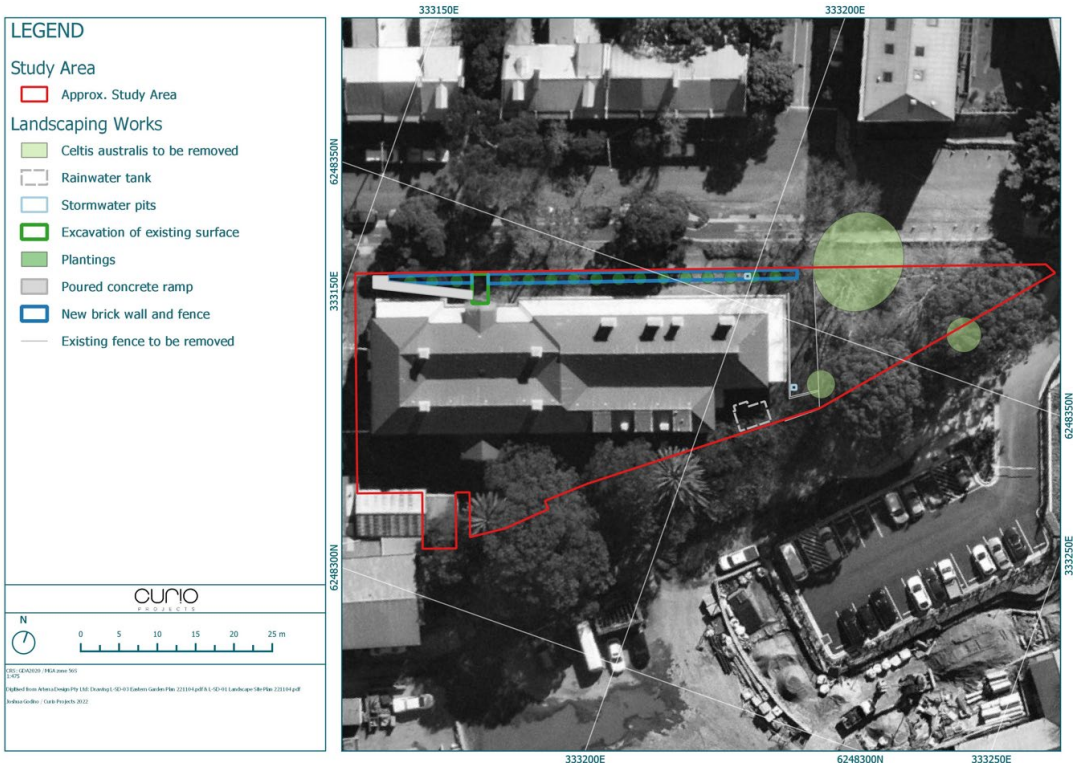

Figure 6-2: Landscaping scope of work

6.1.3. Fire Services

The scope of work for fire services comprises:

- Excavation of service lines for hydrants (6-800mm depth) (Figure 6-3)

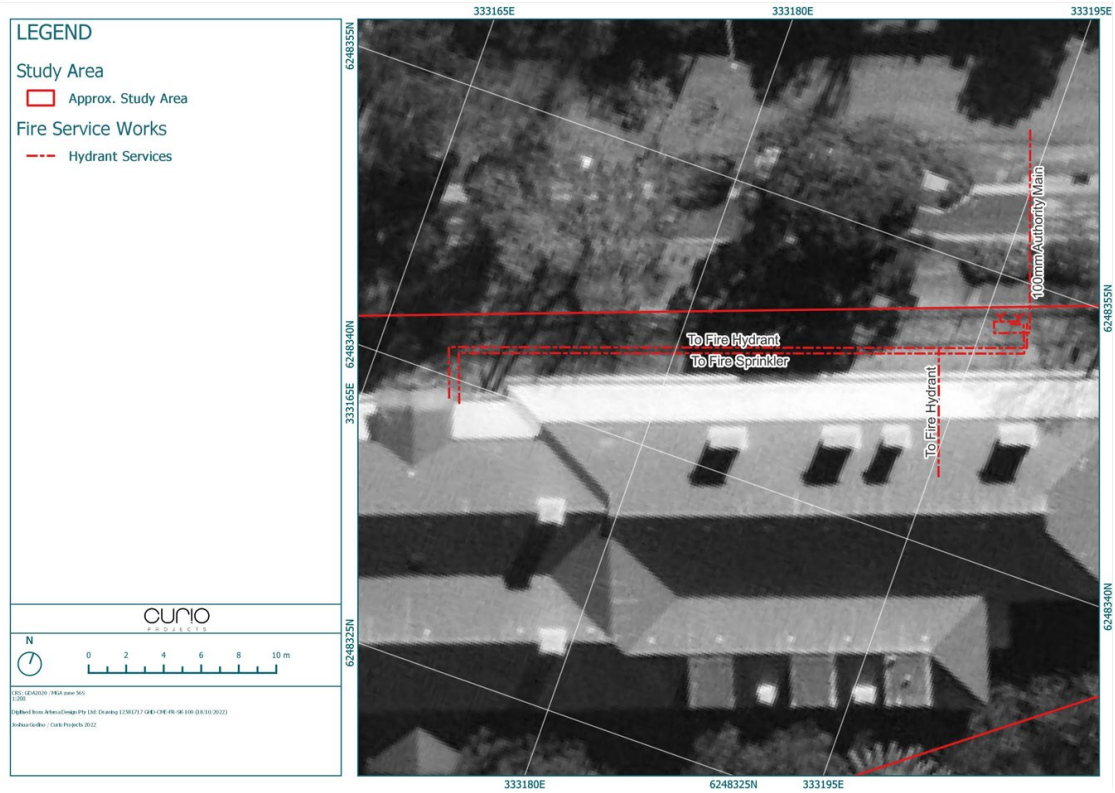

Figure 6-3: Fire services scope of work

6.1.4. Hydraulic Services

The scope of work for hydraulic services (Figure 6-4) comprises:

- Service excavation for:
  - Sewer
  - Stormwater
  - Potable water
  - Rainwater
  - Rainwater/detention tank
  - Inground sanitary drainage

Figure 6-4: Hydraulic services scope of work

6.1.5. Mechanical Services

The scope of work for mechanical services (Figure 6-5) comprises:

- Leveling of asphalt to allow building air vents to be exposed along western and southern sides of CME building
- Trench for refrigerant pipework
- Outside air duct work

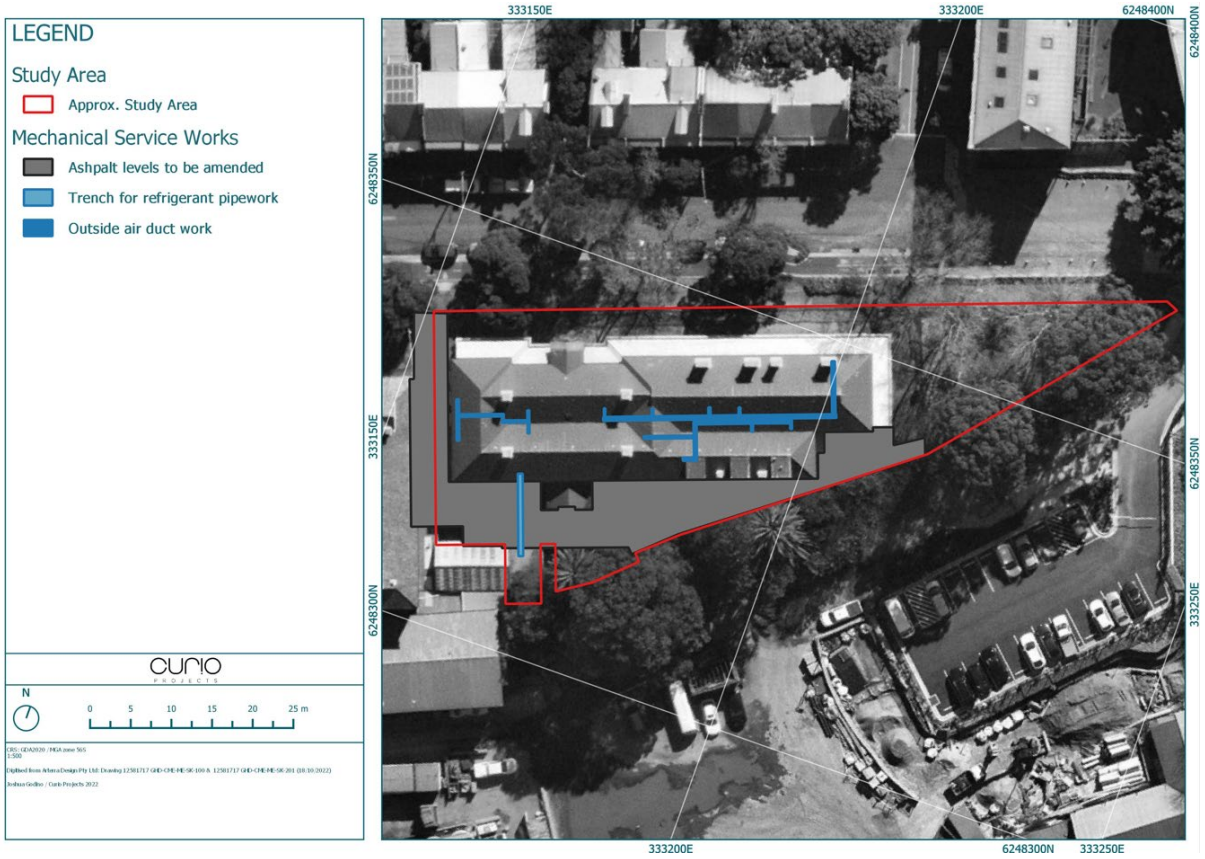

Figure 6-5: Mechanical services scope of work

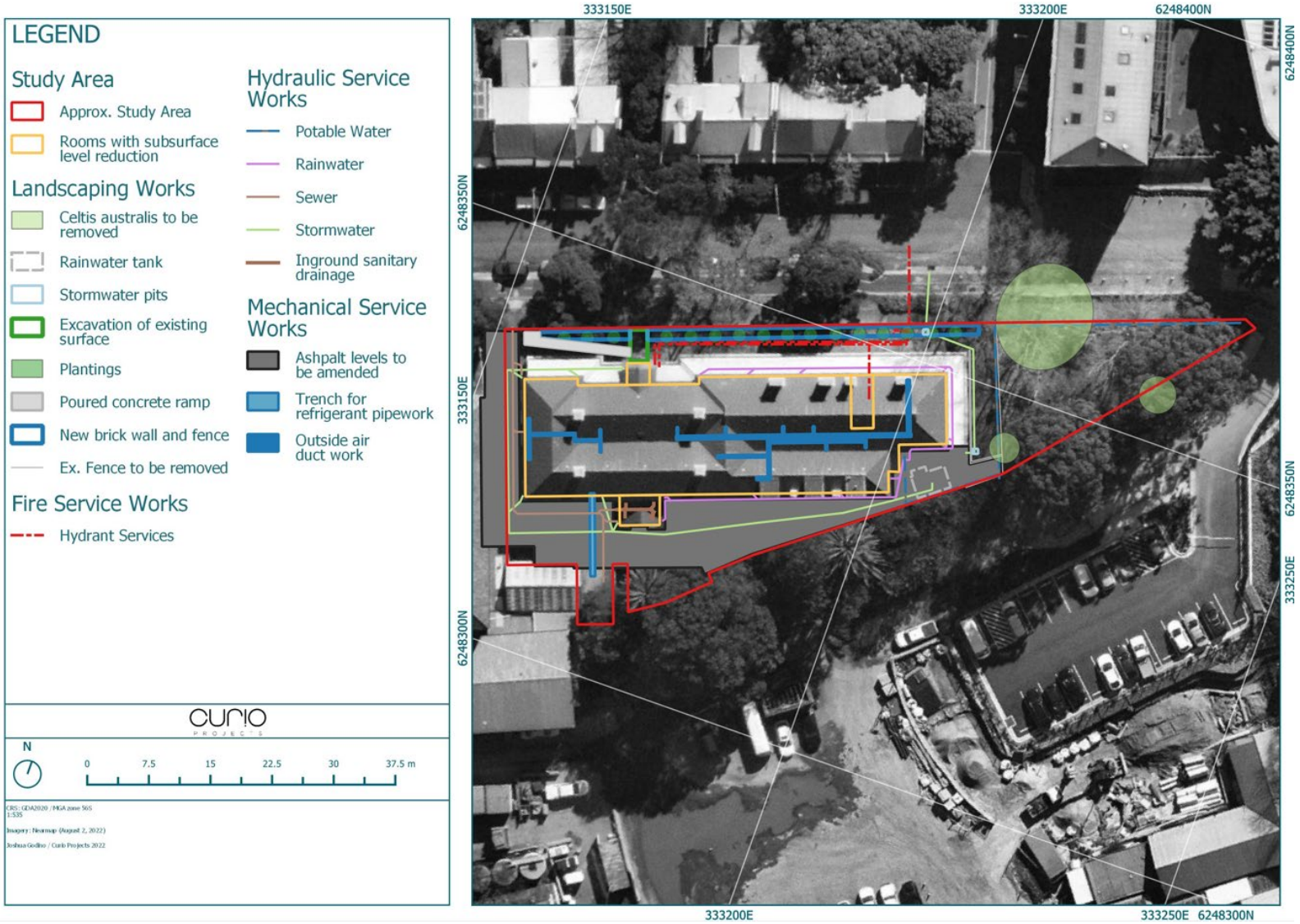

Figure 6-6: Summary of Proposed Ground Disturbing Works

7. Archaeological Impact Assessment

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7. Archaeological Impact Assessment

7.1. Overlay of Proposed Works

Figure 7-1 presents an overlay of the identified archaeological potential against the proposed subsurface impacts. The archaeological potential is considered low-moderate across the study area, including under the current CME building footprint.

Figure 7-1: Overlay of proposed subsurface impact against low-moderate archaeological potential indicated in green.

7.2. Historical Archaeological Impact Assessment

The potential of the proposed works to impact an archaeological resource is assessed below in consideration of the relevant questions from the Heritage Division's (now Heritage NSW, DPC) guidelines for Statements of Heritage Impact (2002).

Table 7-1: Statement of Heritage Impact Questions

Heritage consideration	Discussion
Is the addition sited on any known, or potentially significant archaeological deposits?	This assessment has not identified any known archaeological resources within the study area. The study area has been assessed to have a low to moderate potential to contain unexpected archaeological resources associated with the construction and use of the CME building, however these potential resources are considered unlikely to meet the threshold of significance and would be unlikely to be considered as 'relics' requiring archaeological investigation and mitigation. Therefore, the proposed development would be unlikely to impact on any historical archaeological relics or resource of significance and there is no compelling reason to avoid or amend the proposed works. Mitigation in the form of archaeological monitoring is recommended, with an Unexpected Finds Procedure to be followed throughout the course of the works. Should relics be suspected during works, works will cease, and Heritage NSW will be notified.

8. Conclusions and Recommendations

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8. Conclusions and Recommendations

8.1. Conclusions

The following conclusions have been determined as a result of this HAA:

- The study area is listed as of State heritage significance on the SHR as *Eveleigh Chief Mechanical Engineers Office and Moveable Relics* (SHR #01139) and within the *Everleigh Railway Workshops* curtilage (SHR #01140)
- The proposed works will have subsurface impacts up to 800mm across much of the study area, with localised deeper excavation
- The study area has been subject to four post-1788 land use and development phases:
    - Phase 1: Post-European arrival (1788-c1822)
    - Phase 2: John Chisolm Estate (1822- 1885)
    - Phase 3: Construction of first rail line (1885- 1887)
    - Phase 4: Chief Mechanical Engineers Building (1885-Early 2000s)
- This assessment has found that the study area has the following archaeological potential and significance:
    - Phase 1: Nil potential to contain archaeological resources associated with Phase 1 occupation. If encountered, these remains are unlikely to reach the threshold of local or State significance.
    - Phase 2: Nil to low potential to contain archaeological resources associated with Phase 2 occupation. If encountered, these remains are unlikely to reach the threshold of local or State significance.
    - Phase 3: Low to Moderate potential to contain archaeological resources associated with Phase 3 occupation. If encountered, these remains may reach the threshold of local significance or may be considered 'works'
    - Phase 4: Moderate potential to contain archaeological resources associated with Phase 4 occupation. If encountered, these remains are unlikely to reach the threshold of local or State significance.

8.2. Recommendations

In accordance with the above conclusions, the following recommendations are made:

1. Archaeological Monitoring

    As subsurface excavations are proposed in areas assessed as having moderate and low-moderate potential to contain archaeological resources that may contain historical and research significance at a local level, it is recommended that archaeological management in the form of monitoring be carried out under a *s139(4) excavation permit exception*.

    a. *s139(4) excavation permit exception*: A s139(4) excavation permit exception allows for archaeological test excavations under Exception 2(d) or monitoring under Exception 2(e) to confirm the presence of significant archaeological resources. However, it does not permit the removal of, or impact to, archaeological 'relics' of local or State significance as defined by the Heritage Act. Impacts to 'relics' are only permitted under a *s140 excavation permit* (see below). While no application is required for a *s139(4) excavation exception;* an Archaeological Research Design (ARD), Archaeological Work Method Statement and Unexpected Finds Procedure must be

prepared prior to works commencing and used to guide the archaeological program. Investigations must be carried out by a qualified archaeologist.

b. Should suspected relics be identified over the course of the works, works will cease immediately and Heritage NSW will be notified, in accordance with the Unexpected Finds Procedure.

2. Additional Works

Should any additional impacts to the proposed scope outlined in Section 6 be proposed, an addendum to this report will be required to assess the impacts.

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8.3. Architectural Plans

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