



Chief Mechanical Engineer's Building

Conservation Management Plan (Draft)

February 2023

Document Information

Citation

Curio Projects 2022, *Conservation Management Plan (DRAFT) – Chief Mechanical Engineer's Building*

Local Government Area

City of Sydney Council

Issue	Issue date	Version	Notes/Comments	Author(s)	Review
1	15.12.22	Draft Report	Client Review	Mikhaila Chaplin Natalie Vinton Sebastian Gerber-Hood Tatiana Barreto Alex Thorn	Dr Jody Steele (Curio) Natalie Vinton (Curio) Jenny Faddy (TfNSW) Emma McGirr (TfNSW)
2	22.12.22	Final Draft Report	Final Draft	Mikhaila Chaplin Natalie Vinton Ian Bainsbridge	Natalie Vinton (Curio) Jenny Faddy (TfNSW) Emma McGirr (TfNSW)
3	8.01.23	Draft Report	Final Draft for Exhibition with SSDA	Ian Bainsbridge Natalie Vinton	Jenny Faddy (TfNSW)
4	16.02.23	Final Draft	Revised to incorporate Jenny Faddy Comments as per email dated 10/2/23	Ian Bainsbridge	Natalie Vinton

This Conservation Management updates and supersedes the 1997 Paul Rappoport Architect Heritage Consultant and Caldis Cook Group Pty Ltd.

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.

Unless otherwise specified or agreed, copyright in the intellectual property of this report vests jointly in Curio Projects Pty Ltd.

Curio Projects Pty Ltd
5 Blackfriars Street
Chippendale NSW 2008

Contents

Document Information	2
Terminology & Abbreviations	9
1. Introduction	11
1.1. Purpose of This Report	12
1.2. Background	13
1.2.1. Site Location	13
1.3. Limitations & Constraints	17
1.4. Authorship & Acknowledgements	17
2. Statutory Context	19
2.1. Environment Planning and Assessment Act 1979	20
2.2. State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021	20
2.3. Sydney LEP 2012	21
2.4. NSW Heritage Act 1977	22
2.5. Section 170 Heritage and Conservation Register	26
2.5.1. NSW National Parks and Wildlife Act 1974	26
2.5.2. Environment Protection & Biodiversity Conservation Act 1999	27
2.6. Heritage Items & HCAs in the Vicinity	27
2.6.1. Non-Statutory Heritage Registers	28
3. Historical Analysis	30
3.1. Historical Summary Timelines	31
3.1.1. Summary of North Eveleigh Precinct Development	31
3.1.2. CME Building Timeline	33
3.2. Pre-Colonial Landscape & Early Land Grants Summary	34
3.2.1. Post Contact History	37
3.2.2. Early Land Grants and Development	39
3.3. Eveleigh Railway Workshops	40

3.3.1. South Eveleigh	41
3.3.2. North Eveleigh	42
3.4. Chief Mechanical Engineers Building	44
3.4.1. Construction timeframes	44
3.4.2. Modifications & Alterations	62
3.4.3. Previous/ Current Important Previous Buildings and Features	63
3.5. Role of the CME Building within Eveleigh	67
3.6. Management Systems Applied at Eveleigh	68
3.7. Heist on Wilson Street	70
3.8. Engineers Employed at the Chief Mechanical Engineers Building	70
3.8.1. Mr. William Thow (CME 1889-1911)	71
3.8.2. Mr. Ernest Edward Lucy (CME 1911-1932)	72
3.8.3. Mr. Walter Russell (Assistant CME 1918 to 1920)	75
3.8.4. Mr. A. D. J. Forster (CME 1920 to 1925)	75
3.8.5. Mr. Harold Young (CME 1932 to 1950)	76
3.8.6. Mr. C. Cardew (Assistant CME 1955 to 1963)	77
3.8.7. W.H. Armstrong (CME 1951 to 1956)	80
3.8.8. Mr. F. P. Heard (CME 1956 to 1966)	82
3.8.9. Mr. W. Waite (CME 1966 to 1973)	82
3.9. Decline & Closure of CME Building	83
3.10. Recent History of CME Building	86
3.11. Historical Thematic Framework	86
3.11.1. Themes for the CME Building	86
4. Physical Description	88
4.1. Site & Setting	89
4.1.1. North Eveleigh Precinct	89
4.2. Neighbourhood Context	91
4.3. CME Building	93
4.3.1. Updated Room Numbers	93

4.3.2. CME Building – Ground Floor (Updated 2022 Room Numbers)	95
4.3.3. CME Building – First Floor (Updated 2022 Room Numbers)	96
4.4. Phases of Construction	97
4.5. CME Building – Interiors	98
4.5.1. Floors	98
4.5.2. Ceilings	100
4.5.3. Doors	105
4.5.4. Windows	114
4.5.5. Skirting	118
4.5.6. Architraves	120
4.5.7. Fireplaces	122
4.5.8. Paintwork	124
4.5.9. Staircase	126
4.6. CME Building – Exteriors	129
4.6.1. The Balcony	130
4.6.2. Verandah	133
4.6.3. Roof & Chimneys	134
4.7. Landscape - North	136
4.7.1. Landscape -East	137
4.7.2. Landscape- South	140
4.7.3. Landscape - West	142
4.8. Moveable Heritage	143
4.8.1. Fireplace surrounds as moveable heritage	146
5. Archaeology	147
5.1. Previous Archaeological Assessments	148
5.2. Historical Archaeology	148
5.2.1. Summary of Archaeological Potential in the Study Area	148
5.2.2. Archaeological Significance	149
5.3. Aboriginal Archaeology	149

5.3.1. Desktop Assessment	150
5.3.2. Summary of Desktop Assessment	151
6. Significance	152
6.1. Previous Statements of Significance	153
6.1.1. ERW	153
6.1.2. Eveleigh Carriage Workshops	154
6.1.3. Redfern North Eveleigh Paint Shop Sub-Precinct	156
6.1.4. Chief Mechanical Engineers Office - Heritage NSW	157
6.1.5. Surrounding Heritage Listings	158
6.2. Assessing Significance Methodology and Criteria	159
6.3. Criteria for Assessment of Cultural Heritage Significance	160
6.3.1. Criterion (a) – Historical Significance	160
6.3.2. Criterion (b) – Associative Significance	161
6.3.3. Criterion (c) – Aesthetic Significance	162
6.3.4. Criterion (d) – Social Significance	162
6.3.5. Criterion (e) – Technical/ Research Potential Significance	163
6.3.6. Criterion (f) – Rarity	164
6.3.7. Criterion (g) – Representativeness	164
6.4. Summary Statement of Heritage Significance	164
6.5. Significant Views	165
6.6. Heritage Curtilage	165
6.7. Gradings of Significance	166
6.8. Significant Diagrams	170
6.8.1. Elevations	170
6.8.2. Floor Plans	174
6.9. Summary Statement of Archaeological Significance	177
6.9.1. Historical Archaeological Significance	177
6.9.2. Aboriginal Cultural Heritage Significance	177
6.10. Comparative Analysis	179

7. Opportunities & Constraints	183
7.1. Background	184
7.2. CME Building & Site – Opportunities and Constraints	185
7.2.1. Legal & Statutory Obligations	186
7.2.2. Significance	186
7.2.3. Site Ownership & Management	186
Opportunities	187
Constraints	187
7.2.4. External Factors	187
7.2.5. Overall Context and Setting	188
7.2.6. Views and Viewscapes	189
7.2.7. Threshold for Change	190
7.3. Landscaping	192
7.3.1. Opportunities	193
Constraints	194
7.3.2. Moveable Heritage Collection – Opportunities	194
7.3.3. Archaeology	195
Archaeology Opportunities	196
Constraints	196
7.4. Aboriginal Heritage	197
7.4.1. Constraints	197
7.4.2. Cultural Heritage Tourism, Education & Interpretation	198
7.4.3. Heritage Interpretation	198
Opportunities	199
7.4.4. Constraints	200
COMMUNITY CONSULTATION	201
7.5. Summary	201
8. Conservation Policies	202
8.1. Conservation Policy Development	203

8.2. Conservation Policies	203
9. Inventory Datasheets	202
References	626
Appendices	633

Terminology & Abbreviations

The terms below used in this report are defined as per the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter) 2013 Articles 1.1 to 1.17:

- **Place** means a geographically defined area. It may include elements, objects, spaces, and views. Places may have tangible and intangible dimensions.
- **Cultural Significance** means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.
- **Fabric** means all the physical material of the place including elements, fixtures, contents and objects.
- **Conservation** means all the processes of looking after a place so as to retain its cultural significance.
- **Maintenance** means the continuous protective care of a place, and its setting. Maintenance is to be distinguished from repair, which involves restoration or reconstruction.
- **Preservation** means maintaining a place in its existing state and retarding deterioration.
- **Restoration** means returning a place to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.
- **Reconstruction** means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material.
- **Adaptation** means changing a place to suit the existing use or a proposed use.
- **Use** means the functions of a place, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.
- **Compatible use** means a use which respects the cultural significance of a place. Such use involves no, or minimal, impact on cultural significance.
- **Setting** means the immediate and extended environment of a place that is part of or contributes to its cultural significance and distinctive character.
- **Related place** means a place that contributes to the cultural significance of another place.
- **Related object** means an object that contributes to the cultural significance of a place but is not at the place.
- **Interpretation** means all the ways of presenting the cultural significance of a place.

Abbreviation	Explanation
ARD	Archaeological Research Design
ARHS	Australian Railway Historical Society
ATP	Australian Technology Park
ATPSL	Australian Technology Park Sydney Limited
CME	Chief Mechanical Engineer
CMP	Conservation Management Plan
DPIE	Department of Planning, Industry and Environment
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environmental Protection and Biodiversity Act 1999
ERW	Eveleigh Railway Workshops
Heritage Act	Heritage Act 1977
HCA	Heritage Conservation Area
HIS	Heritage Interpretation Strategy
ICOMOS	International Council on Monuments and Precincts
LEP	Local Environmental Plan
NLA	National Library of Australia
OCP	Otto Cserhalmi + Partners
RL	Reduced Level
RNEP	Redfern North Eveleigh Precinct
RWA	Redfern–Waterloo Authority
SCA	Sydney City Archives
SHI	State Heritage Inventory
SLNSW	State Library of New South Wales
SHR	State Heritage Register
SSD	State Significant Development
SSP	State Significant Precincts
SSP SEPP 2005	State Environmental Planning Policy (State Significant Precincts) 2005
Sydney LEP 2012	Sydney Local Environment Plan 2012
TfNSW	Transport for NSW
UGDC	Urban Growth Development Corporation

1. Introduction

1. Introduction

1.1. Purpose of This Report

Curio Projects Pty Ltd (Curio Projects) has been commissioned by Transport for NSW (TfNSW) to update the 1997 Chief Mechanical Engineers Building (CME Building) Conservation Management Plan (CMP) by Paul Rappoport Architects and Caldis Cook Group Pty Ltd to ensure that the CMP for the Chief Mechanical Engineers Building subject site is consistent with and complies with, current NSW statutory and non-statutory heritage requirements and guidelines.

This CMP is the second comprehensive CMP to be prepared for the CME Building which is individually listed as an item of State heritage significance (SHR No. 5014147) on the NSW State Heritage Register. In particular, this report builds upon the significant work undertaken by Paul Rappoport, P & Caldis Cook Group Pty Ltd in 1997, *Chief Mechanical Engineer's Building, 327 Wilson Street, Chippendale. Eveleigh Locomotive Workshops, Conservation Management Plan*, which was prepared for State Rail Authority of NSW, and does not seek to replace, but rather update and add to, the significant work undertaken for the previous CMP.

This CMP has been prepared to comply with the recent refresh of the Heritage NSW suite of CMP guidelines which were updated and reissued in 2021. The guidelines require CMPs to be user-friendly, written in plain English and accessible to heritage practitioners and the general public alike. Specifically, the CMP has been prepared in accordance with the:

- Heritage Council of NSW, *Statement of Best Practice for Conservation Management Plans*, 2021
- Heritage Council of NSW, *Guidance on Developing a Conservation Management Plan*, 2021
- Heritage Council of NSW, *Conservation Management Plan Checklist*, 2021

In addition, the CMP has been prepared in accordance with the following publications:

- ICOMOS, *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*, 2013
- NSW Heritage Office, *Assessing Heritage Significance*, 2001.
- Kerr, J. S., *The Conservation Plan: A Guide to the Preparation of Conservation Plans for Places of European Cultural Significance*, (7th Ed), NSW, National Trust of Australia (NSW), 2013.

The Chief Mechanical Engineers Building CMP should be utilised as the key point of reference for the management of heritage at the CME Building subject site to ensure that all future development at the CME Building responds to a clear, holistic overarching vision to conserve the fundamental heritage values of the building.

Preparation of this revised CMP has included extensive additional primary research and has considered the following relevant previous assessments and reports prepared for the site:

- Paul Rappoport Architects and Caldis Cook Group Pty Ltd, 1997. *Chief Mechanical Engineers Building Conservation Management Plan*. Prepared for State Rail Authority of NSW.
- OCP Architects (Curio Projects Update), 2022. *Eveleigh Railway Workshops: Overarching Conservation Management Plan*. Prepared for Transport for NSW.
- Otto Cserhalmi & Partners PL, 2002. *Eveleigh Carriageworks Conservation Management Plan Volume I*. Prepared for State Rail Authority.
- Curio Projects, 2022. *Redfern North Eveleigh Precinct Renewal Project: Non-Aboriginal Heritage Study & SOHI- Paint Shop Sub-Precinct*. Prepared for Transport for NSW.
- Artefact Heritage, 2022. *Redfern North Eveleigh Precinct Renewal: Aboriginal Cultural Heritage Study*. Report to Transport for NSW.
- Balarinji, 2022. *Connecting with Country Framework*. Prepared for TfNSW.

1.2. Background

1.2.1. Site Location

The Chief Mechanical Engineer's Building (CME Building) is located at 505 Wilson Street, and forms part of Lot 5 in Deposited Plan 1175706.

The CME Building as shown in Figure 1.1 and its curtilage for the purposes of this CMP (the subject site) is outlined in **Error! Reference source not found.** and Figure 1.5.



Figure 1.1: Northern façade of the Chief Mechanical Engineer's Building (existing), viewed from Wilson Street (Source: Ethos Urban)



Figure 1.2: Aerial showing extent of the CME Building subject site outlined in red (Source: Nearmap/ Ethos Urban)

The CME Building subject site is bounded to the north by Wilson Street; the Wilson Street driveway (that leads into the RNE Precinct) along the east and south; the CME Toilet Block to the south west; and the shared driveway with the Scientific Services Building No.1 to the West (as highlighted in Figure 1.2).

The CME Building subject site is located in the north-eastern corner of the Redfern North Eveleigh Precinct (RNE Precinct) and forms part of the Paint Shop Sub- Precinct study area within the RNE Precinct (as shown Figure 1.4 and Figure 1.5).



Figure 1.3: Redfern North Eveleigh Precinct with the CME Building outlined in red. (Source: TfNSW with Curio additions in red)

The Redfern North Eveleigh Precinct sits within the wider Redfern-Waterloo Authority Site's State Significant Precinct (SSP). The Redfern North Eveleigh Precinct is 10 hectares of land owned by Transport Asset Holding Entity (TAHE) at the southern edge of Redfern Station, located between the rail corridor and Wilson Street.

The Redfern North Eveleigh Precinct, including the CME Building, is the subject of an approved Part 3A Concept Plan (MP08_0015) which continues to apply to the land pursuant to Schedule 2 of *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*. TfNSW is currently preparing a SSP Study for the Paint Shop Sub-Precinct within the wider Redfern North Eveleigh Precinct, which was exhibited between 26 July and 25 August 2022. It is noted that the SSP Study indicates that the Concept Approval would be superseded should the proposed rezoning of the Paint Shop Sub-Precinct be approved.

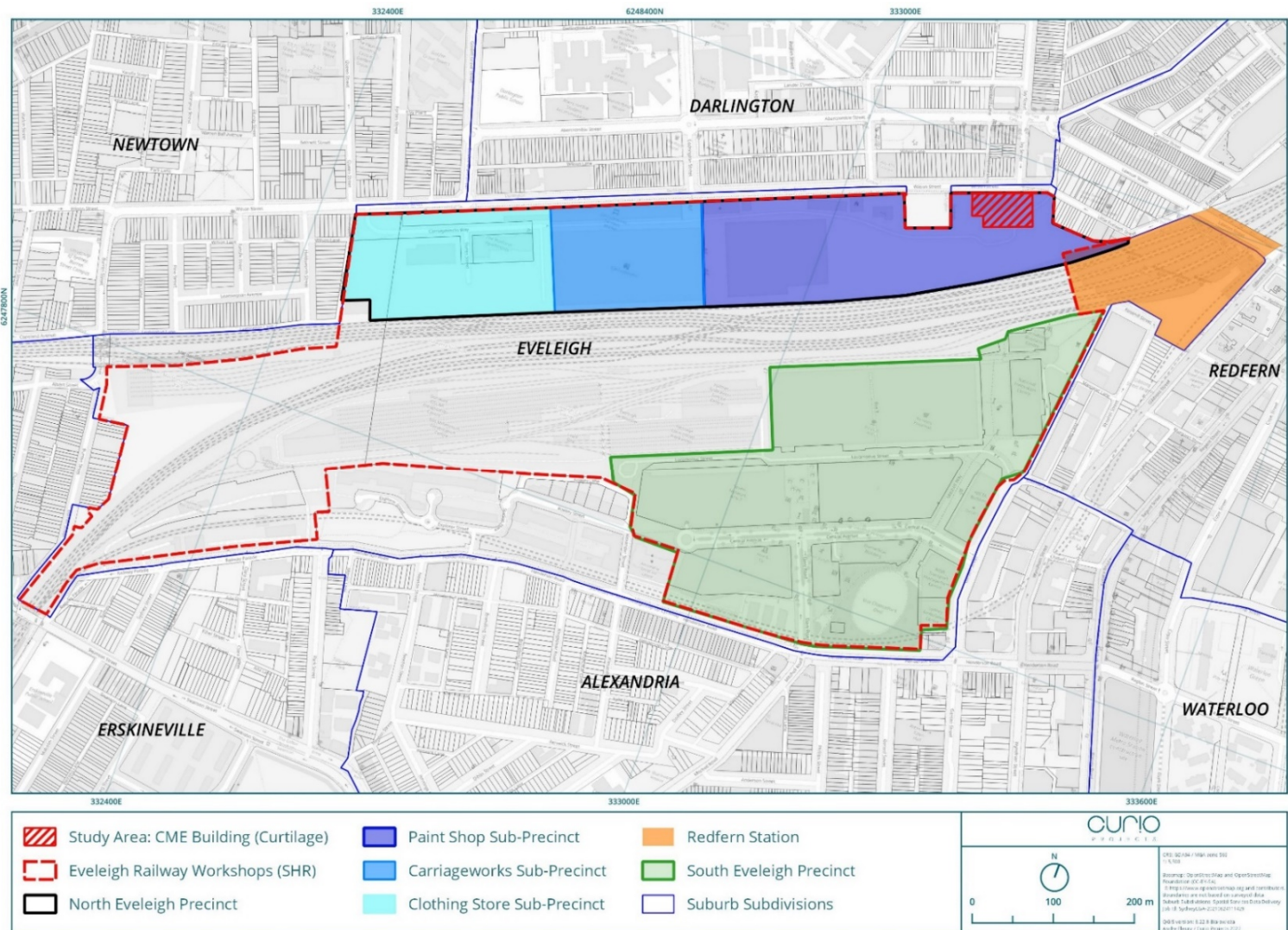


Figure 1.4: The CME Building subject site located within the wider Eveleigh Railway Precinct (Source: Curio Projects)

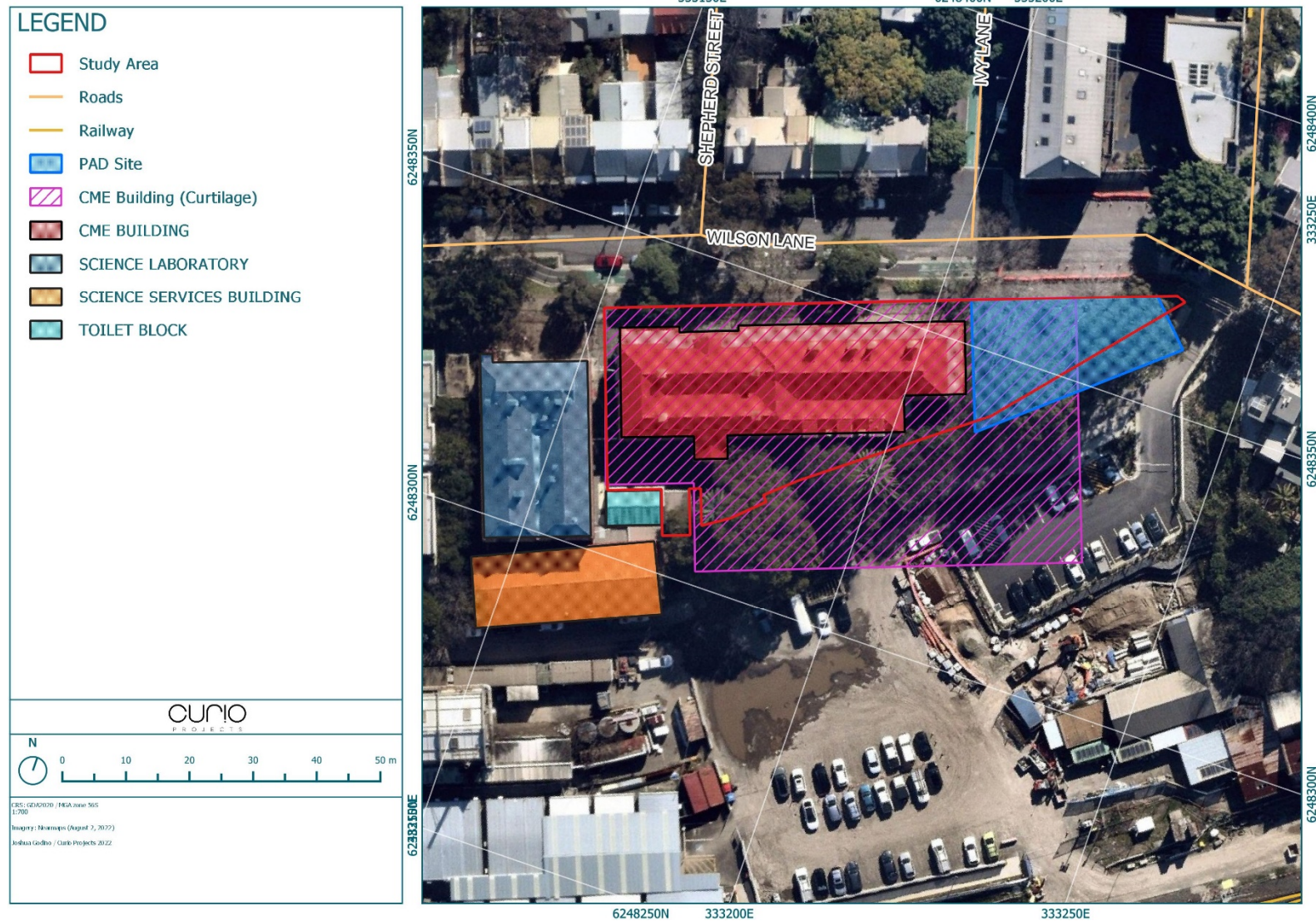


Figure 1.5: Study area outlined in red (Source: Curio Projects)

1.3. Limitations & Constraints

This report has been prepared using a combination of the extensive historical data and documentation already available for the site in the existing CMP (1997), the historical information contained in previous heritage studies prepared for Eveleigh Railway Workshops, where relevant, and extensive additional new primary research undertaken by Curio. The additional new primary historical research has been undertaken with a focus on photographic data and archival historical documentation, as well as with respect to the broader heritage values and significance of the site to the local Redfern Aboriginal community, as well as the connection of the RNE Precinct to the history and function of the Eveleigh Railway Workshops, as a whole.

This CMP does not include a full assessment of the potential Aboriginal Cultural Heritage significance (intangible values) of the site and should be read in conjunction with the *Aboriginal Cultural Heritage Study & Statement of Impact: Redfern North Eveleigh Precinct Renewal Paint Shop Sub-Precinct* was prepared by Artefact in 2022 regarding the Aboriginal Cultural heritage values of the site, the RNE Paint Shop Sub-Precinct *Connecting with Country Framework* by Balarinji, and the reports prepared by Curio such as the 2022 *Historical Archaeological Assessment- CME Building, Statement of Heritage Impact- CME Building and Stage 1 Heritage Interpretation Plan – CME Building*, which provides a full study of the non-Aboriginal history and heritage values of the subject site.

Any future development of the site should undertake an Aboriginal Community Consultation as defined under the *National Parks and Wildlife Act 1974* and in accordance with the draft *Connecting to Country* framework published by the Government Architect NSW (2020).

1.4. Authorship & Acknowledgements

This version of the CMP was prepared by Mikhaila Chaplin, Archaeologist and Heritage Specialist, of Curio Projects, with senior specialist advice, input and review of this CMP undertaken by Natalie Vinton, CEO, and Dr Jody Steele, Director, of Curio Projects.

Historical research has been undertaken by Alex Thorne, Artefact & Heritage Specialist, Mikhaila Chaplin, Archaeologist and Heritage Specialist and Sebastian Gerber-Hood, Interpretation & Archaeology Specialist of Curio Projects.

GIS mapping has been undertaken by Andre Fleury, Historian and Archaeologist, and Josh Godino, GIS Specialist, both of Curio Projects.

The Conservation Policies Chapter has been undertaken by Tatiana Barreto, Built Heritage Specialist and Dr Jody Steele, of Curio Projects.

In the 1997 CMP, Paul Rappoport Architects and Caldis Cook Group Pty Ltd acknowledge the following people and groups for their assistance in the production of the 1997 CMP:

- Donald Ellsmore and Stuart Sharp, SRA Heritage Unit
- Ray Horsey, Facilities Management, RSA
- David Jackson and Don Hagarty, Australian Railway Historical Society
- Don Fraser, Institution of Engineers
- Victor Poljanski, SRA Archives Manager
- David Sheedy, Architect
- Don Godden, Godden Mackay
- Dr Lucy Laksa, University of New South Wales
- Richard Brown and Ken Chapman, RSA Testing Laboratories
- David Burke, Author of *Man of Steam*
- John Forsyth, SRA Archives Officer

- Otto Cserhalmi and Partners P/L

It is important to acknowledge their contribution to previous CME Building CMP, which has played a significant role in the updated CMP process.

2. Statutory Context

2. Statutory Context

In NSW, heritage items and known or potential archaeological resources are afforded statutory protection under three principal pieces of legislation:

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

The study area and items of movable heritage are listed in several 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 statutory 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 Curio's 2022 Non-Aboriginal Heritage Study report prepared for the RNE Precinct Paint Shop Sub-Precinct project.

2.1. Environment Planning and Assessment Act 1979¹

The NSW Department of Planning and Environment (DPE) 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 EPA Act also requires that potential Aboriginal and historical archaeological resources are adequately assessed and considered as part of the development process, in accordance with the requirements of the NPW Act and the Heritage Act.

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

SEPP (Precincts- Eastern Harbour City) 2021 commenced on 1 March 2022 and replaced parts of the SEPP (State Significant Precincts) 2005² and several Sydney Regional Environmental Plans (SREP's). SEPP (Precincts- Eastern Harbour City) 2021 is the principle environmental planning instrument that applies to the entire Eveleigh Railway Workshop (ERW) site, including the CME building and both the Redfern North Eveleigh Precinct and South Eveleigh (Figure 2.1).

- The Chief Mechanical Engineer's Building is included in the SEPP (Precincts – Eastern Harbour City) 2021 as part of the State Significant Precinct *Redfern-Waterloo Authority Sites*.³
- The Chief Mechanical Engineer's Building is identified as a heritage item within the precinct (Administration Building, Former Chief Mechanical Engineer's office, Wilson Street (Schedule 4 Heritage Items, Part 2, Item 5⁴).

¹ The CME Building was previously included in the SREP No 26 City West schedule 4 which has since been repealed following the consolidation into the new SEPP.

² The CME Building was formerly listed as a heritage item on the State Environmental Planning Policy (State Significant Precincts) 2005, clause 27.

³ SEPP (Precincts- Eastern Harbour City), Part 2.2, accessible via < <https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0726#statusinformation> >

⁴ SEPP (Precincts- Eastern Harbour City), Schedule 4, Part 2, accessible via < <https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0726#sch.4-oc.2-pt.2> >

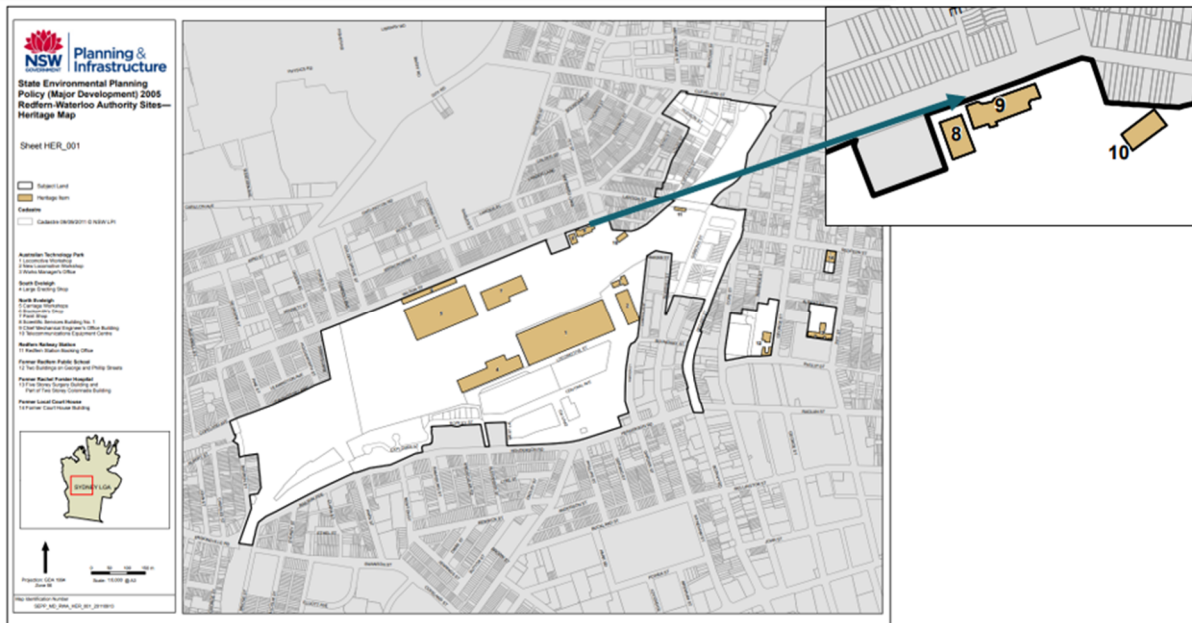


Figure 2.1: SEPP (Major Development) 2005 Map showing the CME Building (item 9), map directed from 2021 SEPP (https://eplanningprod.blob.core.windows.net/pdfmaps/SEPP_MD_RWA_HER_001_20110913.pdf)⁵

2.3. Sydney LEP 2012

The 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. Clause 1.2 of the Sydney LEP 2012 states the need to conserve the environmental heritage of the City of Sydney which applies to unlisted and potential heritage items outside of Schedule 5.

As part of the wider ERW, the CME Building is subject to the overriding provisions of SSP SEPP 2021, the study area is excluded from the 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 the Non-Aboriginal Heritage Study report for the project⁶

It is understood that a draft heritage map had been prepared which proposed for the inclusion of the CME Building as a heritage item under the Sydney LEP⁷ (shown in Figure 2.2). The CME Building would then be removed from the present mapping in the *SEPP Precincts- Eastern Harbour City*.⁸

⁵ The maps do not appear to have been updated as the heritage items listed on the 2021 SEPP vary slightly with the CME numbered 4 in the current SEPP.

⁶ Curio 2022b, *Redfern North Eveleigh Precinct Renewal Project, Non-Aboriginal Heritage Study & SOHL-Paint Shop Sub-Precinct*, June 2022, report prepared for Transport for NSW

⁷ NSW Government 2022, *Explanation of Intended Effect Paint Shop Sub Precinct*, July 2022, p. 9.

⁸ NSW Government 2022, *Explanation of Intended Effect Paint Shop Sub Precinct*, July 2022, p. 9.

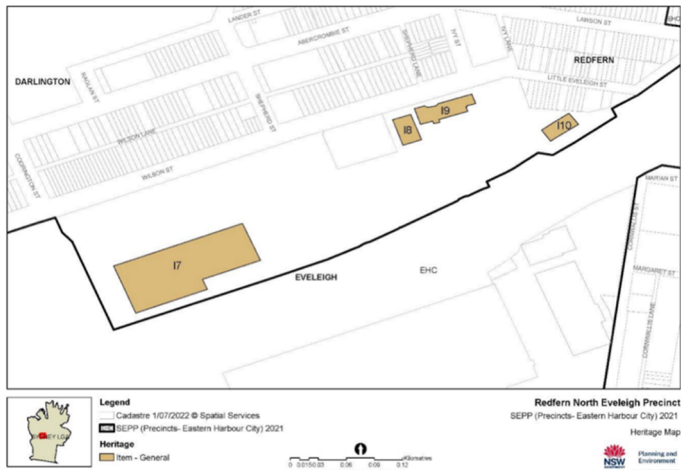


Figure 2.2: Proposed heritage map. Source. NSW Government 2022, *Explanation of Intended Effect Paint Shop Sub Precinct*, July 2022, p. 10.



Figure 2.3: Sydney LEP heritage map sheet 009 with the CME Building added in green. Source. City of Sydney with Curio overlay.

2.4. NSW Heritage Act 1977

Heritage items are afforded statutory protection in NSW under the NSW Heritage Act 1977 (Heritage Act). Heritage places and items of particular importance to the people of New South Wales are listed on the NSW State Heritage Register (SHR). The Heritage Act defines a heritage item as a 'place, building, work, relic, moveable object or precinct'. The Heritage Act is responsible for the conservation and regulation of impacts on items of State Heritage Significance. State Heritage Significance is 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'.

Heritage NSW is the approval authority under the Heritage Act for works to an item on the SHR. Section 57(1) of the Heritage Act requires HNSW approval if the work involves the following tasks:

- a) *Demolishing the building or work*
- b) *Damaging or despoiling the place, precinct or land, or any part of the place, precinct, or land*
- c) *Moving, damaging or destroying the relic or moveable object*
- d) *Excavating any land for the purpose of exposing or moving the relic*
- e) *Carrying out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct*
- f) *Altering the building, work, relic or moveable object*
- g) *Displaying any notice or advertisement on the place, building, work, relic, moveable object or land, or in the precinct*
- h) *Damaging or destroying any tree or other vegetation on or remove any tree or other vegetation from the place, precinct or land.*

Application for approval in accordance with Section 57(1) is undertaken by submission of a Section 60 Application to Heritage NSW. Section 60 applications also apply to all archaeological relics within an SHR site.

The CME Building is included in the State Heritage Register *Eveleigh Chief Mechanical Engineer's Office and Moveable Relics* (SHR #01139, gazetted 2/4/1999⁹) (Figure 2.4) 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 study area is located adjacent to, but not within, the curtilage of the Eveleigh Railway Workshops SHR listing (SHR #01140, 2/4/1999¹⁰). The study area is also located proximal to the Redfern Railway Station Group curtilage (SHR#01234, gazetted 2/04/1999)¹¹. The boundaries of these in relation to the CME Building are shown in Figure 2.6



Figure 2.4: CME Building SHR Curtilage map (Source: State Heritage Inventory)



Figure 2.5: ERW SHR Curtilage (Source: State Heritage Inventory)

⁹ NSW Government State Heritage Inventory, *Eveleigh Chief Mechanical Engineer's Office and Moveable Relics*, SHR Item, accessed August 2022, <<https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5014147>>

¹⁰ 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>>

¹¹ 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>>

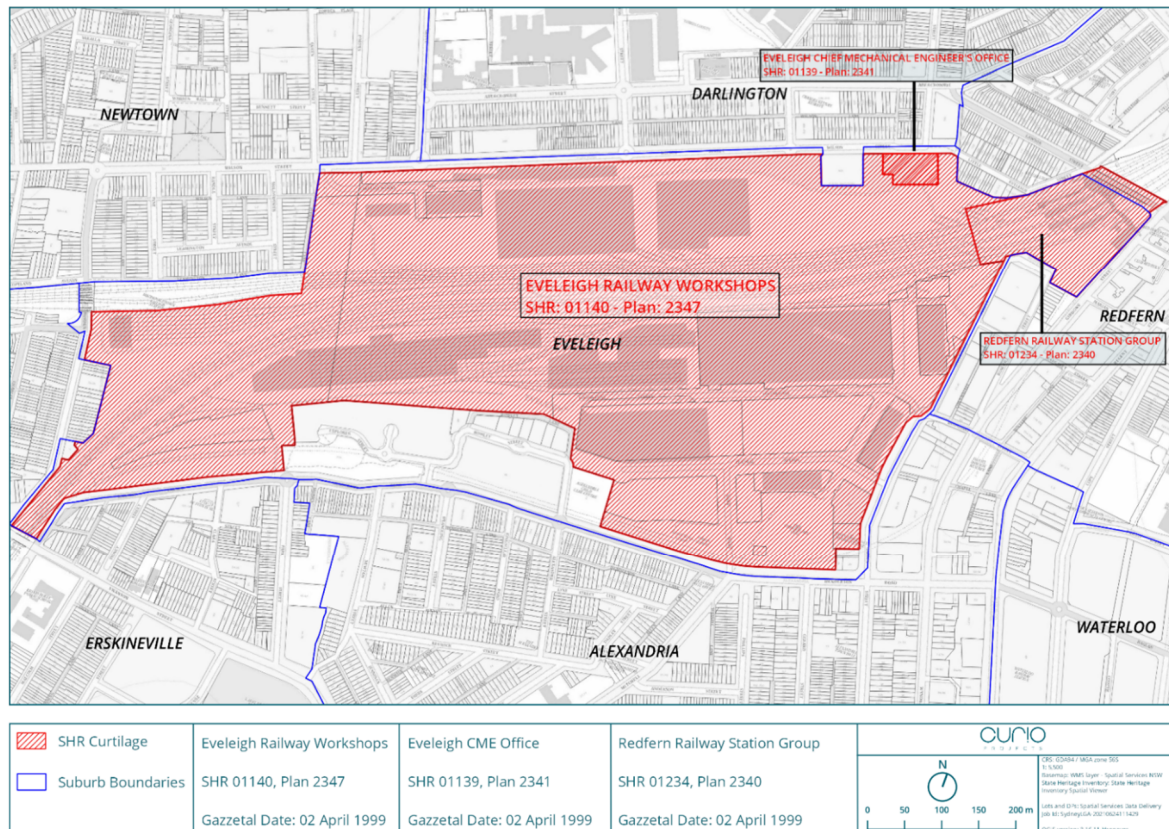


Figure 2.6. SHR curtilage for the CME Office (SHR no. 00139) and ERW (SHR no. 01140).

Exemptions

Standard exemptions have been gazetted for all SHR sites (Friday, 17 June, 2022¹²). The purpose of Standard Exemptions is to streamline the approvals process, particularly where works are minor or have little impact on significance.

In addition to the standard SHR exemptions, a series of agency-specific exemptions under Section 57(2) of the Heritage Act was granted to NSW Transport—RailCorp (NSW Government Gazette, No. 22, 13 March 2015¹³). These are administered and monitored internally by the Sydney Trains Heritage Team.

While the agency-specific exemptions provide exemptions from approval for a large number of minor works, these are qualified by the note on 'No Adverse Impact' that states that:

When the significance of a heritage item may be impacted by the use of agency-specific exemptions, work is to be guided by the assessment and advice of a qualified and experienced heritage officer or consultant to ensure that any adverse impact on heritage significance is avoided.

Excavation Permits

The NSW Heritage Act, 1977, protects heritage; however, historical, archaeological remains are additionally protected from being moved or excavated through the application of the 'relics' provisions. The relics provisions protect unidentified 'relics' which may form part of the State's

¹² [Government Gazette No 262 of Friday 17 June 2022 \(nsw.gov.au\)](https://www.nsw.gov.au/government-gazette/2022/262)

¹³ [Government Gazette of 6 February 2015 \(nsw.gov.au\)](https://www.nsw.gov.au/government-gazette/2015/22)

environmental heritage, but which have not been listed on the SHR, a LEP or protected by an Interim Heritage Order. Since amendments were made to the Heritage Act in 2009, a 'relic' has been defined as:

any deposit, artefact, object or material evidence that:

- (a) Relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement*
- (b) Is of State or local heritage significance.*

Division 9 of the NSW Heritage Act governs the 'Protection of certain relics' and Section 139 states that

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

Permits are issued under Section 140 of the NSW Heritage Act on lands that are not situated within the curtilage of State-Heritage Register (SHR) Listed Items. In cases where 'relics' are situated within sites or places listed on the SHR; permits are required to be issued under Section 60 of the Heritage Act prior to any ground-disturbing works on site.

An Archaeological Assessment and Research Design must be prepared to obtain an excavation permit in accordance with relevant heritage guidelines, including Historical Archaeological Sites and the Historical Archaeology Code of Practice. For further details of these guidelines, refer to the historical archaeology sub-section of the Heritage NSW website¹⁴.

Statutory approval is still required if a 'relic' is unexpectedly discovered in the course of an excavation undertaken without a permit (s139(2)). In those instances, works must cease, and notification of the unexpected discovery (to Heritage NSW) is required under Section 146 of the NSW Heritage Act.

Section 146 of the NSW Heritage Act states that:

146 Notification of discovery of a relic

A person, who is aware or believes that he or she has discovered or located a relic (in any circumstances, and whether or not the person has been issued with a permit) must:

- (a) within a reasonable time after he or she first becomes aware or believes that he or she has discovered or located that relic notify the Heritage Council of the location of the relic, unless he or she believes on reasonable grounds that the Heritage Council is aware of the location of the relic, and*
- (b) within the period required by the Heritage Council furnish the Heritage Council with such information concerning the relic as the Heritage Council may reasonably require.*

¹⁴ [Historical archaeology | NSW Environment and Heritage](#)

In accordance with s146 of the Heritage Act, an historical archaeological post-excavation report or similar, depending on the circumstances in which the discovery was made- and in accordance with any requirements of the Minister must be prepared.

State Heritage Register

Heritage listing on the SHR protects State-significant places and items. Listing of an asset on the SHR requires Transport Asset Holding Entity (TAHE) to notify Heritage NSW and seek approval for any proposed works to items within the heritage curtilages as specified under the Heritage Act, unless exempt under standard or specific exemptions.

Additionally, TAHE must manage its heritage assets listed on the SHR in accordance with the minimum standards specified under Section 118 of the Heritage Act and Part 3 of the Heritage Regulation 2005.

The minimum standards of maintenance and repair of a listed item relate to the following:

- (a) the protection of the listed item from damage or deterioration due to weather.*
- (b) the prevention of and the protection of the listed item from damage or destruction by fire.*
- (c) security (including fencing and surveillance measures) to prevent vandalism; and*
- (d) essential maintenance and repair (being maintenance and repair necessary to prevent serious or irreparable damage or destruction).*

This CMP should be used as a management tool to conserve significance while balancing operational, functional and safety requirements when carrying out minimum standards of maintenance.

2.5. Section 170 Heritage and Conservation Register

Under Section (s) 170 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 Engineer's Office 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).¹⁵

2.5.1. NSW National Parks and Wildlife Act 1974

The NSW National Parks and Wildlife Act 1974 (NPW Act), administered by the NSW Department of Planning, Industry and Environment (DPIE), is the primary legislation that provides statutory protection for all 'Aboriginal objects' (Part 6, Section 90) and 'Aboriginal places' (Part 6, Section 84) within NSW.

An Aboriginal object is defined through the NPW Act as:

¹⁵ 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>

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

The NPW Act defines 'harm' to Aboriginal objects and places as:

"...any act or omission that:

- (a) destroys, defaces or damages the object or place, or*
- (b) in relation to an object-moves the object from the land on which it had been situated, or*
- (c) is specified by the regulations, or*
- (d) causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c), (NPW Act 1974)*

The NPW Act also establishes penalties for 'harm' to Aboriginal objects and declared Aboriginal places. It also provides exemptions and defence provisions related to 'harm' of Aboriginal objects. One of the main defences against the harming of Aboriginal objects and cultural material is to seek an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the NPW Act, which allows disturbance to Aboriginal objects in accordance with the requirements of an approved AHIP.

A database of Aboriginal objects and places (Aboriginal Heritage Information Management System-AHIMS) which includes 'information about Aboriginal objects that have been reported to the Director-General of Department of Premier and Cabinet; information about Aboriginal places which have been declared by the Minister for the Environment to have special significance with respect to Aboriginal culture; and archaeological reports' is managed by Heritage NSW.

A registered AHIMS site (RNE-PAD 001) is located within the CME Building study area, east of the CME Building.

2.5.2. Environment Protection & Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act (EP&BC Act) established the Australian Heritage Council (formerly the Australian Heritage Commission) and provides for the protection of cultural heritage at a National level and for items owned or managed by the Commonwealth. The EP&BC Act has established two heritage registers:

- Commonwealth Heritage List (CHL): significant items owned or managed by Commonwealth Government agencies
- National Heritage List (NHL): for items assessed as being of National cultural significance.

Australian Heritage Council approval is required for works to an item on either of these lists which would impact on its significance.

No heritage items within CME Building study area are listed on the Commonwealth or National Heritage Lists.

2.6. Heritage Items & HCAs in the Vicinity

A table of all statutory heritage listings in the vicinity of the CME Building as part of the Paint Shop sub-precinct has been include in the Non-Aboriginal Heritage Study report for the project¹⁶, items most relevant to the study area are as follows:

- Eveleigh Railway Workshops (SHR #01140)
- Redfern Railway Station Group (SHR #01234)
- Golden Grove HCA (C18, 14 Dec 2012)
- Darlington HCA (C19, 14 Dec 2012)

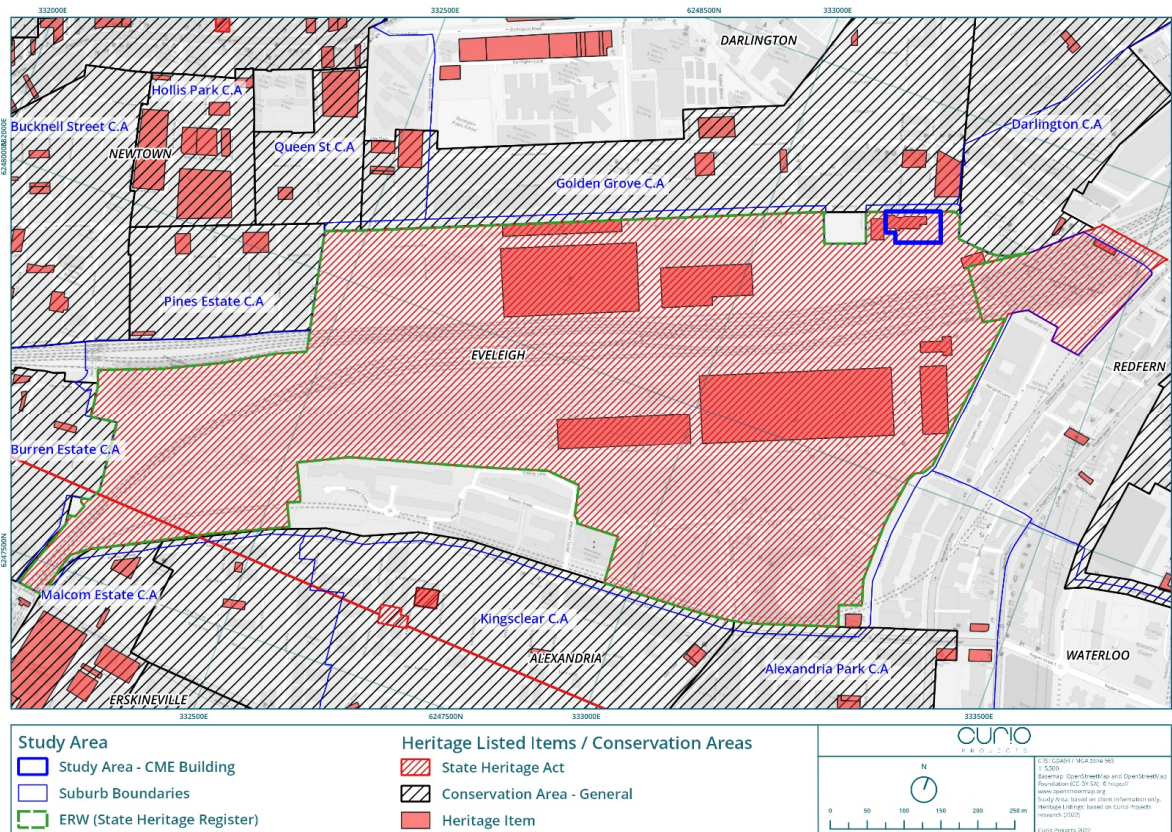


Figure 2.7: Heritage Items/ Conservation Areas in and in the vicinity of the subject site. Source. Curio Projects.

2.6.1. Non-Statutory Heritage Registers

A number of organisations maintain registers of buildings or sites which they have assessed as having cultural heritage significance. These registers have no statutory authority; however, the inclusion of a place on a non-statutory register suggests a certain degree of community esteem and appreciation. Non-statutory registers include the National Trust (NSW) Register, the NSW National Trust Industrial Archaeology Sites List, the RAlA 20th Century Register of Significant Buildings and the Art Deco Society of NSW's Art Deco Building Register.

Register of National Estate

The Australian Heritage Council is also responsible for keeping the Register of the National Estate (RNE). The RNE can no longer be added to, and for Commonwealth properties, has been superseded

¹⁶ Curio 2022b *Redfern North Eveleigh Precinct Renewal Project, Non-Aboriginal Heritage Study & SOHL-Paint Shop Sub-Precinct*, June 2022, report prepared for Transport for NSW

by the Commonwealth and National Heritage Lists. The RNE is now an indicative list of significant places with no statutory controls, except for properties owned by the Commonwealth.

The *Chief Mechanical Engineers Office* was included in the Register of the National Estate (RNE 5014147)¹⁷ as were the *Chief Mechanical Engineer's Office Moveable Relics* (RNE 5012069)¹⁸, yet this listing no longer appears on the database. The building was also included in the description of the *Eveleigh Railway Workshops* (RNE 15903).¹⁹

National Trust of Australia (NSW)

The National Trust (NSW) Register was established in 1949, and maintains a 'register of landscapes, townscapes, buildings, industrial sites, cemeteries and other items or places which the Trust determines have cultural significance and are worthy of conservation'. While the Register does not have statutory authority, it does fill the role of raising public awareness of heritage issues.

The CME Building is included in the National Trust's listing for the Eveleigh Railway Workshops (#57460, 24/3/1986).²⁰

¹⁷ 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>

¹⁸ OCP 2002, *Eveleigh Carriageworks CMP Vol 1*, p. 276.

¹⁹ 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>

²⁰ National Trust, *Eveleigh Railway Workshops* data card.

3. Historical Analysis

3. Historical Analysis

For ease of reference, this historical overview of the Chief Mechanical Engineers Building subject site has been divided into twelve main sections, being:

- Section 3.1 Historical Summary Timelines
- Section 3.2 Pre-Colonial Landscape and Early Land Grants
- Section 3.3 Eveleigh Railway Workshops
- Section 3.4 Chief Mechanical Engineers Building
- Section 3.5 Role of the CME Building within Eveleigh
- Section 3.6 Management Systems Applied at Eveleigh
- Section 3.8 Heist on Wilson Street
- Section 3.9 Engineers Employed at the CME Building
- Section 3.10 Decline & Closure of CME Building
- Section 3.11 Recent History of CME Building
- Section 3.12 Historical Thematic Framework

Please refer to Appendix A of this report for full details on the historical context of the CME Building subject site and its surrounding precinct written by Curio Projects, 2022. More information and details on the Aboriginal Cultural history of the surrounding landscape is included in Appendix A of this report and in *Artefacts 2022 Aboriginal Cultural Heritage Study for the RNE Precinct Paint Shop Sub-Precinct* report.

In addition, the 2022 *ERW Overarching Conservation Management Plan* by OCP Architects (and as updated and amended by Curio) provides further historical context to the surrounding Eveleigh Railway Workshops precinct.

3.1. Historical Summary Timelines

The following summary timeline of key events in the development of the North Eveleigh Precinct and then the CME Building development have been provided in order to provide a succinct overview of the context of the development of the CME.

3.1.1. Summary of 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
1900	CME Building is extended to the East
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 Workshop Building.
1907	Carriage and Wagon Blacksmith's Shop constructed north of Carriage Workshop Building

Year	Event
	Signal and Telegraph Branch Workshop constructed
c1912	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
1920	CME Building is extended to the South with additional office rooms and a female toilet
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 ²¹ (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
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.

²¹ Godden 1986: 79

3.1.2. CME Building Timeline

Table 1.1: CME Building Historical Timeline

Year	Event
c40,000BP-1794	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 southeast of the CME Building
1923-24	Calder House vacated due to poor condition ²² (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

²² Godden 1986: 79

Year	Event
1974	Workshops Branch established
c1980	Newly appointed position of <i>General Manager of Workshops</i> established, making the Chief Mechanical Engineers position redundant.
1986	CME Building no longer the office of the <i>General Manager of Workshops</i> , 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 <i>Central to Eveleigh Urban Transformation and Transport Program</i> . 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

3.2. Pre-Colonial Landscape & Early Land Grants Summary

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 Bay²³. The subject site is understood to be situated within the lands of the Gadigal people. According to early records of Governor Phillip, the Gadigal lands stretched from “...the entrance of the harbour, along the south shore, to the cove adjoining the settlement”²⁴. 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.

²³ Attenbrow 2010.

²⁴ 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]

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-ran²⁵), 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 seasonally²⁶. 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 mullets²⁷.

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 colours²⁸.

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 landscape²⁹.

²⁵ City of Sydney, 2013, *Barani Sydney's Aboriginal history*. <https://www.sydneybarani.com.au>

²⁶ Attenbrow 2010, p. 62

²⁷ 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.

²⁸ 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

²⁹ Information obtained from notes taken by SJB architects following a conversation with Professor (Uncle) Dennis Foley regarding Aboriginal use of land in and around the study area. (Pers. Com. Between SJB architects and Professor (Uncle) Dennis Foley on 27 April 2022).



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)³⁰



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

³⁰ Retrieved May 4, 2022, from <http://nla.gov.au/nla.obj-143787504>

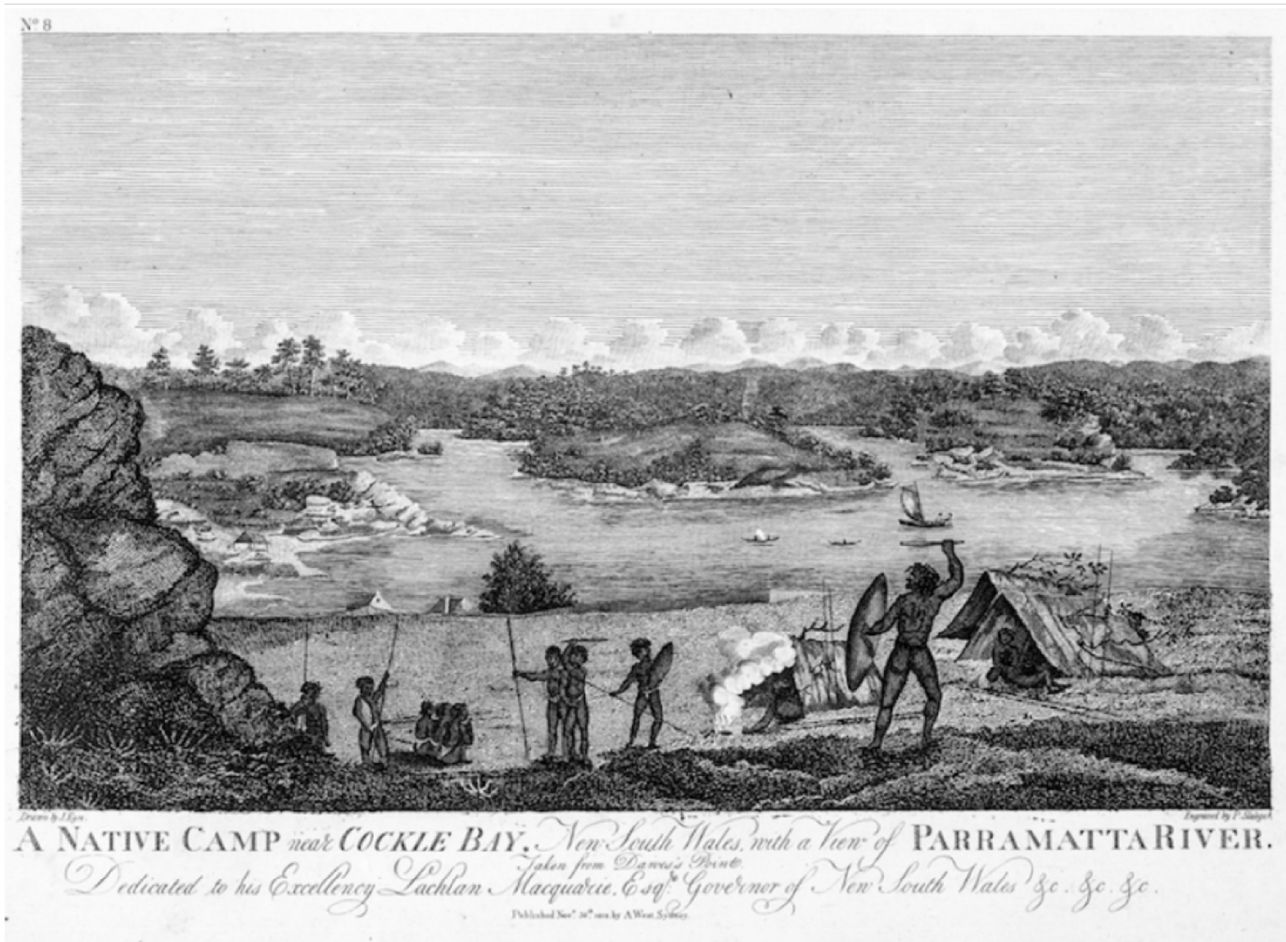


Figure 3.3: A native camp near Cockle Bay. Source: Trove, available at <http://nla.gov.au/nla.obj-135782267>

3.2.1. 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 1789³¹.

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 settlement³². 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

³¹ Hinkson, M. & Harris, A., 2010, *Aboriginal Sydney: a guide to important places of the past and present*, 2nd ed, Aboriginal Studies Press Canberra.

³² 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

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 settlers³³. 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 1793.³⁴ 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.³⁵ 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.³⁶ 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 terminus at the Cleveland Paddocks was constructed in 1855, the Aboriginal community was dispersed from the campground³⁷.

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 artefacts³⁸.

³³ Murray and White 1988

³⁴ Collins, 1798, *An Account of the English Colony in New South Wales*, Volume 1, T. Cadell Jun and W. Davies, London

³⁵ 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

³⁶ Cox Inall Ridgeway, 2021, *Central Precinct Renewal Project: Consultation Report for Aboriginal Heritage Interpretation Strategy*. Prepared for Transport for NSW

³⁷ Artefact, 2022, *Redfern North Eveleigh Precinct Renewal, Aboriginal Cultural Heritage Study*. Prepared for Transport for NSW

³⁸ 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.



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]³⁹.

3.2.2. 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 Chisholm, 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.⁴⁰

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 1830.⁴¹ 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 1924.⁴²

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

³⁹ Retrieved May 4, 2022, from <https://archival.sl.nsw.gov.au/Details/archive/110327850>

⁴⁰ OCP Architects, 2022. *Eveleigh Railway Workshops Overarching Conservation Management Plan*: 24

⁴¹ Sources vary regarding the exact date of original construction of the Calder House cottage, reporting variously from c.1820 to the late 1830s.

⁴² OCP Architects 2017b, *North Eveleigh West- Conservation Management Plan*.

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.

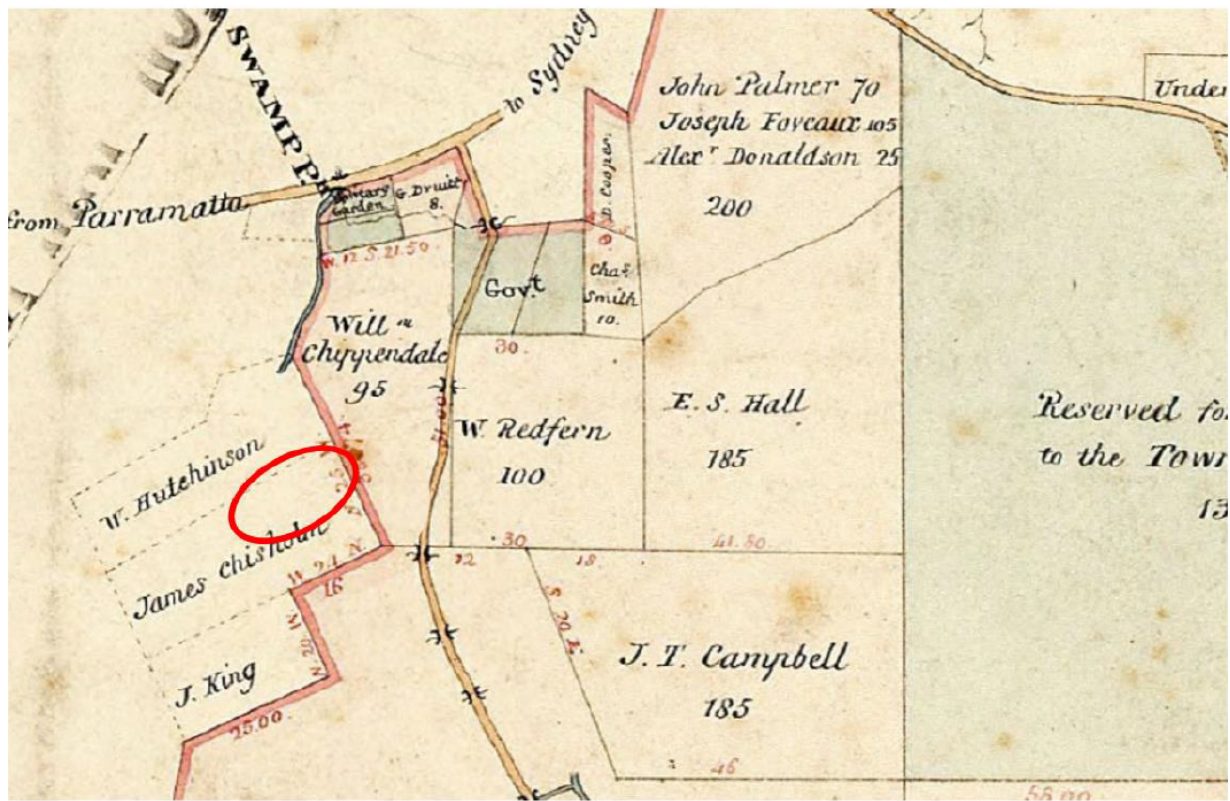


Figure 3.5: Undated map of Parish of Alexandria, early land grants. General area of the CME Building indicated in red. Source: Historical Lands Record Viewer

3.3. Eveleigh Railway Workshops

After Sydney's first railway line was completed and opened in 1855, the growth and demand for rail infrastructure and transportation dramatically increased within a short space of time.⁴³ 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 workshop, could not support the ever-growing needs of Sydney's increasing suburban traffic⁴⁴. 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.⁴⁵ 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

⁴³ OCP, 2002. *Eveleigh Carriageworks Conservation Management Plan*: 34

⁴⁴ Ibid: 85

⁴⁵ Godden Mackay Logan 2013, *Australian Technology Park CMP Vol.1*, p.10-12

interference with rail traffic, but close enough to allow for communication between the two workshops.⁴⁶

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.⁴⁷ 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 turnaround 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.

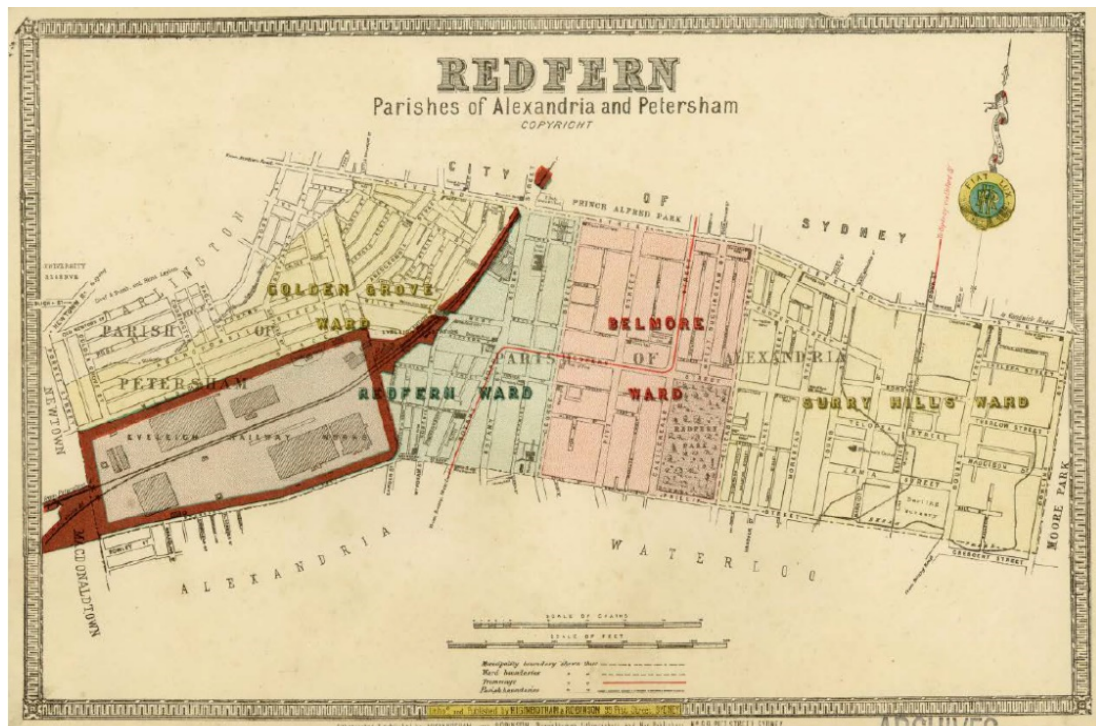


Figure 3.6: Undated Parish of Alexandria and Petersham Map of Redfern. Highlights of the resumption of land by the Government for the ERW. Source: State Library of NSW, 1172084

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.^{48 49}

⁴⁶ OCP Architects, 2022. *Eveleigh Railway Workshops Overarching CMP*: 28-29

⁴⁷ OCP 2002a

⁴⁸ OCP Architects, 2022. *ERW Overarching CMP*: 28-29

⁴⁹ 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.

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 (LES):** Built in 1899, it was here that 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.⁵⁰



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

⁵⁰ Simpson Dawbin, 2003. *Large Erecting Shop CMP*: 52

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.⁵¹
- **Blacksmiths 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 (CME) Building:** 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.⁵²
- **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.⁵³

⁵¹ OCP, 2002. *Eveleigh Carriageworks Conservation Management Plan*: 109

⁵² OCP, 2002a. *Eveleigh Carriageworks Conservation Management Plan*: 69

⁵³ Curio Projects, 2022. *RNE Paint Shop Sub Precinct Non-Aboriginal Heritage Study*: 45

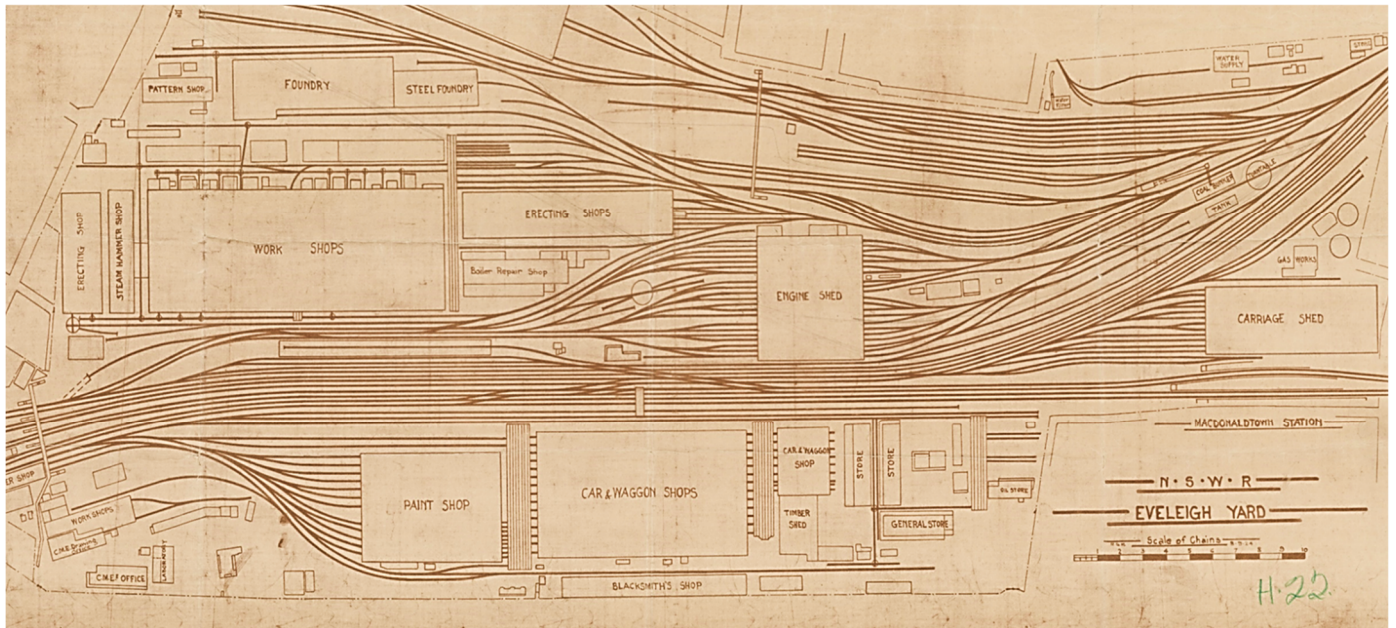


Figure 3.7: View from Cornwallis Street across rail line to the southeastern end of Carriage Works. South Eveleigh Managers Office and Tower in the foreground, undated. Source: 003 - Z/SP/E12/3 - N.S.W.R. Eveleigh Yard - Erskineville St, Swanson St, Wells St 1914 - SLNSW

3.4. Chief Mechanical Engineers Building

3.4.1. Construction timeframes

The Chief Mechanical Engineers Building was established in 1887 in the northeastern corner of North Eveleigh along Wilson Street as shown in Figure 3.5 to Figure 3.8 below. The CME Building was intentionally located on the highest area of land within the Eveleigh Railway Workshops precinct offering an important key view line from the CME Building across the whole of the ERW landscape.

As stated in the 1882 Annual Report during the planning stage of the precinct:

"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)⁵⁴

⁵⁴ Railways and Tramways of NSW Annual Report, 1882.

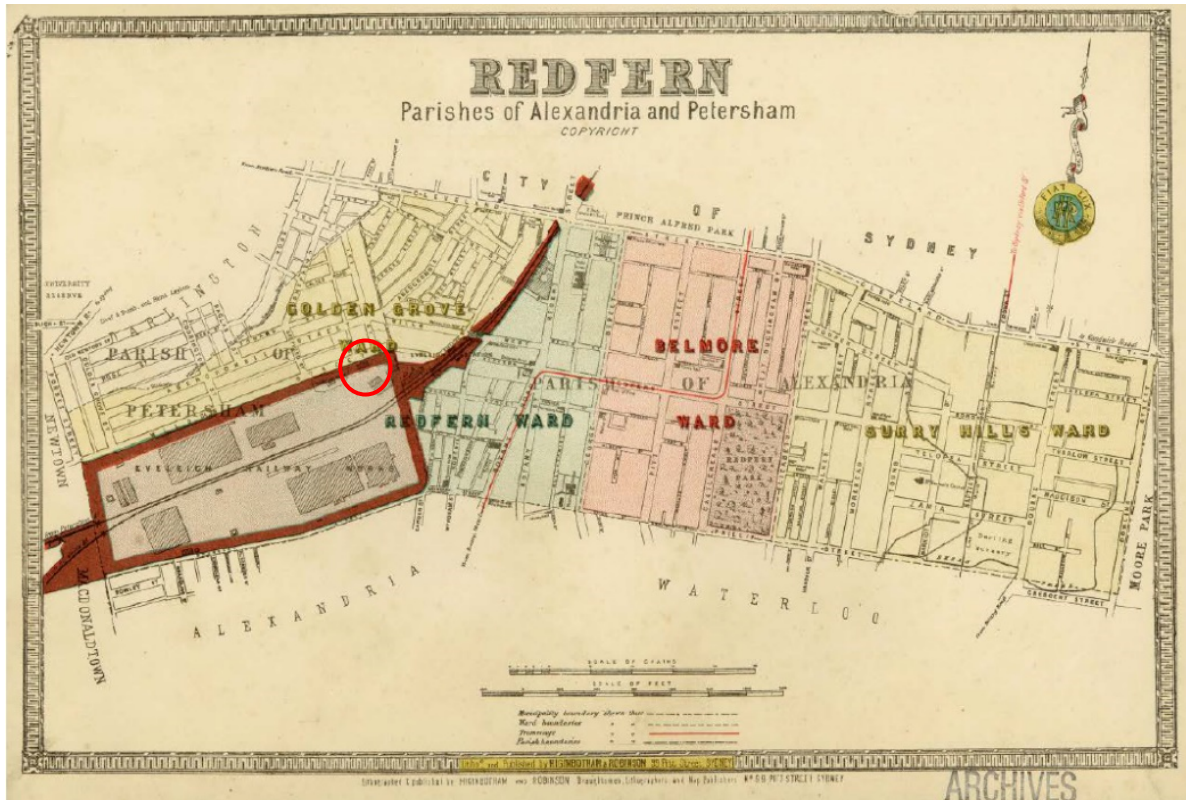


Figure 3.5: Undated Parish of Alexandria and Petersham Map of Redfern. Highlights of the resumption of land by the Government for the ERW. General location of the CME Building circled in red. (Source: State Library of NSW, 1172084)

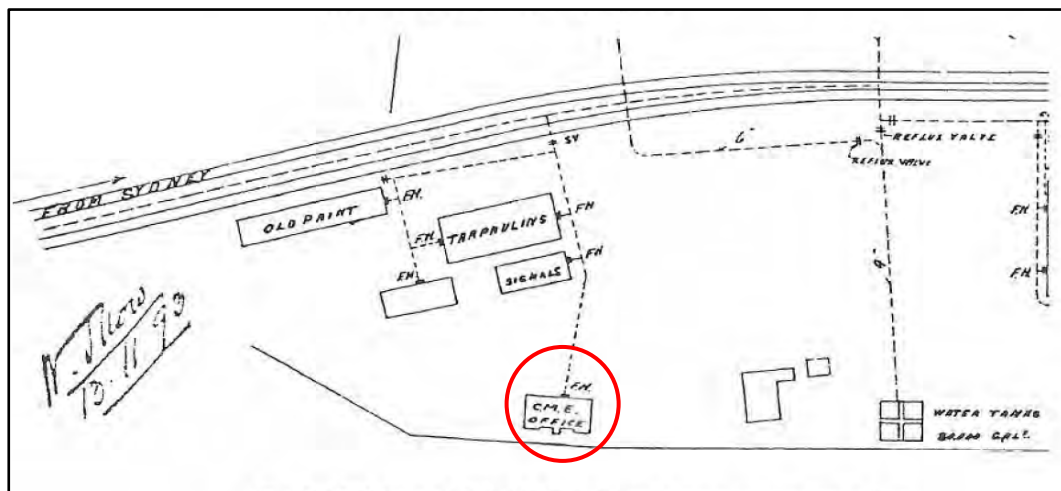


Figure 3.6: 1893 layout of the CME Building including the surrounding buildings and railway line. General location of CME Building circled in red. (Source: SRAO, Drawing 4224)

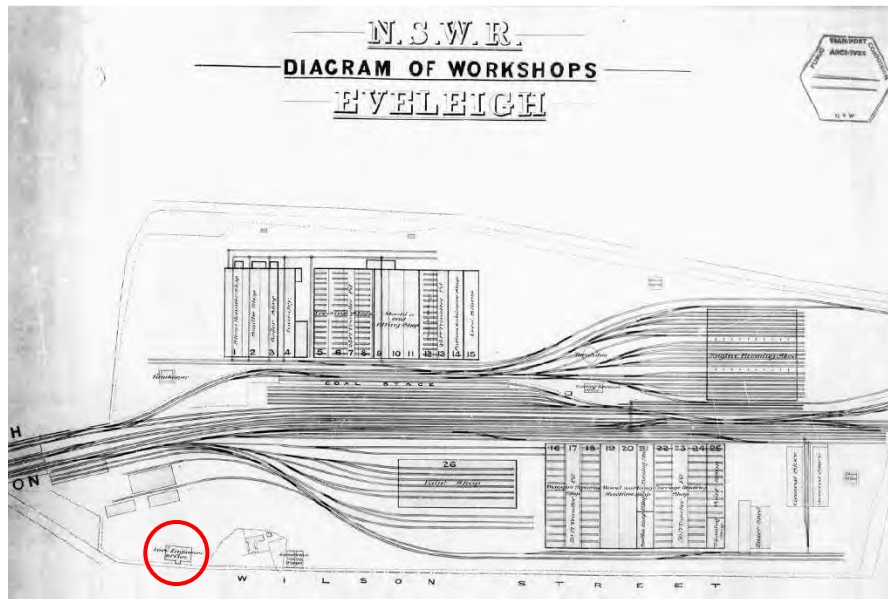


Figure 3.7: NSW Railways Diagram of Eveleigh Workshops, 1887. General location of the CME Building circled in red. (Source: NSW State Records, R5601117)

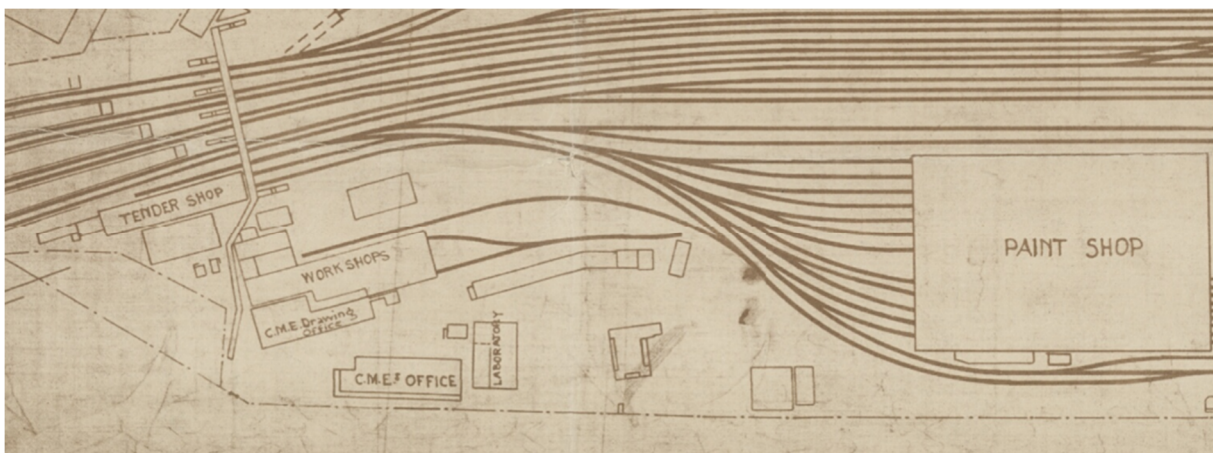


Figure 3.8: Detail from NSW Plan of Eveleigh Yard, Dated 8.9.1924 (Source: SLNSW Z/SP/E12/3, <https://collection.sl.nsw.gov.au/digital/PpDwGz3VOWRVl>)

It was initially known as the Locomotive Engineers Office and General Managers Office and was established to house the offices of the Chief Mechanical Engineer under whose supervision the entire ERW operated.

The existing CME Building is smaller than that which was originally planned during the design process. The original plans show that the dimensions were proposed to be 100 feet x 50 feet, whereas the extant building is only 78 feet long and 47 feet wide.⁵⁵

The 1881 Railways and Tramways of NSW Annual Report describes the original 1887 building as the following (Figure 3.11 to Figure 3.19).

The original 1887 form of the CME Building was as a large two storey brick building surrounded by a bull-nosed verandah on three sides supported by cast-iron columns with iron lace friezes for the capital brackets and iron lace balustrades. The 1887

⁵⁵ Ibid: 24

building had a hipped single gable corrugated iron roof, sandstone windowsills, and an entrance portico to Wilson Street with a triangular pediment inscribed with the date '1887'.⁵⁶

The CME building underwent several key phases of modifications in order to keep up with the Eveleigh Workshops rapid growth and continued expansion. The main phases of construction of the CME building are outlined in Figure 3.9 which highlight the original 1887 structure (shown in blue), the north eastern extension in 1900 (shown in purple); and the south eastern corner extension and exit addition along the southern façade of the building, in 1920 (shown in green). Figure 3.10 shows the evolution of the building in three-dimensional form.



Figure 3.9: Ground floor plans of the CME building with the three main phases of construction. (Source: Rappoport & Caldis Cook Group, 1997 with Curio additions)

⁵⁶ Railways and Tramways of NSW Annual Report, 1881.

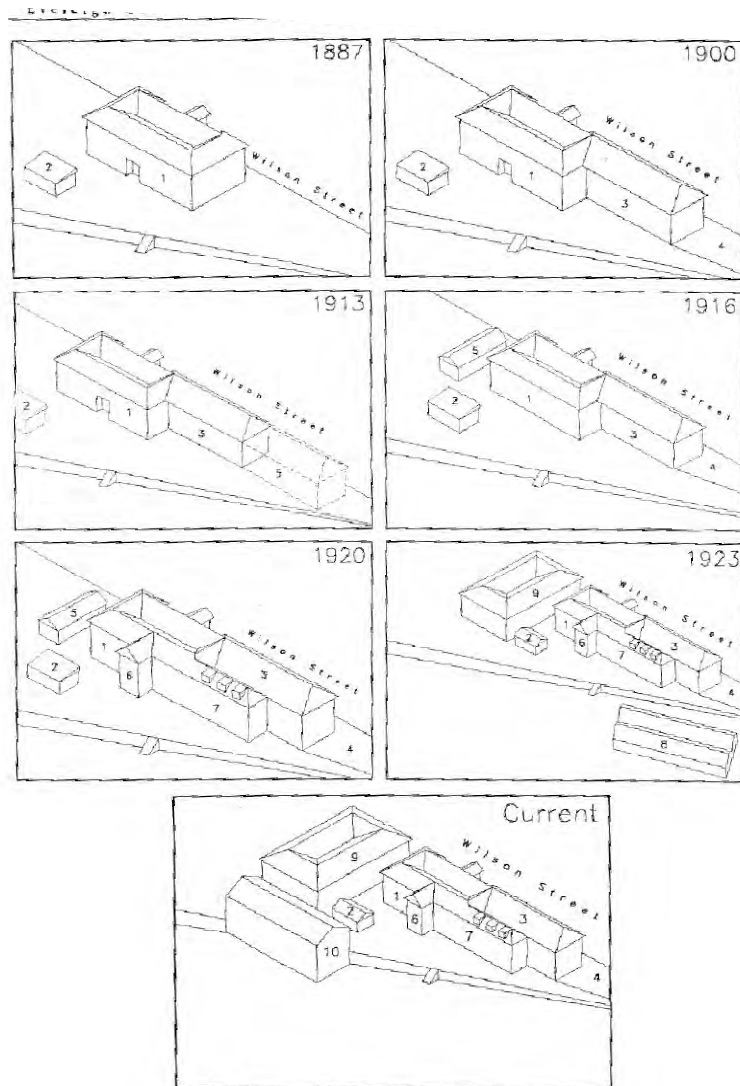


Figure 3.10: 3D development drawings of the CME Building and the surrounding building (Source: Rappoport & Caldis Cook Group, 1997)

The original structure of the CME building is mostly unaltered since the 1920s and still includes the 1887, 1900 and 1920 structural phases. The original external heritage fabric has been maintained except for an addition to the building in 1900 which was grafted onto the eastern wall of the building meaning partial demolition of the brickwork, roof and balcony.⁵⁷

Two known fires broke out at the CME Building on 20 Feb 1902 and on 5 Feb 1908. Although no physical evidence of the fire that we know of survives, it is believed that modifications to the CME Building are likely a result of the fires.⁵⁸

The CME 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 1989.⁵⁹

⁵⁷ Curio, 2022. RNE Paint Shop Sub Precinct Non-Aboriginal Heritage Study: 51

⁵⁸ Ibid: 14

⁵⁹ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 31

The building continued to house office spaces for administration staff until the early 2000s after which the building was vacated.

1887 Construction

The 1887 construction of the Chief Mechanical Engineers Building included timber tongue-and-groove floorboards on timber joists and bearers, a ceiling rose in every room and a total of 16 fireplaces with four double sided fireplaces.⁶⁰ The internal doors were fitted with moulded timber architraves, skirting blocks, and made up of three or four panels and glazed fanlights are located above door openings to the offices in the main corridors. Ceilings belonging to the original 1887 construction are believed to have been made up of lathe and plaster.⁶¹

Below is a timeline extracted from the 1997 CMP by Rappoport and Caldis Cook Group, with minor additions by Curio, of the suggested phases of ceiling modifications over the course of the CME Building history.

Table 1.3: Suggested CME Building ceiling timeline as written in the 1997 CMP

Year	Event
1887	Original lathe and plater ceilings installed throughout building
1900	Corrugated iron ceilings installed to the extension. Pressed metal ceilings installed in Room.
1902	A fire destroys plaster ceilings. Rooms that were affected are replaced with corrugated iron (Rooms F1, F8 and F7) to match the newly installed 1900 addition ceilings.
1908	Another fire occurs at the CME Building where damaged ceilings are replaced with timber tongue and grove ceilings (Rooms G15, G4, G16, G2, G1, F10, F2 & F4) potentially due to the economy at the time.
1920	Corrugated iron ceilings are installed in the 1920 addition to keep consistent with the ceilings in the rest of the CME Building.
1970	Suspended T-bar ceilings are installed across all ceilings within the CME Building. Existing ceilings remain concealed. The year 1970 is not the confirmed date of the installation of the suspended T-bar system. Although as there are no solid records of the date, the 1997 CMP states it was the probable year due to the commercial popularity of the system around that time.

The original roof consisted of timber trusses with corrugated iron roof sheeting with double pitches and a central box gutter (Figure 3.19). It is believed that the original roof sheeting for the balcony roof and main roof were painted red. The external facades of the building were potentially not painted at all.⁶² Although further investigations are required, the 1997 CMP indicated through their physical analysis that three layers of external paintwork were discovered including the current external layer of paint. A middle layer found was a reddish-brown colour, potentially a reaction to the mortar, and the paintwork at the joints are a lighter colour.⁶³

⁶⁰ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 26 & 27

⁶¹ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 28

⁶² Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 27

⁶³ Ibid

No internal chased or plumbed services, such as lighting, heating, gas, ventilation, or plumbing, were included as part of the 1887 construction of the CME Building.⁶⁴ The original drawings indicate a bathroom with two toilets located on the first floor in Room F3A although due to the amendment of the additional balcony to Wilson Street, it is believed the toilets were never built as they would have blocked access to the balcony. The balcony became accessible through the central corridor (Room F3A and Room F3B) on the first floor which included two doorways to either side of the balcony and window.

The original drawings depict the room allocations as the following.

Ground Floor (Figure 3.17):

- Vestibule
- Hall
- Stair
- Corridor
- Locomotive Engineer
- Assistant Loco-Engineer Room
- Chief clerk
- Clerks
- Correspondence
- Records
- Clerks room
- Verandah

First Floor (Figure 3.18):

- Stair
- Hall
- Lavatory
- Office
- Office
- Office
- Office
- Drawing office
- Drawing office
- Corridor
- Balcony

The office room location of the Chief Mechanical Engineers within the 1887 construction was located in Room G4, the first room to the east of the CME Building northern entrance. Then after the 1900 addition was completed, the office of the CME was moved to Room G10 within the eastern end of the CME building. Room G2 was the office location of the Assistant CME within the 1887 construction and later was used as a laboratory in which X-Ray equipment was used in by the 1900s.⁶⁵⁶⁶

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 in the western end of the building, to collect their wages on a weekly basis.⁶⁷ This entrance was likely a highly trafficked area and weekly would've seen workers queuing up to receive their pay. The door at Room G1 includes a vertically sliding window and ledge within one of the door panels that was used for the purpose of delivering these pay packets to the employees.⁶⁸ The Pay Office (Room G1) would have stored a large amount of paperwork and records. The 1997 CMP states that oral records have mentioned the Pay Office previously had a mezzanine installed specifically to assist in coping with the storing of records due to little space.⁶⁹ By the 1900s, Room G1 was used as a testing laboratory for the metallurgical section of the State Rail Authority testing laboratories.

⁶⁴ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 28

⁶⁵ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 40

⁶⁶ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 64

⁶⁷ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 41

⁶⁸ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 45

⁶⁹ Ibid

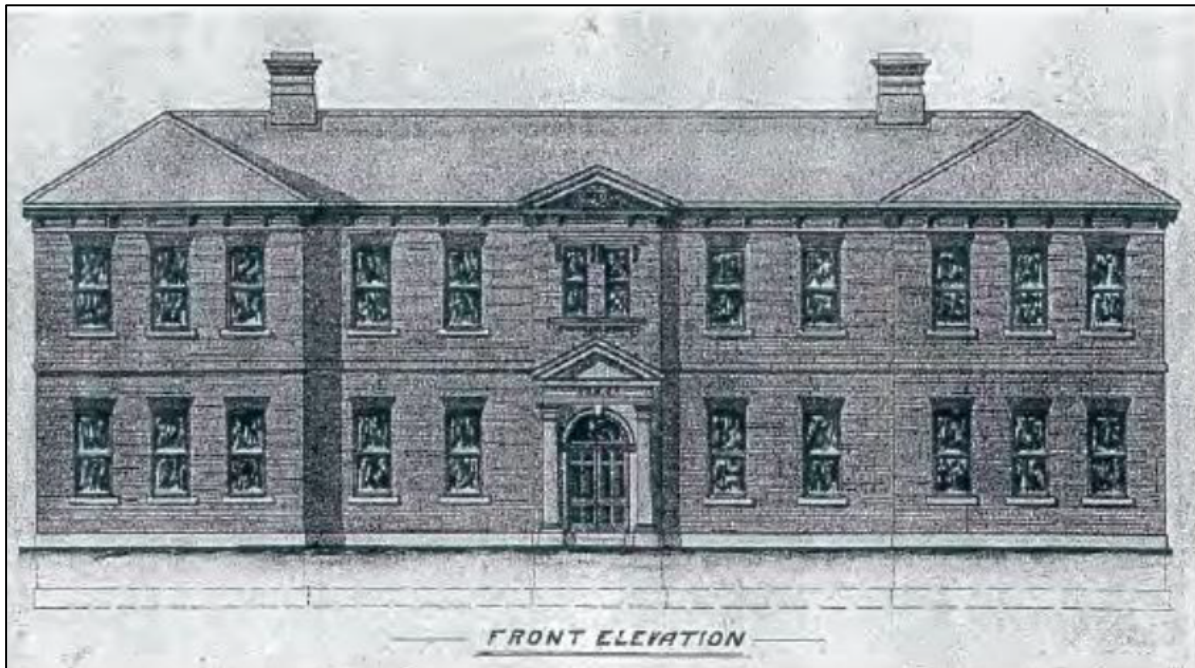


Figure 3.11: Plans of the original front elevation of the CME building, showing the building without balconies and verandah (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)



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)



Figure 3.13: Original 1887 construction amended plan that show the balconies and verandah. (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

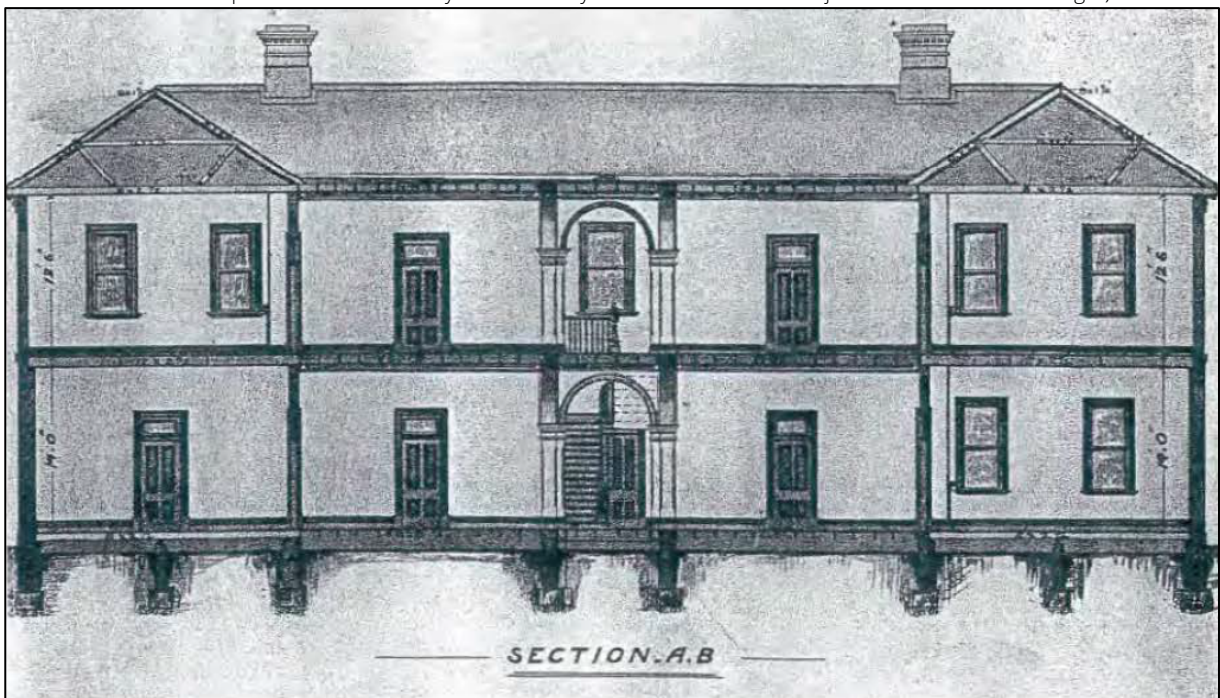


Figure 3.14: Cross sectional elevation of the original 1887 construction of the CME Building. Details of the internal staircase and offices are visible (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

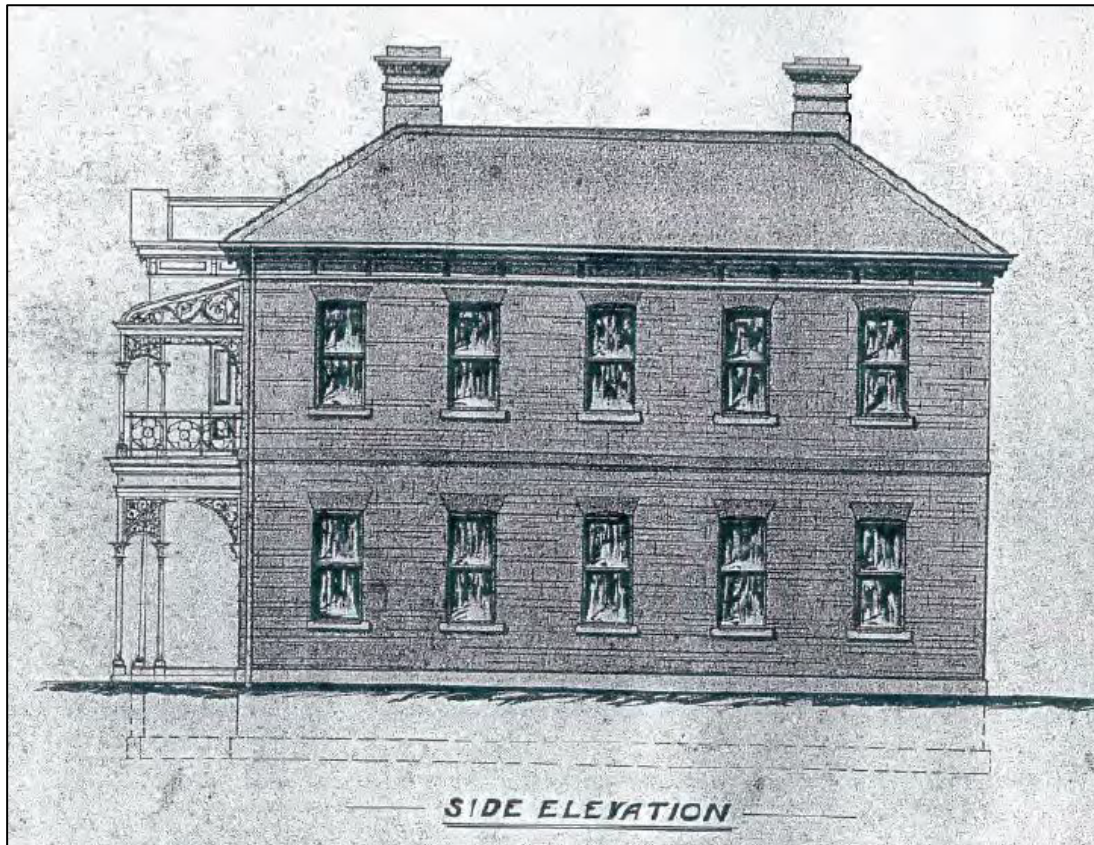


Figure 3.15: Side elevations of the original 1887 construction. Verandah and balcony on the Wilson Street side (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

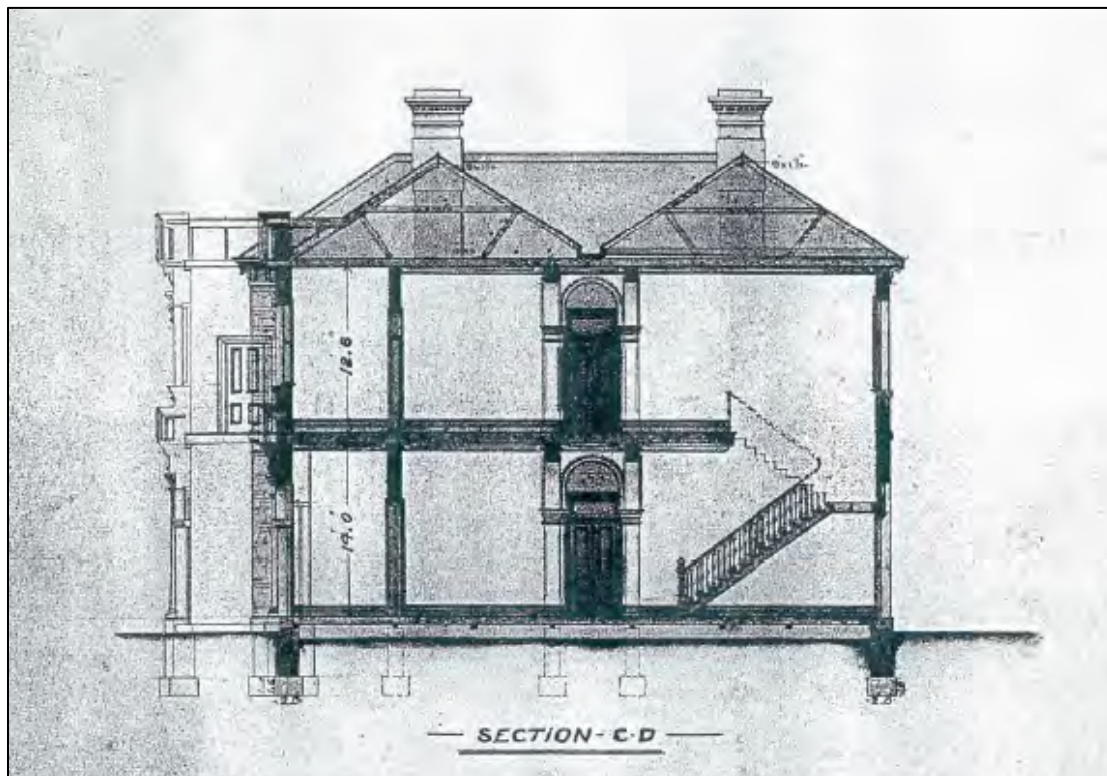


Figure 3.16: Section of internal view within the CME Building (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

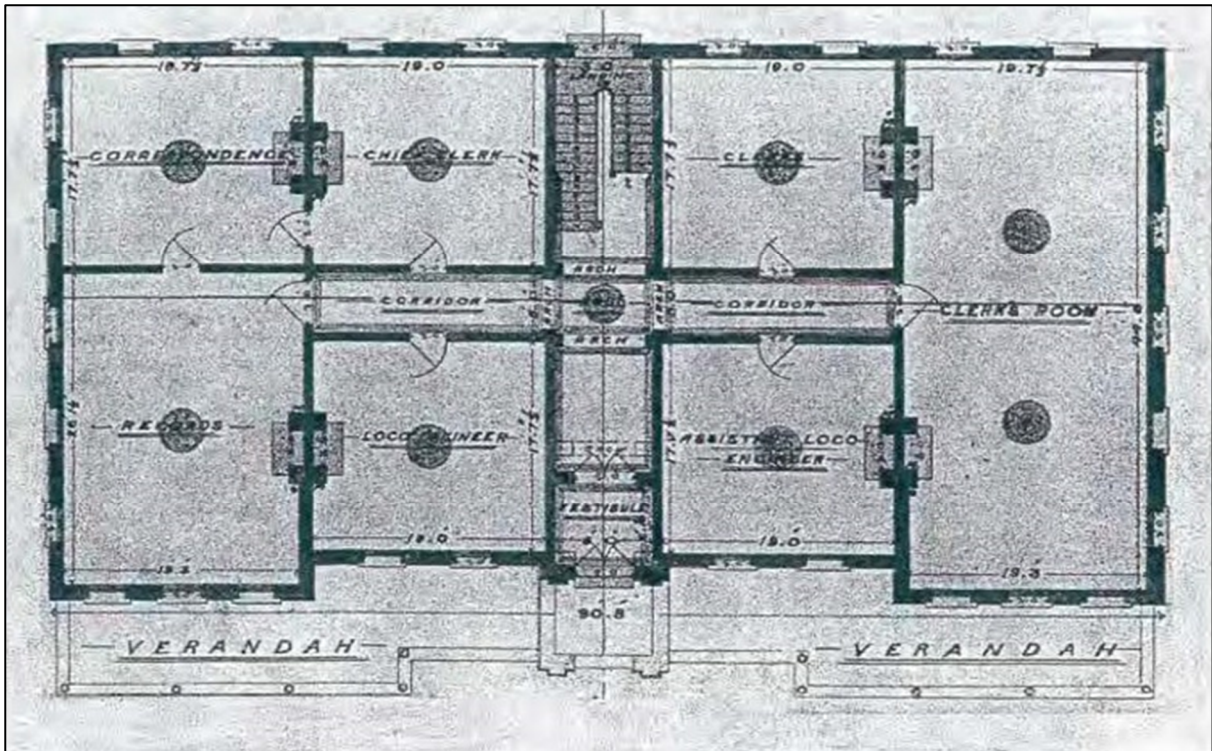


Figure 3.17: Ground Floor plan of the original 1887 construction of the CME Building (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

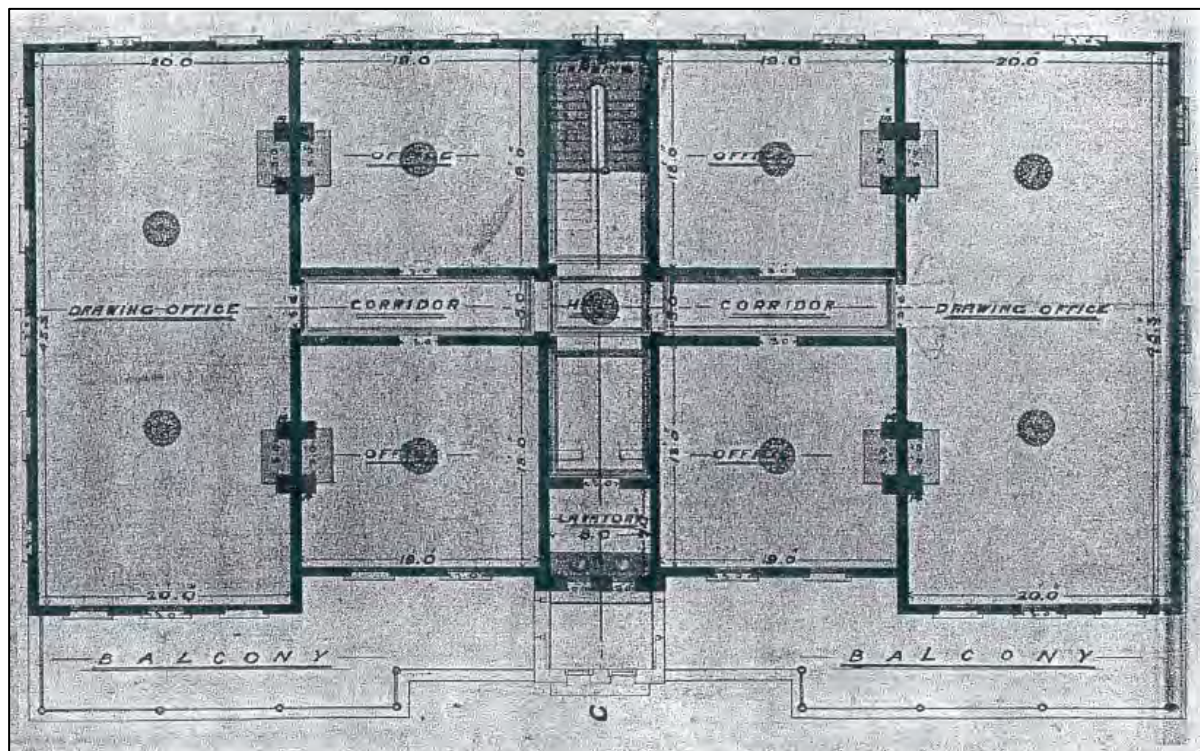


Figure 3.18: First floor plan of the original 1887 construction of the CME Building (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

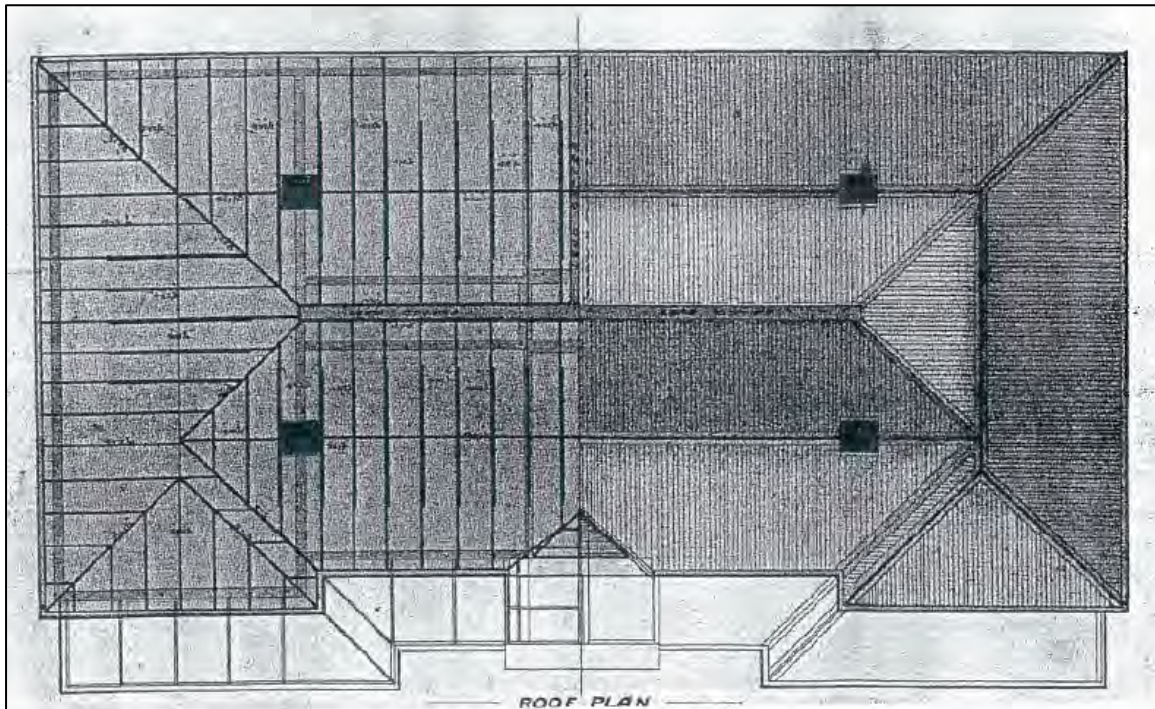


Figure 3.19: 1887 construction of the CME Building roof plan which include details of the cut away section of the roof truss timbers (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

1900 Addition

The 1900 addition involved an eastern extension of the CME Building which 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 (Figure 3.20). 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.⁷⁰

Partial demolition of the brickwork, roof and balcony of the CME Building occurred to accommodate the 1900 eastern extension.

New elements of the 1900 addition of the CME Building include the following:

- Two new office rooms on the ground floor
- Large new CME Office
- Separate entry to CME Office
- CME Lavatory
- New drawing office on the first floor
- Extended verandah
- Extended balcony
- Converted drawing offices to offices
- Conversion of previous CME Office into office
- Conversion of existing CME Assistant office into office
- Extension of roof
- Provision of new fireplaces

⁷⁰ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*:

- Creation of garden east of building

One of the changes in the 1900 addition compared to the 1887 construction of the CME Building include the widening of the corridors on both levels in the 1900 addition. Contrary to the 1887 construction, the 1900 addition included plumbing, chasing of electrical, gas and telecommunications services. Fireplaces within the 1887 construction were located within traverse walls in central positions, although in the 1900 addition, fireplaces are located along the northern perimeter wall of the building.⁷¹ It is believed the roof sheeting and balconies of the CME Building were painted red and the external brickwork across all external walls of the CME Building were not painted until around c1932.⁷²

A number of windows and doorways that were part of the 1887 construction are now bricked up (such as a doorway that provided access to balcony in Room F5). It is believed to have occurred as part of the 1900 addition works. Along the northern elevation of the building, two doors and two windows linking to Room F3B are now completely bricked up and previously used as a dark room for photographic processing.⁷³ Windows in Room G5 were also bricked up located along the northern elevation of the CME Building and believed to have occurred at some point during the 1900 addition phase.

The 1887 and 1920s skirting are similar in size and make although the 1900s addition skirting is different. The 1900 skirting was specifically designed to incorporate electrical and telecommunication services to include wire grounds and casings to carry electrical, lighting and telephone wiring.⁷⁴

At one point the entire first floor of the CME building was also taken up by drawing tables as the drawing offices took advantage of the natural light (Room F6).⁷⁵ The 1900 addition included a large room on the first floor (Room F6) which was entirely allocated to be a drawing office. New designs of drawing tables are seen in Figure 1.18. An isolated office (Room F5B) is located to the west of the new large drawing office which was potentially used as an office for the Drawing Office Supervisor which contained a full height glazed screen to have wider view to Room F6.⁷⁶

The 1900 addition included a larger office space for the Chief Mechanical Engineer whose office was relocated to Room G10 on the ground floor on the eastern end of the building. The CME Assistant office was also located within the eastern end of the ground level of the CME building.⁷⁷ The CME office constructed in the 1900 addition included a larger office space, private entrance along Wilson Street and a private lavatory that became the first indoor toilet in the building (Figure 3.21). The ceilings are fabricated from pressed metal with deep cornices and bulkheads framing a central rose (Figure 3.23). The eastern wall of the room is fitted with bank drawers and a grand marble fireplace along the northern wall. The Chief Mechanical Engineers desk is believed to have been located in front of the bank draws facing west.⁷⁸

⁷¹ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 30

⁷² Ibid

⁷³ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 64

⁷⁴ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 63

⁷⁵ Ibid

⁷⁶ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 31

⁷⁷ Ibid

⁷⁸ Ibid

From the 1900 addition of the CME Building came the establishment of a new and well-maintained garden located east of the building.

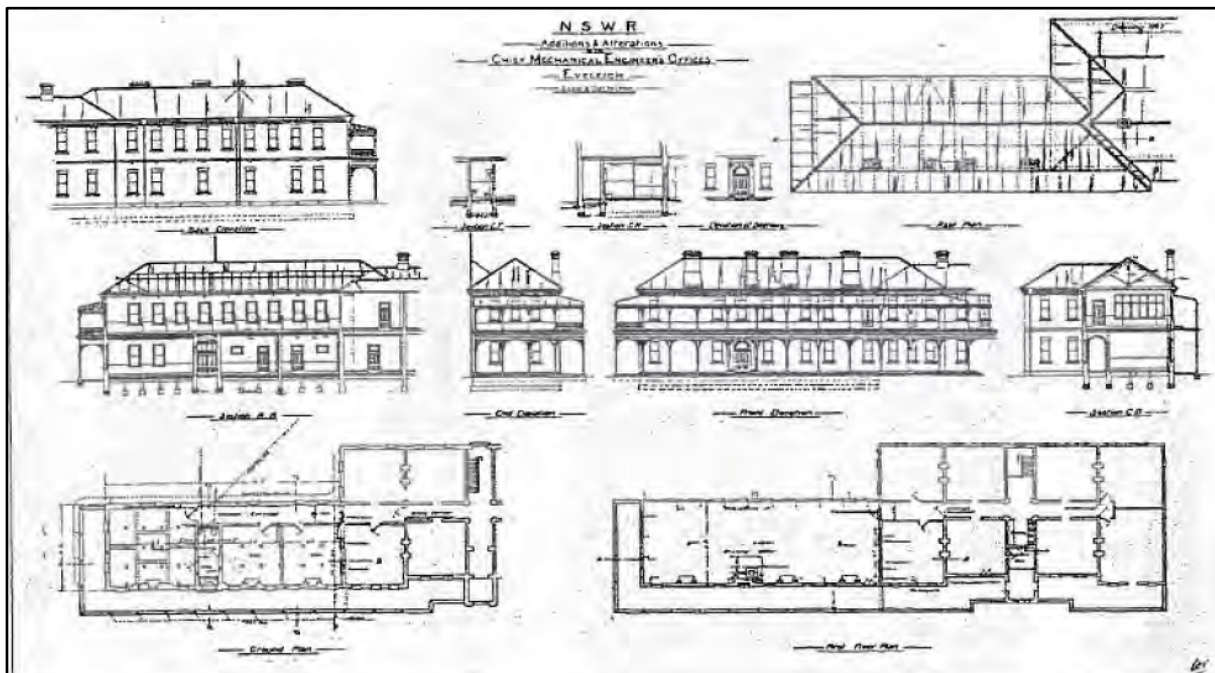


Figure 3.20: Plans, sections and elevations of the 1900 addition showing the sympathetic treatment of the extended façade to that of the original 1887 construction (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

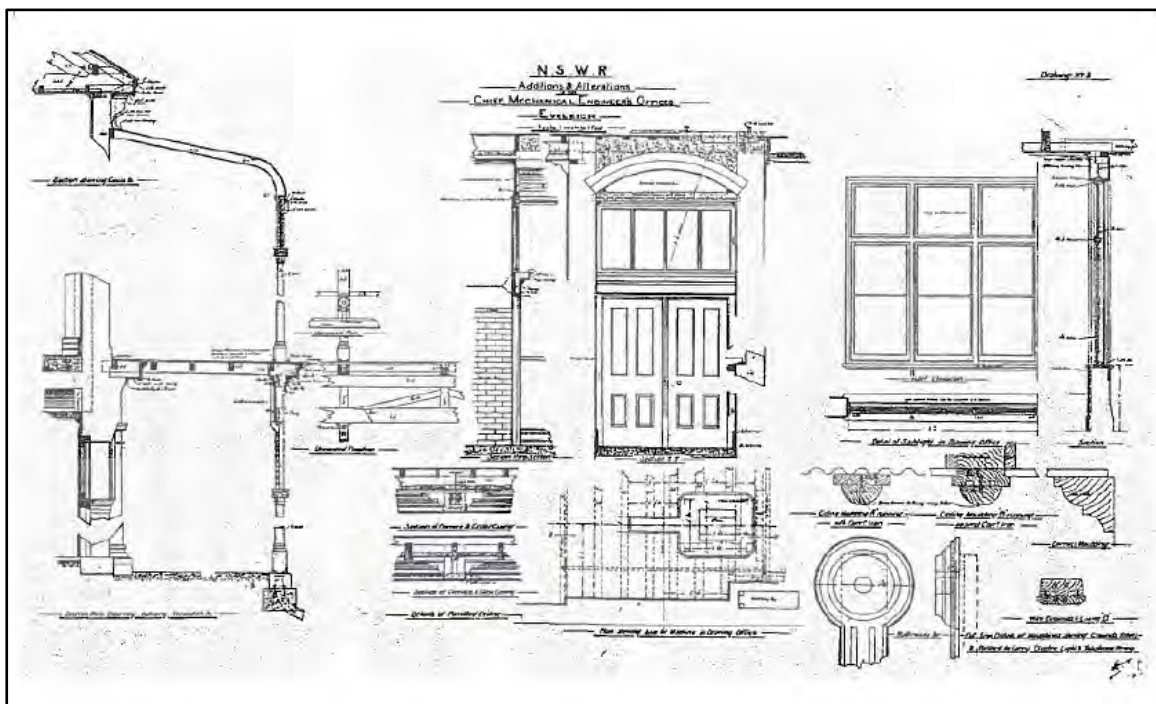


Figure 3.21: Detailed drawing of the Chief Mechanical Engineer's new entrance as part of the 1900 addition (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

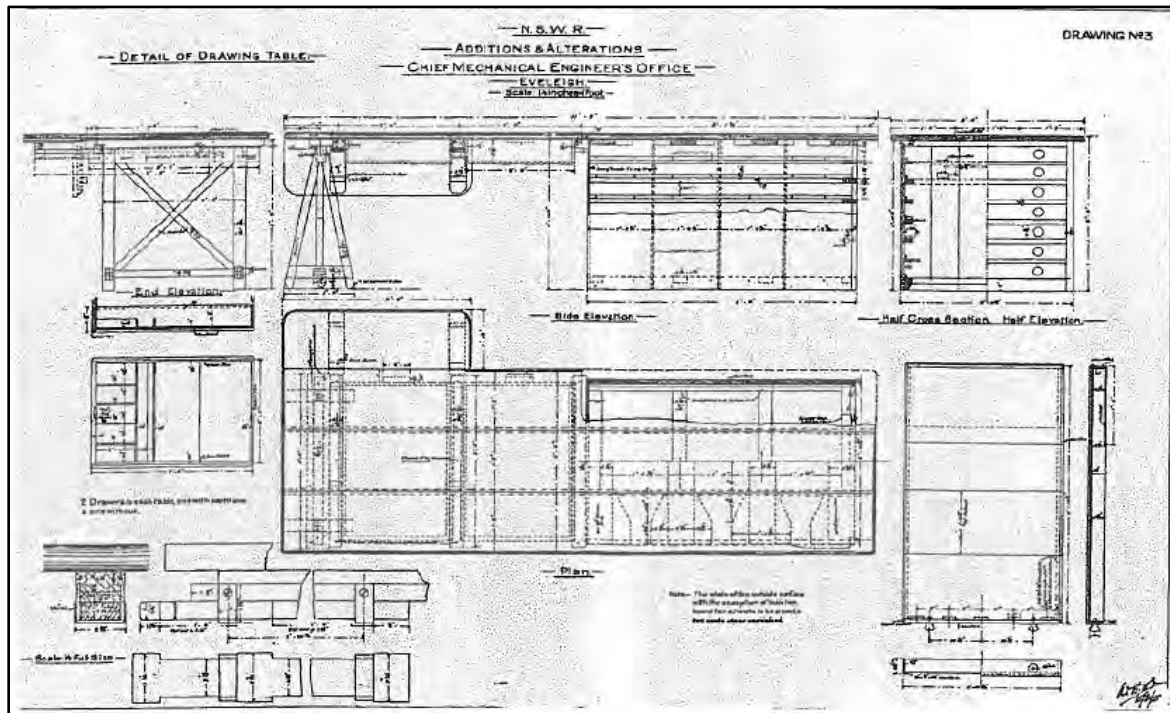


Figure 3.22: Detailed drawing of the 1900 addition drawing table design which were extensively used on the first floor of the CME building (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

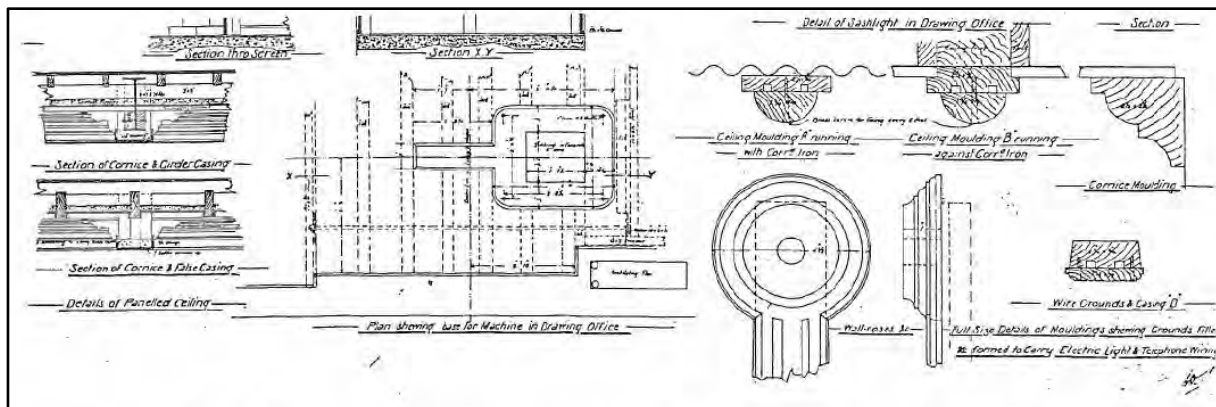


Figure 3.23: Details of numerous ceiling framing, cornice and bulkhead details as part of the 1900 addition to the CME building. Details of the corrugated iron ceilings for the general officers and pressed metal ceiling for the CME's office (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

Manager)



Figure 3.24: The Drawing Office (Room 21), Chief Mechanical Engineer's Department, 1903 (Source: Australian Town and Country Journal, 4 March 1893)



Figure 3.25: Mr. J Scoular, Chief Draughtsman in his office (Room 19), 1903 (Source: (Source: Australian Town and Country Journal, 4 March 1893)

1913 Proposed Addition (Later Cancelled)

An eastern extension was proposed in 1913 to be constructed in the location of the current CME gardens (Figure 3.26). This proposal was rejected and was never executed. This was likely rejected due to boundary limitation due to its close proximity to the eastern boundary of the site. The 1913 addition would have included a new CME office, toilet and entranceway with another three new drawing rooms.⁷⁹

Essential features of the 1913 proposal include:

- Three new offices on the ground floor
- New CME Office
- New CME private entry
- New CME private lavatory
- Extended verandah
- Extended balcony
- Extended roof
- Extended drawing office (Figure 3.24)
- Extended corridor

The later 1920 addition was likely approved over the proposed 1913 addition due to the expansion of the width of the building instead of its length.

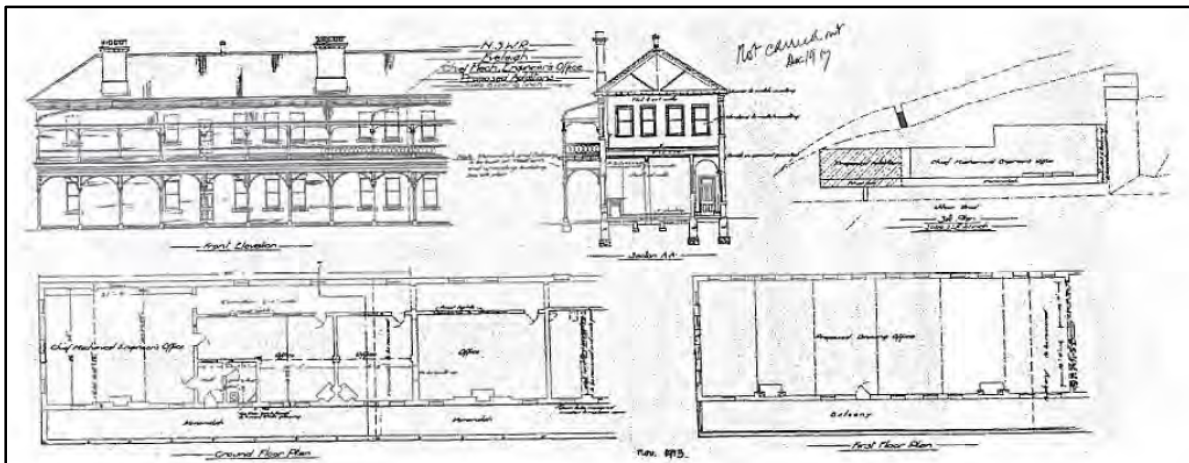


Figure 3.26: Drawings of the 1913 addition that was cancelled (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

1920 Addition

The 1920 addition of the CME Building included a number of new facilities such as the first indoor female toilets off the staircase and two additional male toilets on the ground floor at the southern entrance to the building (Figure 3.27).⁸⁰ The inclusion of female toilets within the 1920 addition indicates the increase of female staff and their role in the administration side of the ERW at the CME Building. This also demonstrates the overall occupancy increase of the building due to expansion of operations at ERW at the time and the focus on supervising the change from steam to electrification of trains.

⁷⁹ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 33

⁸⁰ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 34

The events occurring at the CME Building during that period is described in David Burkes *'Man of Steam- E. E. Lucy- A Gentleman Engineer in the 8Great Days of the Iron Horse'* and included below.

"The early twenties sow an immense amount of work channelled through the Wilson Street Offices: (sic) By 1923 Sydney's population topped the million mark. Patronage of the suburban lines hod risen from 45 million in 1910 to 100 million by the start of the 1920's, a figure expected to reach 112 million in 1926 and 140 million by 1930. (sic) To the public gaze the most conspicuous of all these mammoth projects lay, not with Lucy, but in the hands of the Metropolitan Railway Construction branch which had as its leader the brilliant engineer. Bradfield. (sic) Bradfield stood astride the making of Sydney's new electric railways, the driving of the underground and the spanning of the harbour with a great arch bridge".⁸¹ (David Burke, 1986. Man of Steam)

New elements of the 1920 addition include the following (Figure 1.20):

- New female toilets at the stair landing
- New male toilets at the southern exit
- Enlarged drawing office on the first floor
- Three new offices on the ground floor
- Covered southern exit

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 F6) was also expanded to the southeast to create three alcoves with skylights.⁸² The skylights were added after the initial 1920 addition drawing designs likely due to the need of more natural light in the office for the drawing tables. A skylight is also evident on the balcony (Room F18) which has a single glazed skylight in the balcony roof. The 1997 CMP suggests potentially three skylights were located across the balcony roof previously.⁸³

Three years after the 1920s addition was completed, an entirely new separately housed drawing office was constructed just southeast of the CME Building which demonstrated the dramatic increase in work and need for accommodation during this period.

⁸¹ Burke, 1986. *Man of Steam- E.E. Lucy- Gentleman Engineer in the Great Days of the Iron Horse*.

⁸² Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 35

⁸³ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 51

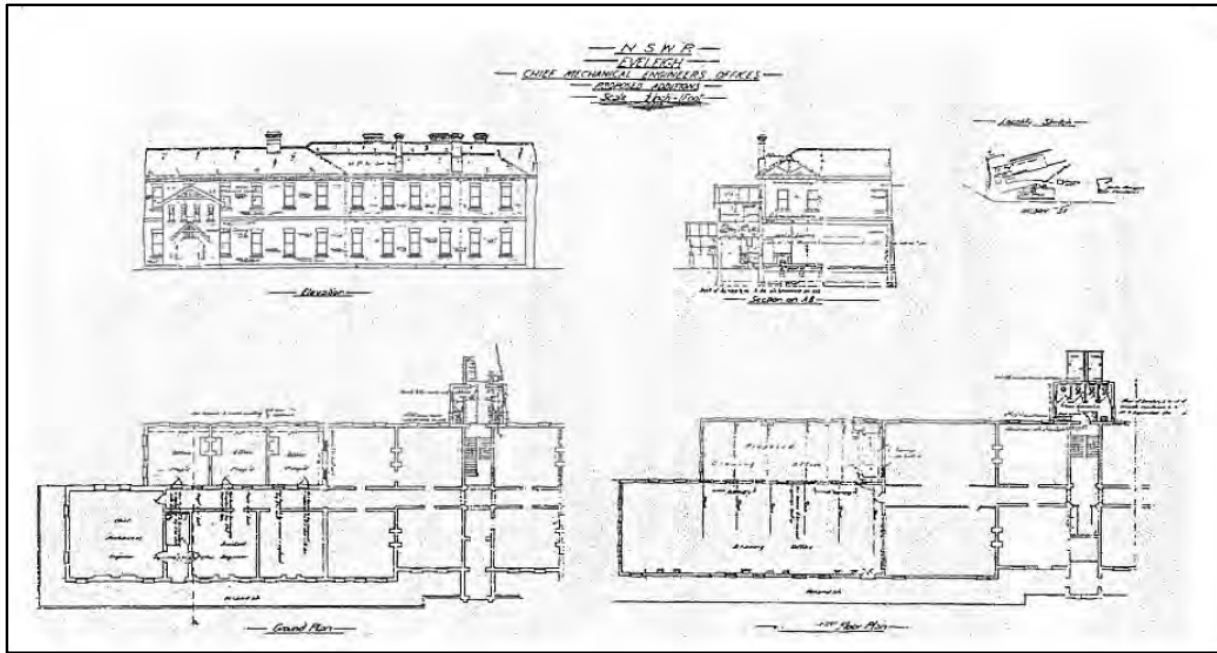


Figure 3.27: Plans of the 1920 addition which included the construction of three skylights over the drawing office, now Room 21 (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

3.4.2. Modifications & Alterations

Original internal elements are still present despite periods of alteration and modification.

Modifications undertaken to the CME building, as outlined in the 1997 CMP and with Curio additions, have included the following:

- Modifications to ceilings; (please refer to Table 1.3 for more details on an estimated timeline)
- Introduction of partition walls;
- Balcony enclosures subsequently reversed leaving doorways and windows bricked up in Room F3B; (c1900)⁸⁴
- Fireplaces boarded up and surrounds removed;
- Original office joinery removed;
- Original sanitary fittings removed (not all);
- Addition of sundry electrical items and chasing;
- Internal and external paint colours modified;
- Internal floor finishes modified;
- Introduction of reverse cycle air conditioning units;
- Introduction of fluorescent lighting; and
- Introduction of hydraulic fixtures including laboratory equipment.
- Partial demolition of the brickwork, roof and balcony to accommodate the 1900 eastern extension (1900).
- Removal of chimney elements and paintwork on external facades of the CME Building.
- Partial demolition of northern wall brick wall in Room F4 to construct a new door to provide access to the balcony (c1900).
- The original 1887 doorway along the northern wall in Room F5 that provided access to the balcony was bricked up (c1900).
- Plasterboard wall was added to first floor western hallway entrance (Room F11).

⁸⁴ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 69

- A plasterboard wall was added to divide the original 1887 north to south first floor corridor into Room F3A and F3B.
- Partition walls were added to Rooms G1, G2, G21, F1, F5 and F6.

3.4.3. Previous/ Current Important Previous Buildings and Features

Calder House

Calder House was previously located c50 metres west of the CME Building and had a strong association with the subject site as it was used as a residence for the Locomotive Works Manager and Chief Mechanical Engineer of the ERW until 1923 after being destroyed in a fire.⁸⁵

Further detail on Calder House is located in Appendix A of this report.

CME Toilet Block

Located south of the CME Building was a toilet block/outhouse that was constructed during the 1887 phase of the CME Buildings establishment (Figure 3.28). The single storey brick building with a monopitch roof (measuring approximately 7 metres by 3.9 metres) provided facilities for occupants at both the CME Building and the Scientific Services Building. The cleaners passage measured to be 3 foot wide (900mm).⁸⁶ The 1887 toilets included six 'earth closets' and located behind the toilets was a cleaners passage which was used for cleaning purposes and the replacement of soiled earth with clean earth known as a 'earth store'.⁸⁷ During the 1920s the toilet block underwent modifications, and the original toilet block was potentially demolished.⁸⁸ The current toilet block includes water closets instead of earth closets and the addition of windows to the building. The construction of the current toilet block south of the CME Building is consistent with the building methods used during the 1920s.

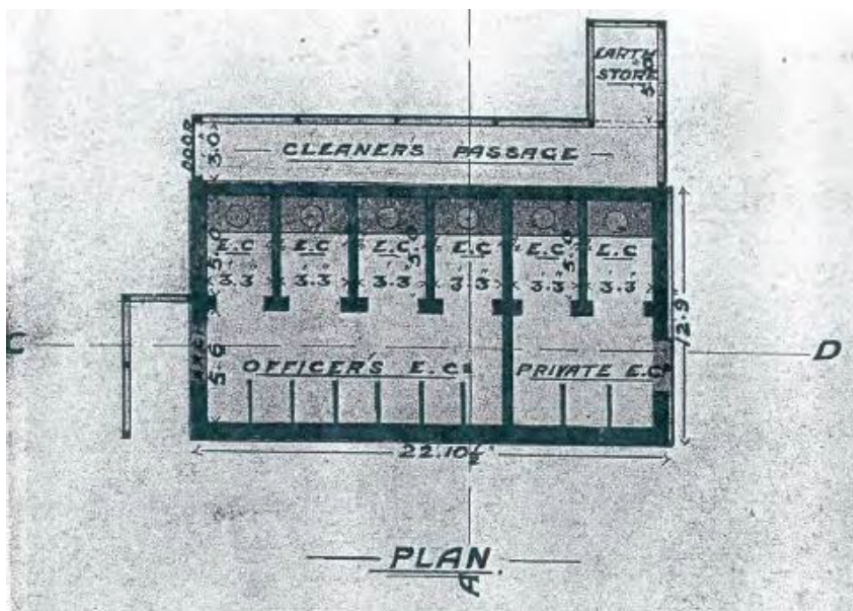


Figure 3.28: Layout of the original toilet block/ outhouse originally for the CME Building. Later adapted and altered to incorporate with the Scientific Services Building No.1 and No.2 (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

⁸⁵ Don Godden & Associates, 1990. *Eveleigh Railway Workshops Heritage Study, Vol 1.*

⁸⁶ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP: 20*

⁸⁷ Ibid

⁸⁸ Curio, 2022. *RNE Paint Shop Sub-Precinct: Non-Aboriginal Heritage Study: 53*

Scientific Services Building No.1

The first chemical lab located in the RNE Precinct was the Comptroller of Stores Office which was established in 1906.⁸⁹ In 1916, a single storey building was constructed west of the CME Building that included a strong room and chemical laboratory (originally measuring to 7 meters in width and 14 metres in length).⁹⁰ The strong room was used for storing important documents and data produced in the CME Building and the testing laboratory was used to undertake tests on metal, paints, lubricants, detergents and welds to assist in the design and manufacturing of locomotive and carriages within the ERW precinct and NSW.⁹¹

Huge modifications and additions were made in 1923 to the building which became a double storey brick building which also saw expansion in length and width (Figure 3.29). In the 1960s, the Scientific Services No. 2 building was constructed south of the Scientific Services Building No.1.⁹²

The CME Building and the Scientific Services Building No.1 were connected during its period of use. The CME Building continued to house administration related activities of the testing laboratories which were still occurring in 1997. Areas of the CME Building, such as Rooms G2, G21A, G1 and G21B, were being used by the RSA Testing Laboratories in the 1990s.⁹³

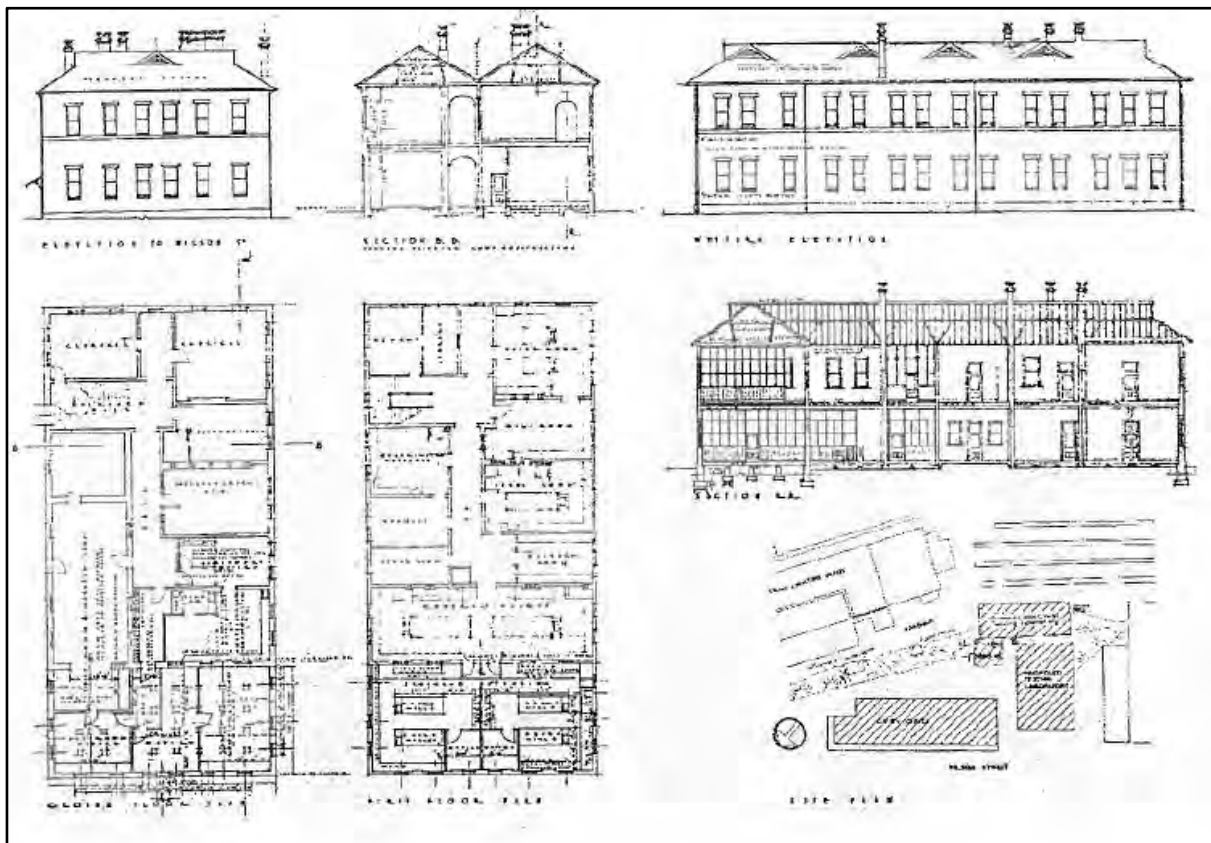


Figure 3.29: Scientific Services Building No.1 1923 plan, section and elevation of proposed designs (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

⁸⁹ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 18

⁹⁰ Ibid

⁹¹ Ibid: 19

⁹² Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 18

⁹³ Ibid

1923 Drawing Office

In 1923, a standalone single storey timber framed drawing office was constructed located on the lower embankment southeast of the CME Building (Figure 3.30). The proposed plans for the drawing office included additional office accommodation for the Chief Mechanical Engineer and three separate toilet urinals and hand basins connected by a covered walkway.⁹⁴ The structure measured to be approximately 52 metres by 17 metres. Some of the previous names for the structure included CME's drawing office, drawing office, Train Equipment Depot.⁹⁵

The structure was used as an additional drawing office facility which was linked to the operation at the CME Building and considered part of the CME Building complex which aided in keeping up with the increasing work during the period. An external staircase between the CME Building and the Drawing Office would've been required due to the different ground levels of each building with the CME Building sitting on a higher landscape. The building was fully demolished by 1995.⁹⁶

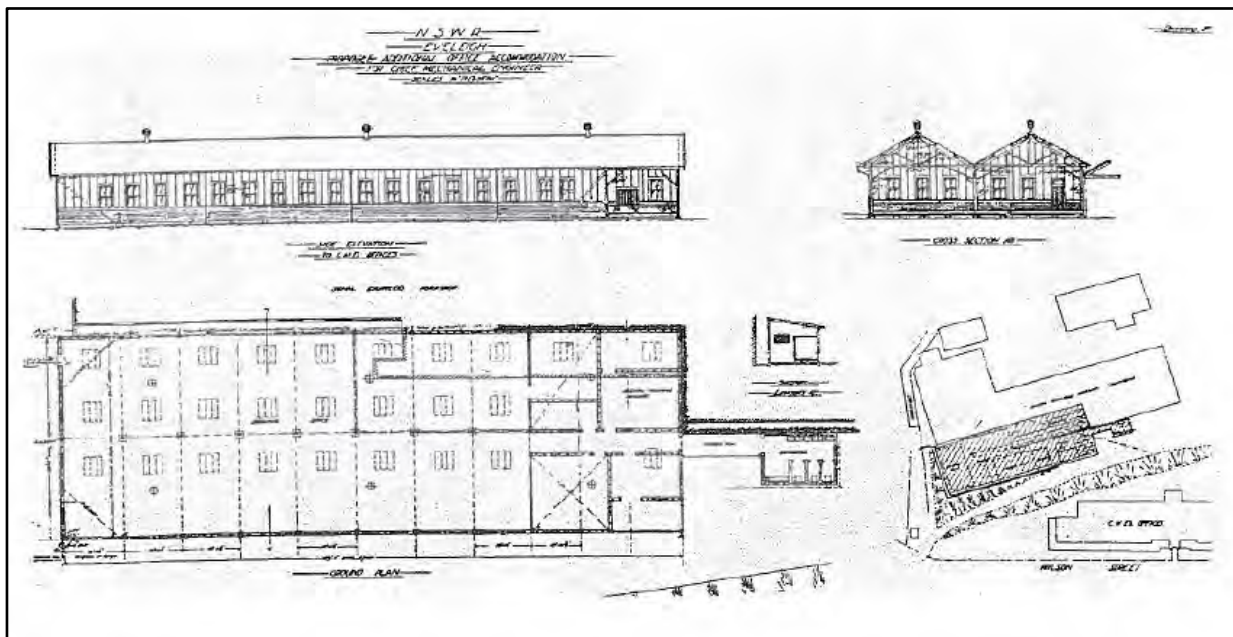


Figure 3.30: Plans, sections and elevations of the 1923 additional Drawing Office located southeast of the CME Building (Source: RSA Archives B2 Plan room in Transport House. Located by David Sheedy- Architect and Victor Poljanski -SRA Archives Manager)

Garden

Up until the late 20th century, the gardens located to the east of the building were well maintained (Figure 3.31). A quote from Chris Betteridge's 1997 report on *"The Railway Gardens of Sydney- An Inspirational Visit to Redfern Station and Eveleigh"* that was included in the CMP by Rappoport & Caldis Cook Group described the condition of the garden east of the CME building in 1997 as:

"The present garden at the Chief Mechanical Engineer's Building is a triangular area approximately 375 square metres, laid down to lawn, with garden beds around its periphery. The space tapers towards its northeastern corner where an entrance drive

⁹⁴ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*:21

⁹⁵ Ibid

⁹⁶ Ibid

from Wilson Street enters. The street side of the garden is boarded with a recent steel picket fence in heritage green.

Along the street side of the garden are (sic) planted London Plan trees at 5 metre centres. These trees have been bollarded and are underplanted with various shrubs including hydrangeas, *Michelia figo* (Portwine Magnolia), variegated *Celtis* sp. And seedlings of Canary Island Date Palm (*Phoenix canariensis*). The row of planes extends westwards along the northern façade of the building and there are planes also planted in Wilson Street.

There is a narrow garden bed along the edge of the area under the eastern balcony of the CME building which has been paved with interlock pavers. This bed has haphazard planting of *Nandina domestica*, *Chlorophytum* sp. And a self-sown loquat. Along the southern edge of the triangular lawn is a bed planted with *Agapanthus africanus* at 50cm centres and irregular plantings of native shrubs e.g., *Grevillea cultuivars* and of *Cordyline* sp. To the south of this bed is a pedestrian path leading to the rear of the CME building. Adjoining this path is an embankment planted with eucalyptus, acacias, a Silky Oak (*Grevillea robusta*) and *Celtis* sp. Under these trees are shrubs of *Nerium oleander* (Oleander), *Hibiscus rosa-senensis* (*Hibiscus*, *Ochna serrulate* (Micky Mouse Plant) and *Westringia* sp.

In the centre of the lawn area is a circular bed edged with volcanic rock and planted with an unidentified tree about 5 metres high with variegated leaves, a *Murraya paniculate* 3-4 metres high, a bottlebrush, a white cedar, *albizzia*, a pomegranate and an azalea, all *canariensis* probably planted in the 1920s, a large camphor Laurel (*Cinnamomum camphora*) and several self-sown camphor laurel and a *Celtis*.

East of the CME building, leading to Redfern No.1 Platform, a path winds between an assortment of buildings. A steep bank to the north of these buildings is densely clothed with loquat, Moreton Bay Fig, *Jacaranda* sp., *Casaurina* sp. And *Plumbago* sp. The environs of these disused buildings are infested heavily with weeds including *Conyza* sp., *Hedera helix* (English Ivy), *Tradescantia* sp., *Araujia* sp., *Parietaria* sp. (Allergy Weed), Saffron Thistle." (Musecape, 1997)⁹⁷

⁹⁷ Musecape, 1997. *The Railway Gardens of Sydney- An Inspirational Visit to Redfern Station and Eveleigh*



Figure 3.31: Eastern elevation, entrance driveway and gardens of the CME Building, c.1950 (Source: State Archives & Records, NRS-17420-2-19-588/000)

3.5. Role of the CME Building within Eveleigh

The ERW site fell predominantly under the management and control of the Mechanical Branch of the NSW Railways. Initially, from 1878 the branch split off from other engineering sections of the NSW Railways, first known as the Locomotive Engineers Branch, until becoming known as the Mechanical Branch in 1890.⁹⁸ The construction, maintenance, repair, acquisition, and disposal of railway rolling stock were the responsibility of the Mechanical Branch. Other responsibilities included testing new materials and systems that were appropriate for use in the NSW Railways. All of the staff that made up the Mechanical Branch reported to the Chief Mechanical Engineer at his office in the CME building.⁹⁹

The Chief Mechanical Engineer oversaw and managed the entire ERW site and was ultimately responsible for the design, construction, maintenance, and care of all operating rolling stock within the NSW railway.¹⁰⁰ The CME building also contained the offices of the Locomotive Engineer, Locomotive Overseer, Locomotive Inspector, and the professional clerical staff.¹⁰¹

The CME Building not only housed the Chief Mechanical Engineer of ERW but also their assistants and clerks who supervised the design and manufacture of locomotives, carriages, and wagons. Other functions included establishing new rail routes across the state, reporting and monitoring performance of rolling stock, and testing new materials and systems for potential use in the NSW Government Rail (NSWGR) organisation.¹⁰²

⁹⁸ State Archives NSW, AGY-1193, Mechanical Branch [Railways]

⁹⁹ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 91

¹⁰⁰ Ibid

¹⁰¹ Curio Projects, 2022. *RNE Paint Shop Sub-Precinct Non-Aboriginal Heritage Study*: 51

¹⁰² Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 14

The first Chief Mechanical Engineer at Eveleigh was William Thow, appointed in 1889, and the nearby remnant Calder House was used as a residence for the Chief Mechanical Engineer for until it was vacated due to its poor condition before being burnt down in 1924.¹⁰³

A number of renowned mechanical engineers who worked at the CME building made huge contributions to the railway. Such achievements included improving the capability of locomotive performances as well as creating famous designs for locomotives and carriages.¹⁰⁴ In the 1920s, engineers worked on revising their understanding of electrification and then later even dieselsation.

The building was continuously used as a railway building from its establishment up until the 1990s where the ownership was still under the State Rail Authority.¹⁰⁵

3.6. Management Systems Applied at Eveleigh

The majority of the management of operations for the ERW was undertaken in the CME Building by administration staff. The 1997 CMP by Rappoport and Caldis Cook Group outlined particular roles of the administration staff at the Wilson Street office, including the following.

- *design of locomotives, carriages, and wagons;*
- *testing of manufactured, imported and locally supplied stock and permanent way;*
- *reporting on the performance of manufactured, imported and locally supplied stock and permanent way;*
- *tendering and purchasing of all associated materials used in NSWGR, including; oils, lubricants, paints, metals;*
- *administration of productive output, maintenance, and repair at the ERW; and*
- *workshops.*¹⁰⁶

The establishment of systems to manage the above and production in accordance with budgetary constraints proved to be challenging for both management and workers, resulting in resistance and strikes.¹⁰⁷ An example of this is the introduction of the card system into the workshops which led to the 1917 strike which was the biggest Australian industrial dispute in history at that point.

*"Only 15,000 of the NSW Railways and Tramways Department's 48,000 employees did not strike. In geographic terms the dispute extended beyond Sydney to the industrial centres of Newcastle, Broken Hill, Bulli-Wollongong, Lithgow, Bathurst and Goulburn and it received sympathetic support from trade unions in Victoria and Queensland. In total, four million working days were lost in New South Wales at a cost of 2.5 million pounds".*¹⁰⁸ (Taksa & Kent, 1996)

The F. W. Taylor's scientific management system was implemented due to the effects of World War One was outlined in Taksa & Kent's 1996 work *Eveleigh Workshop Management Plan for Moveable Items and Social History* as seen below.

Against this backdrop, the Railways and Tramways Department began to gradually implement the efficiency methods associated with F W Taylor's scientific management. Taylor's system had initially gained a global audience as a result of his

¹⁰³ Godden, 1990: 56 & 93

¹⁰⁴ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 91

¹⁰⁵ Ibid: 4

¹⁰⁶ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 91

¹⁰⁷ Ibid

¹⁰⁸ Taksa & Kent, 1996: 24

discovery of high-speed steel, which more than doubled the output possible in steel production. But, because of the way Taylor enmeshed high speed steel with his management system. the latter rapidly obtained a global audience and a diverse following which extended to Australia. This system was extremely broad ranging. Included amongst its methods were the standardisation of tools, time and motion studies, the results of which were tabulated by engineer managers for incorporation into instruction cards for workers, payment incentive schemes, and functionalised foremanship which increased surveillance over workers through the employment of additional numbers of foremen".¹⁰⁹ (Taksa & Kent, 1996)



Figure 3.32: Mr. R. Hill on his retirement showing staff of C.M.E. building, 1961 (Source: State Archives & Records, NRS-22469-1-7-H611142)

¹⁰⁹ Taksa & Kent, 1996: 23



Figure 3.33: Mr. R. Hill on his retirement showing staff of C.M.E. building 1961 (Source: State Archives & Records, NRS-22469-1-7-H611143)

3.7. Heist on Wilson Street

On the 10 June 1914, a heist involving a getaway car occurred on Wilson Street outside of the CME Building. This event was quite famous in the local community and in the decades to follow. It occurred on payroll day at the Eveleigh Railway Workshops as the robbers targeted the pay boxes that were collected from the bank and transferred to the CME Building via a horse drawn wagon. Paymaster for NSW Railways, Frederick Charles Miller and his colleague, John Henry, returned from the bank with two cash boxes that totaled to £699¹¹⁰ After they arrived at the CME Building, Norman Twiss, a CME administration employee, met the cab and delivered one cash box safely inside the Pay Office within the CME Building so staff could begin paying the workers.

As Twiss returned to retrieve the second cash box, a car pulled up behind them with guns demanding the money. A reward of £400 was later posted for information about the identity of the men who were later caught.¹¹¹

3.8. Engineers Employed at the Chief Mechanical Engineers Building

The Eveleigh Railway Workshops underwent substantial development and change in workshop practices over the years, and these developments were the product of the various staff members working out of the Chief Mechanical Engineer's Office.

¹¹⁰ State Archived & Records. *Robbery Under Arms – The Eveleigh Heist 1914*
<https://www.records.nsw.gov.au/archives/magazine/galleries/eveleigh-heist>

¹¹¹ Ibid

The CME building was primarily intended as an office and workstation for the Railway Workshop engineers, who would be responsible for the research, blueprints and implementation of their designs within the Railway System. From the CME these engineering staff also took up roles as the most senior level supervisors and overseers at the workshops.¹¹² It was the Chief Mechanical Engineer himself, not the two Works Managers, who was the absolute head of the Railway Workshops at Eveleigh, and for the entirety of the NSW Railway System.¹¹³

The following section highlights some of the key individuals that worked from the CME building from its construction up until closure in 1989. These are predominantly men that held the position of Chief Mechanical Engineer, or its equivalent, 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
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
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

3.8.1. 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. Born in Liverpool, England, and subsequently educated in Carlisle, Thow was hired by the Carlisle Railway Company and worked under his father, before working for the Scottish Railway in Perth, Scotland. After being hired as a draftsman at the Glasgow Dubs & Co locomotive works, he worked for five years at the Worcester Engine Works Company as an ordinary and then a chief draftsman. Thow was subsequently

¹¹² Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP: 93*

¹¹³ Don Godden, 1986. *Heritage Study of the Eveleigh Railway Workshops Vol. 1: 42*

employed by the London and Northwestern Railway Company at the famous Crewe Railway Establishment, and later obtained the position of Inspector and Mechanical Assistant in Egypt.¹¹⁴

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. Middleton. Thow was thereafter the first person to be given the title of 'Chief Mechanical Engineer', as the position name was changed upon his appointment (Figure 3.34). 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 Engineer's Office in Eveleigh.¹¹⁵

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 which 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.¹¹⁶



Figure 3.34: Photograph of William Thow, First Chief Mechanical Engineer (1889-1911) NSW (Source: State Archives & Records NRS-17420-2-3-343/000)

3.8.2. Mr. Ernest Edward Lucy (CME 1911-1932)

Ernest Edward Lucy originally hailed from the United Kingdom, working for the Great Western Railways, or GWR (known to its staff as God's Wonderful Railway), which was among the oldest and most famous railway companies in Britain (Figure 3.35 and Figure 3.36). Lucy would begin work for NSW Railways in 1906 as the Assistant Chief Mechanical Engineer under Mr. Thow. Lucy, before being given the top position in 1911 after the latter's retirement. Lucy's wife, who had been suffering

¹¹⁴ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP: 94*

¹¹⁵ Ibid.

¹¹⁶ NSW Railways, 1920. *New South Wales Railway and Tramway Magazine*, 1st December 1920.

from a serious illness since at least 1906, passed away only a few weeks after his appointment as CME. Lucy would retire from the position in 1932, after 22 years of service.¹¹⁷

Ernest Lucy served as CME for some of the most productive and eventful years of the Eveleigh Railway Workshop, having control over 16,000 men and supervision over 26,000,000 miles of track at its peak.¹¹⁸ Lucy helped to produce some of the era's most ambitious civic projects, like the Sydney Harbour Bridge and the city's underground railway. Among the most famous products of his years of service were the massive D57 Mountain Class locomotives, as well as the famed NN and C36 classes (Figure 3.38). 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 1930's (Figure 3.37).¹¹⁹



Figure 3.35: Photograph of E. E. Lucy, Chief Mechanical Engineer (Source: State Archives & Records, 17420-2-3-343/001)

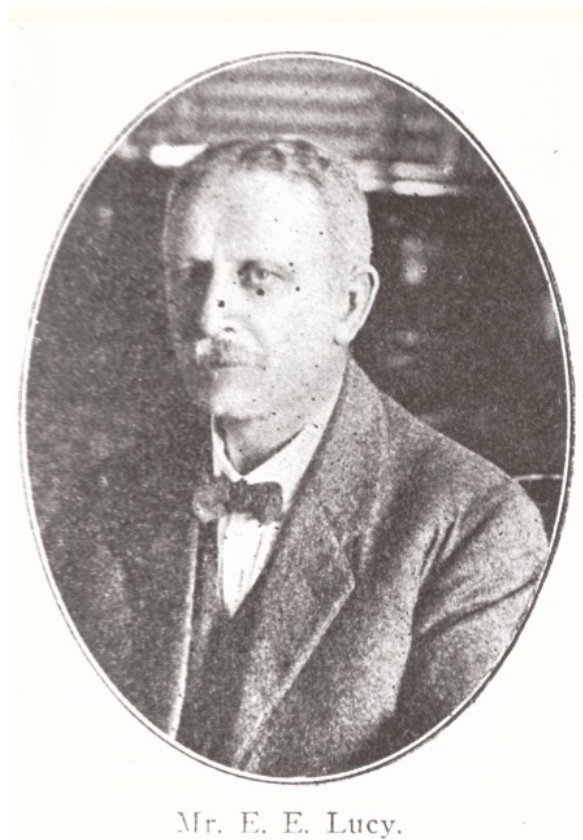


Figure 3.36: Mr EE Lucy Chief Mechanical Engineer 06-1911 To 1932, NSW] (Source: NRS-17420-2-3-343/002)

¹¹⁷ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 95

¹¹⁸ The Sun, *Knew Locos*, 9 April 1932: 3.

¹¹⁹ D. Burke, 1986. *Man of Steam – E Lucy – Gentlemen Engineer in the Great Days of the Iron Horse*



Figure 3.37: Photograph album of Eveleigh Workshops during the 1917 railway strike - E.E. Lucy C.M.E. and Officers (Source: State Archives & Records, NRS-15309-1-1-[16])

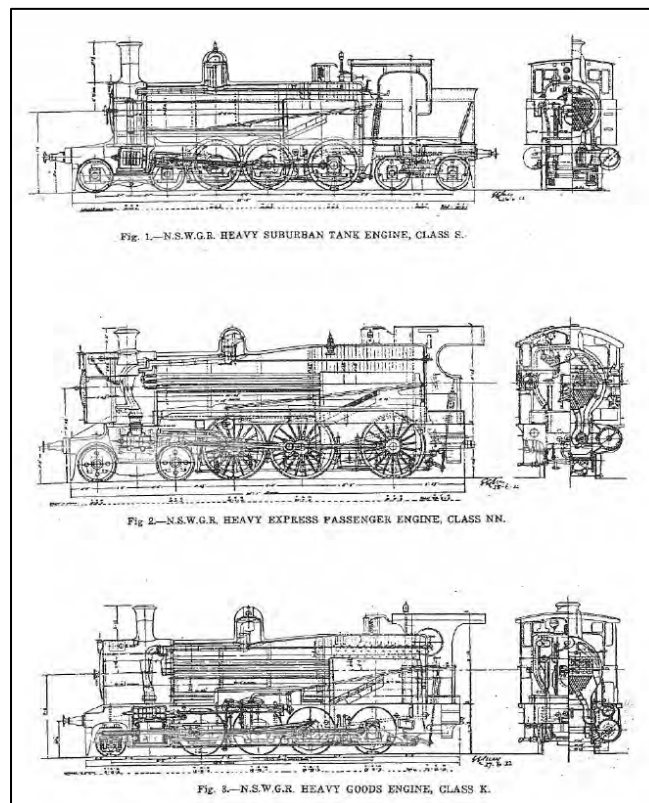


Figure 3.38: Locomotive designs discussed by EE Lucy during a presentation at the Sydney Division of the institution of Engineers, Australia on Thursday 14th September 1922; Recent and Future Locomotive Design in New South Wales. Published by the Institute of Engineers, 1922. (Source: Institute of Engineers 1922)



Figure 3.39: Mr. EE Lucy and Colleagues at CME Office, Eveleigh, Main Suburban, NSW (Source: State Archives & Records: NRS-17420-2-3-343/002A)

3.8.3. Mr. Walter Russell (Assistant CME 1918 to 1920)

Walter Russell worked as an apprentice in England and then later as a draftsman for locomotive and hydraulic tender work in the GWR in 1893, before being given the position of inspector and tester of materials purchased in the company in 1898.¹²⁰ By 1901, Russell was working as an inspector for girders and bridges, before being promoted to Assistant Divisional Locomotive Carriage and Wagon Superintendent at the Swindon Works in England and then as Chief Assistant Divisional Superintendent at the Newport Works, Wales. Finally, Russell was eventually hand-picked by the NSW Chief Railway Commissioner, among other people, for the role of Assistant Chief Mechanical Engineer for NSW. Russell unfortunately died in office in 1929, only two years after being given the position.¹²¹

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

Alfred Foster was born in Sydney, growing up in the suburb of Paddington. After attending Fort Street Public School, Foster signed up as an apprentice at the Eveleigh Workshops 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, working for the Consulting Engineer's Office in London, as an assistant engineer in a German firm

¹²⁰ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP: 97*

¹²¹ D. Burke, 1986. *Man of Steam – E. E. Lucy – Gentlemen Engineer in the Great Days of the Iron Horse*

(the nation with the second largest locomotive works in the world, aside from the USA), and then as a consulting engineer working in several countries at once.¹²²

At the outbreak of the first world war in 1914, Forster had just left Germany, narrowly avoiding the hostilities. Like most young Australian men of the era, Forster was eager to serve his country in the conflict but 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 1920.¹²³ Once again, Forster was sent overseas to observe and study railway technology in Europe, this time alongside W.H Young, who would later become the CME himself. By 1925, Forster was only 35 and was promoted to the position of Railway Commissioner, the youngest man to be given the position in history.¹²⁴

3.8.5. Mr. Harold Young (CME 1932 to 1950)

As mentioned above, Mr. H. Young had previously been sent to Europe in 1921 alongside Forster to study railway technology, namely electric traction, and steam designs.¹²⁵ Young was presumably given the position of Assistant CME after its vacancy caused by Forster's youthful promotion in 1925, keeping the position for 7 years before being given the job of CME itself after Mr. Lucy's retirement.¹²⁶ Mr. Young would travel abroad once again in 1936 to Europe and America, leaving his Assistant CME Mr. Armstrong, in command.¹²⁷ In c.1936-37 Mr. Young along with the entire CME staff were relocated to the newly constructed Transport House in the York Street, Sydney CBD, which would subsequently house the entire NSW Railways Administration.¹²⁸ For this reason, every CME listed from 1936 onwards did not work primarily in the North Eveleigh CME building but would have visited the site for overseeing and work related directly to the workshops.

Mr. Young was involved in a controversy in the late 1930's involving a new bogie device known as 'Boock's break-of-gauge', in which Young clashed with the Railway Commissioner, Mr Hartigan, over the device's viability. Hartigan rejected Young's view that the device had potential success, calling it 'fundamentally unsound'.¹²⁹ Young would later recant his opinion on the device's practicality, but the large number of news articles published on the disagreement speaks to its potential effect it had on his reputation. Mr. Young did achieve successes in his career as CME however and was responsible for designing the D58 class locomotive engine, among the most powerful of its kind in the world at that time.¹³⁰ In 1950, Young was forcibly retired by transport officials, alongside many other older men retaining their jobs long after retirement age, to make way for younger men to be given a chance.¹³¹

¹²² Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 97

¹²³ D. Burke, 1986. *Man of Steam – E. E. Lucy – Gentlemen Engineer in the Great Days of the Iron Horse*

¹²⁴ Smith's Weekly, *The Man of the Week*, 10 January 1925: 2

¹²⁵ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 98

¹²⁶ The Sun, *Knew Locos*, 9 April 1932: 3.; The Newcastle Sun, *Railway Posts*, 29 December 1932: 6

¹²⁷ National Advocate, *Off Abroad*, 11 January 1936: 4.

¹²⁸ Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP*: 4, 48

¹²⁹ Sydney Morning Herald, *Break-of-Gauge Device*, 15 July 1838: 18.

¹³⁰ Lithgow Mercury, *Giant Locomotive Gets 'Civic Reception' At Lithgow*, 24 Jan 1950: 2.

¹³¹ Daily Examiner, *Age Purge of Transport Officials*, 12 December 1950: 1.



Figure 3.40: [Executive staff. Back row left to right: [?], E. Davis, A. Cooper, R. McNamara, J. Bannister, R. Heushkel, C. Boston, J. Kincaid, N. Readaclyff, E. Barry, D. Eastwood, J. Dunkerley. Front row left to right: H. Carroll, A. Chapman, Mr Peters, **Mr Young** C.M.E., Mr Garside Commissioner, F. Heard, G. Tully, Mr Crealey, R. Fraser]
(Source: State Archives & Records, NRS-17420-2-19-[SAMS1]-33)

3.8.6. 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. An example is the 'Cardew Blower Ring', which helped to improve steam power within locomotive boilers at a vastly lower level of fuel consumption when the engine was sitting still. This design was implemented into all of the post-war steam locomotives owned by British Railways. Other examples of Cardew's engineering innovations include 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 amongst the transport system in NSW.¹³²

In 1929, Cardew was promoted to Assistant Engineer, 3rd class, and by 1937 had reached the position of Mechanical Engineer, 3rd class. He was appointed to the role of Engineer for Loco Testing in 1940, and then the Engineer for Running Testing in 1947, before finally being appointed Assistant Chief Mechanical Engineer in 1955 until his retirement in 1963. Cardew ultimately worked in the CME building for close to 40 years and served under four of its Chief Mechanical Engineer's. These included E. E Lucy, H. Young, W. Armstrong, and finally F. Heard.¹³³

¹³² Rappoport & Caldis Cook Group, 1997. *Chief Mechanical Engineers CMP: 98*

¹³³ Australian Railway Historical Society, 1973. Bulletin No. 432.



Figure 3.41: 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)



Figure 3.42: Mr. C.R. Cardew, Assistant Mechanical Engineer, in Room 27 C.M.E [Chief Mechanical Engineer] Building. Photos taken June 11th, 1958 (Source: State Archives & Records, NRS-22469-1-5-H580926)



Figure 3.43: [CA Cardew Chief Mechanical Engineer Standing In Front Of 3813 Exhibition For Railway Centenary, Sydney Terminal, Sydney Terminal, NSW 3813;] (Source: State Archives & Records, NRS-17420-2-3-355/021)



Figure 3.44: [Mr C Cardew The Chief Mechanical Engineer 2nd From The Left And Mr J Tregae Engineer With 3 Other Employees Standing In Front Of 3813 On Display For The Centenary Exhibition, Sydney Terminal, Sydney Terminal, NSW 3813;] 1955, (Source: NRS-17420-2-3-355/005)

3.8.7. 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.¹³⁴ 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. In that same year, Armstrong served in essence as the acting CME while Young was abroad, giving him valuable experience.¹³⁵ 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 Kingdom, which represented an important development in Australia's abilities as an industrialized nation and a statement of its growth.¹³⁶

As well as his more serious duties, Armstrong also took time to engage in charitable events and public relations initiatives, such as his 1954 opening of the Steam Locomotive Society Miniature Train display in West Ryde, in which passengers and children were hauled on tiny trains along a mile long track.¹³⁷



Figure 3.45: W.H Armstrong, Chief Mechanical Engineer from 1951 to 1956. (Source: NRS-17420-2-3-343/004)

¹³⁴ Daily Telegraph, 13 Dec 1950, p.19: And Eveleigh Stories

¹³⁵ National Advocate, *Off Abroad*, 11 January 1936: 4.

¹³⁶ Eveleigh Stories, *The Chief Mechanical Engineer*.

¹³⁷ The Daily Telegraph, *Miniature Rail Track*, 8 October 1954, p. 16; Cumberland Argus, *Tiny Train to Aid Spastics*, 6 October 1954, p.1.



Figure 3.46: Trial Run Bill Armstrong CME Left and Frank Heard Assistant CME, Cardiff, Short North, 58-CLASS;5807. 1951 (NRS-17420-2-13-456/014)



Figure 3.47: W.H. Armstrong inspecting Locomotive No 6002. Enfield in 1952 (Source: NRS-22469-1-1-H521012)

3.8.8. Mr. F. P. Heard (CME 1956 to 1966)

Mr. F.P. Heard served as Chief Mechanical Engineer from 1956 to 1966, after previously serving as Assistant Chief Mechanical Engineer from 1950. Mr. Heard was promoted to Assistant Chief Mechanical Engineer in 1950, serving under Armstrong after the latter's promotion to CME.¹³⁸ As Assistant CME, Heard had been involved in negotiations over union 'black' bans on both manufacture of tools used in Jet Bombers, as well as work in the Chullora workshops in which excessive noise was causing deafness in workers.¹³⁹ Heard was promoted to the role of CME in 1956 and retired in 1966.



Figure 3.48: F. P Heard, Chief Mechanical Engineer from 1956 to 1966. (Source: NRS-17420-2-3-343/006)

3.8.9. Mr. W. Waite (CME 1966 to 1973)

Mr. W. J. Wait serving as the Works Manager at Cardiff, NSW from at least 1956¹⁴⁰ before being promoted to the position of Assistant CME from at least 1962.¹⁴¹ 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.¹⁴² Mr. W. 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, Mechanical and Electrical Equipment Branch.¹⁴³ The CME Office Building in Eveleigh thereafter became known as the office of the General Manager, Workshops.¹⁴⁴

¹³⁸ The Sydney Morning Herald, *Promotions in Railways*, 29 December 1950, p. 4

¹³⁹ Sydney Morning Herald, *Bomber Tools Banned*, 12 May 1951, p.3 ; Tribune, *£500 could end rail shop noise hazard*, 7 July 1954, p.9

¹⁴⁰ NSW State Archives, *Portrait - Mr Wait - Works Manager Cardiff*, NRS-22469-1-3-H560198

¹⁴¹ NSW State Archives, *Portrait of Assistant C.M.E Mr Waite*, NRS-22469-1-8-H621131

¹⁴² 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

¹⁴³ NSW State Archives, Mechanical Branch [Railways] 01-07-1890 to 01-1973, AGY-1193

¹⁴⁴ Godden 1990; Godden 1986 Vol1 Background, p. 13



Figure 3.49: W. Waite, the last Chief Mechanical Engineer from 1966 until the position's termination in 1973. (Source: NRS-17420-2-3-343/007)



Figure 3.50: W. Waite, the last Chief Mechanical Engineer, presenting Suggestion Awards in 1967 in the Chief Mechanical Engineer's Building. (Source: NRS-22818-6-[6/11960]-M1976)



Figure 3.51: W. Waite, the last Chief Mechanical Engineer, present for the retirement of Mr Coates in 1968, in his office in the Transport Building, Sydney CBD. (Source: NRS-22818-6-[6/11960]-M1976)

3.9. Decline & Closure of CME Building

In 1934 the NSW State Railways began preparations for the construction of 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.¹⁴⁵ 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 (Figure 3.52).¹⁴⁶ Although the CME at the time, Mr Young, was still the head of the NSW Workshops Branch and the state's railway workshops, the fact that the CME Building now no longer housed the offices of the CME himself would have signified the beginning of a decline in its prestige within the NSW Railway Mechanical branch.¹⁴⁷

¹⁴⁵ Wagga Wagga Express 1934, *250,000 Building*, 26 May 1934: 6.

¹⁴⁶¹⁴⁶ The Labor Daily 1936, *Named "Railway House"*, 6 March 1936: 10.

¹⁴⁷ National Advocate, *Off Abroad*, 11 January 1936: 4.

Despite the relocation of the CME and his staff, the Assistant Chief Mechanical Engineer retained an office in the CME Building until at least 1958.¹⁴⁸ The Assistant CME, the second-in-command of the entire NSW Railways Mechanical Branch, was the direct superior of the Locomotive Running Engineer and various Divisional Locomotive Superintendents across NSW, and thus held a tremendous amount of authority and influence.¹⁴⁹ 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, and that despite being overtaken by workshops like Chullora, the Eveleigh Workshops retained their status as the *de jure* centre of the NSW Railway Workshops.

This 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.¹⁵⁰ 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 addition of new tools, buildings, machines, and amenities.¹⁵¹ This coincided with a decision by NSW Railways to begin the closure of the Eveleigh Workshops themselves, indicating a shift in direction by the Railway administration as well as the beginning of the end for the CME Building.¹⁵²

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.¹⁵³ However, the decentralised structure of the new branch gave far more autonomy and accountability to each individual Workshop as a business unit. This meant that the position of General Manager would have likely had far less prestige and practical authority than the famous CME's of previous decades.¹⁵⁴ Sometime after this, the CME Building in Eveleigh became known as the office of the *General Manager of Workshops* until at least 1986, in which position of General Manager, Workshops was held by a Mr G Baird.¹⁵⁵ This indicates that NSW's top Workshop position was by this time relocated back to the CME Building, after being moved to the Transport House in the CBD in 1936. Despite once again being the base of operations for the head of NSW Railway Workshops, the entire Eveleigh Railway Workshops were beginning to slowly close down during this period. Staff were relocated throughout the railway system, making the General Manager of Workshops and his cadre of engineers increasingly redundant as locomotive and carriage work rapidly diminished.¹⁵⁶

This gradual decline concluded in 1989 when the Eveleigh Workshops 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.¹⁵⁷ The entire Workshops Branch itself, with its state backed engineer's overseeing government-owned Workshops, was now

¹⁴⁸ 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.

¹⁴⁹ NSW State Archives 2022, *Mechanical Branch [Railways] 01-07-1890 to 01-1973*, AGY-1193.

¹⁵⁰ Ibid.

¹⁵¹ NSW State Archives 2022, *Workshops Branch [I] 01-07-1973 to 01-1980*, AGY-1646.

¹⁵² OCP, 2022. *Eveleigh Railway Workshops Overarching Conservative Management Plan*: 38

¹⁵³ NSW State Archives 2022, *Workshops Branch [II]*, AGY-2034.

¹⁵⁴ Ibid.

¹⁵⁵ Godden, 1990. *Eveleigh Railway Workshops, Vol1 – Background*:13

¹⁵⁶ Curio Projects, 2022. *LES Non-Aboriginal Heritage Study*: 40

¹⁵⁷ Heritage Group, 1995. *State Projects Eveleigh Railway Yards Locomotive Workshops Conservation Management Plan*: 22

redundant and subsequently abolished, leading to the end of the position of General Manager of Workshops.¹⁵⁸

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.¹⁵⁹ Some of the building's exterior structures, such as the former drawing office, have since been demolished.¹⁶⁰



Figure 3.52: Railway House in 1946, which housed the CME and his staff from 1936 onwards. (Source: NSW State Archives - NRS-21573-2-1-PR374_A)

¹⁵⁸ NSW State Archives 2022, *Workshops Branch [II]*, AGY-2034.

¹⁵⁹ Paul Rappoport Architects 1997, *CME CMP*: 4, 103, 122 - 223; NSW Heritage 2022, *Eveleigh Chief Mechanical Engineers office and movable relics*.

¹⁶⁰ Paul Rappoport Architects 1997, *CME CMP*: 8. & Angus Donald 2012, *Chief Mechanical Engineer's Office & Scientific Services Building: Statement of Heritage Impact*: 8-18

3.10. Recent History of CME Building

The Chief Mechanical Engineer's Building appears to have been almost entirely abandoned after its closure sometime in the 2000s. Over time, the CME Building's interior and exterior fell into disrepair and degradation as it continued to be left empty and exposed to the elements.¹⁶¹

The *Central to Eveleigh Urban Transformation and Transport Program* began in 2016 which involved 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 work was completed in 2017 and resulted in the exterior of the site being fully restored to its former appearance, however the interior of the CME remains in a dilapidated and deteriorating condition to this day.¹⁶²

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. Works that are currently being undertaken at the time of writing include 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.¹⁶³

3.11. Historical Thematic Framework

3.11.1. Themes for the CME Building

A Heritage Interpretation Strategy was completed by Curio Projects in 2022 for the *Redfern North Eveleigh Paint Shop Sub-Precinct* project, which the CME Building is part of. Please refer to this document for more details on the following proposed themes.

The table column "Proposed Paint Shop Sub-Precinct Theme" introduces both non-Aboriginal (identified by Curio), and the Aboriginal (identified by Artefact Heritage, from the Aboriginal HIS) themes.

Table 1.3: Proposed themes for the RNE Paint Shop Sub-Precinct (including CME building)

Australian Theme	NSW Theme	Proposed Paint Shop Sub-Precinct Theme
Tracing the natural evolution of Australia	Environment- naturally evolved	<ul style="list-style-type: none"> Eveleigh's forgotten waterways (Non-Aboriginal Theme) Mura (trackways) and ngurang (places)
Peopling Australia	Aboriginal cultures and interactions with other cultures	<ul style="list-style-type: none"> Mura (trackways) and ngurang (places) Gabara (head), damara (hand) and butbut (heart) Yirran (very, great, large, many)
	Convict	<ul style="list-style-type: none"> Convicts of Calder House
Developing local, regional, and national economies	Events	<ul style="list-style-type: none"> Fighting for change at Eveleigh
	Pastoralism	<ul style="list-style-type: none"> From milk, cheese and butter to trains, rails and clutter

¹⁶¹ NSW Heritage 2022, *Eveleigh Chief Mechanical Engineers office and movable relics*.

¹⁶² Mitchell, M, 2016. 'Rail heritage plan gets nod - Chief Mechanical Engineer's Office to benefit from specialist restoration action': 5

¹⁶³ Transport NSW 2022, *Redfern & North Eveleigh: Chief Mechanical Engineers Building*: 2-3

Australian Theme	NSW Theme	Proposed Paint Shop Sub-Precinct Theme
	Science	<ul style="list-style-type: none"> The science behind the scenes
	Technology	<ul style="list-style-type: none"> From Industry to Technology Gabara (head), damara (hand) and butbut (heart)
	Transport	<ul style="list-style-type: none"> All Aboard! Eveleigh Railway Workshops and Sydney's commuter networks Yirran (very, great, large, many)
Building settlements, towns, and cities	Towns, suburbs, and villages	<ul style="list-style-type: none"> Developing Darlington
	Accommodation	<ul style="list-style-type: none"> North Eveleigh's hidden histories: Calder House Gabara (head), damara (hand) and butbut (heart)
Working	Labour	<ul style="list-style-type: none"> Employment at the Eveleigh Railway Workshops Gabara (head), damara (hand) and butbut (heart)
Educating	Education	<ul style="list-style-type: none"> Home away from home
Marketing the phases of life	Birth and Death	<ul style="list-style-type: none"> Death and dying at Calder House

Table 1.3 includes themes that were listed on the State Heritage Register for the Chief Mechanical Engineers Building.

Table 1.3: Additional themes of the CME Building subject site

Australian Theme	NSW Theme	CME Building Theme
Economy	Transport	<ul style="list-style-type: none"> Building the railway network
Governing	Government & Administration	<ul style="list-style-type: none"> Railway administration
Culture	Creative endeavour	<ul style="list-style-type: none"> Evolution of design in railway architecture
Developing cultural institutions and ways of life	Defence	<ul style="list-style-type: none"> Evolution of design in railway architecture
Developing local, regional and national economies	Aboriginal pre- contact	<ul style="list-style-type: none"> Building the railway network
Governing	Land tenure	<ul style="list-style-type: none"> Railway administration

4. Physical Description

4. Physical Description

This chapter provides a general summary and physical description of the existing structures and features within the subject site, 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.

The *Physical Condition Report and Recommended Works Schedule* prepared by Curio Projects (December 2022) provides a detailed breakdown of the materiality, condition and recommended works for each of the rooms within the CME Building.

Please see Chapter 9 of this report for the CME Building Inventory Sheets for a summary overview of each room.

4.1. Site & Setting

4.1.1. North Eveleigh Precinct

The CME Building subject site is located within the Paint Shop Sub-Precinct of the North Eveleigh Precinct. The North Eveleigh Precinct is bound to the north by Wilson Street and to the south by the railway corridor. North Eveleigh contains a number of extant significant heritage buildings and structures, moveable heritage items, insitu industrial heritage items, as well as a number of later and modern structures that are not considered to contribute to the heritage significance of the site.

Many of the main built items in North Eveleigh of the former ERW are individually identified as heritage items within the State Heritage Listed Eveleigh Workshops. They are as follows:

1. Carriage Workshops (known as Carriageworks) (Figure 4.1)
2. Blacksmith's Workshop (Figure 4.2)
3. Paint Shop (Figure 4.3)
4. Scientific Services Building No. 1 (Figure 4.4)
5. Chief Mechanical Engineer's Office Building (Figure 4.5), the subject site.
6. Telecommunications Equipment Centre (Figure 4.6)
7. Clothing Store (Figure 4.7)



Figure 4.1: North facade of the Carriageworks, North Eveleigh. Source: Curio Projects, 2021.

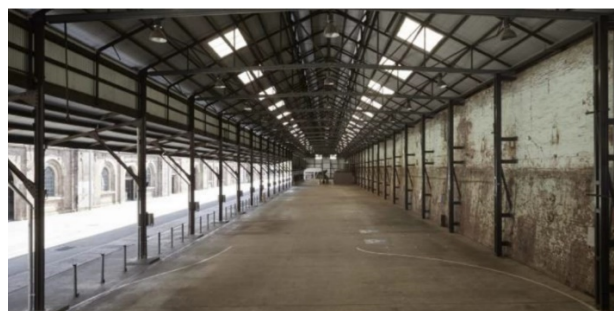


Figure 4.2: Internal view of Blacksmith Workshops looking towards the west, North Eveleigh. Source: Curio Projects, 2021.



Figure 4.3: Eastern facade of the Paint Shop and Suburban Car Workshops from the Fan of Tracks. Source: Curio Projects, 2021.



Figure 4.4: Northwestern facade of the Scientific Services Building No.1. Source: Curio Projects, 2021.



Figure 4.5: Northern facade of the Chief Mechanical Engineers Building (CME Building) from Wilson Street. Source: Curio, Projects, 2021.



Figure 4.6: Western facade of the TEC building. Source: Curio Projects, 2021.



Figure 4.7: Northern facade of the Clothing Store building. Source: Curio Projects, 2021.

4.2. Neighbourhood Context

North of the subject site is the suburb of Darlington, which is bounded to the north by City Road and Cleveland Street, to the east and south by Wilson Street, and to the west by Golden Grove Street. The latter street gives its name to the Golden Grove Heritage Conservation Area, which is contained predominantly within the current boundary of Darlington from Wilson Street through to Darlington Road and Boundary Street. Darlington houses a variety of Victorian residential properties historically associated with the working and middle class, including many terrace groups known for their aesthetic value, giving the suburb a unique and significant heritage character.¹⁶⁴

Wilson Street in particular, directly north of the subject site, contains contiguous rows of narrow, two-storey terraces, with the occasional weatherboard, single-story terraces and sensitive modern infill development. Beyond this, Abercrombie Street contains a group of Victorian-era shops, Federation-era terraces mixed with modern apartments, infill terraces and commercial buildings.¹⁶⁵ In between the two streets, directly north of the subject site, are Shepherds Lane, Ivy Lane and Ivy Street, which retain their heritage laneways and streetscapes.

Much of northern and central Darlington beyond this area is made up of buildings owned or used by the nearby University of Sydney as part of its Darlington Campus south of City Road, with some interwoven streets of privately owned individual historic terrace houses. The key university buildings include the Merewether Building, the Jane Foss Russel Building, the newly built Business School building, the Cadigal Green Park and surround, as well as the University's southernmost entrance on the corner of Lander and Shepard Street. This building stock represents a variety of architectural styles owing to decades of expansion.

To the east of the subject site, is the suburb of Redfern, bounded by Cleveland Street to the north, South Dowling Street to the east, and Phillip Street to the south. Part of Redfern's western boundary abuts the subject site directly along Little Eveleigh Street and Ivy Lane, before turning north along Abercrombie Street, and south along Lawson Street around Redfern Station and ending at Cornwallis Street on the border of South Eveleigh.

Redfern is divided into two parts by the NSW railway line with Redfern Station marking the border, consisting of a smaller section to the west and a far larger section to the east of the railway. The smaller western part of Redfern overlaps with the Darlington Conservation Area, which in turn abuts the subject site's northeast face. This area, beginning at Little Eveleigh Street and ending at Vine Street, is made up predominantly of groups of heritage terrace houses in a variety of condition levels that are largely indistinct from those in Darlington.

This part of Redfern, bound by Caroline, Eveleigh, Louis, and Vine Streets, also houses a mix of community centres, cafes and pubs, historic terraces, modern townhouses, student housing and low-scale commercial buildings. The modern residential tower located at 'The Block' was predominantly built for the area's Aboriginal Community. Beyond this area are several more modern apartment complexes running from Vine to Cleveland Street.

The larger eastern section of Redfern contains the Redfern Heritage Conservation Area, which makes up most of the suburb from Renwick to South Dowling Street, bound by Phillip to the south. This part of Redfern is made up of a dense combination of two-story Victorian and Federation-era terraces, cottages, corner shops, pubs, and industrial areas along the suburb's northern boundary of

¹⁶⁴ Heritage NSW 'Golden Grove Conservation Area'

¹⁶⁵ Heritage NSW, Golden Grove Heritage Conservation Area.

Cleveland Street¹⁶⁶. Many of Redfern's heritage houses have rear-ended lanes and very narrow allotments.



Figure 4.8: Wilson Street facing East. The CME building is visible to the left, with heritage terraces to the right. Source: Curio, 2022.



Figure 4.9: Detail of Wilson Street Heritage terraces. Source: Curio, 2022.



Figure 4.10: Redfern Railway Station facing west towards Darlington. Source: Curio, 2022.



Figure 4.11: Abercrombie Street facing West towards Darlington. Source: Curio, 2022.



Figure 4.12: George Street, Redfern facing North, an example of the heritage terraces in the Redfern Heritage Conservation Area. Source: Curio, 2022



Figure 4.13: Lawson Street in Darlington, facing east towards Redfern Station. Source: Curio, 2022.

¹⁶⁶ Redwatch 2005, *National Trust Register Redfern-Waterloo Map*

4.3. CME Building

The building has undergone three main phases in 1887, 1900 and 1920, which preserved the Victorian style. Since then, the building has been altered to accommodate office partitioning and amendments to the ceilings, flooring, skirting, among others.

Several original features have been retained and remain on site such as the original 1887 staircase, the 1900s bathrooms and the former CME office built in 1900 (G10)¹⁶⁷ as well as marble mantel pieces, decorative plaster cornices and archways, tessellated tiles to entry and bathrooms, timber panelled doors, cornices and architraves, areas of retained ceilings¹⁶⁸.

The room configuration has also been mostly retained throughout the building although a number of timber partitions have been introduced to subdivide the former Drawing Office (F6) as well as circulation areas and other small rooms (e.g., F3A).

Since the original 1997 CMP was prepared, the internal room numbers have been updated as indicated in Section 4.3 below.

4.3.1. Updated Room Numbers

Table 4.1: 1997 CMP Room Numbers and Updated 2022 Room Numbers

1997 CMP Room Number	Updated 2022 Room Number	1997 CMP Room Number	Updated 2022 Room Number
Room 1	G10	Room 12	G21A
Room 1A	G9	Room 13	G1A, G1B, G1C
Room 1B	G8	Room 13A	G21B
Room 2	G12	Room 14	F10
Room 2A	G11	Room 14A	F11
Room 3	G7	Room 15	F1
Room 4	G13	Room 15A	F16
Room 5	G6	Room 16	F1
Room 5A	G24, G25, G26	Room 17	F2
Room 6	G14	Room 18	F8
Room 7	G5	Room 18A	F13, F14
Room 8	G15	Room 19	F4
Room 9	G4	Room 19A	F5A
Room 9A	G3A	Room 19B	F5B
Room 9B	G3B	Room 20	F7
Room 9C	G3C	Room 21	F6A to F6F
Room 9D	G23	Room 21A	F17
Room 9E	G19	Room 21B	F18
Room 9F	G18, G20	Room 22	F12
Room 10	G16	Room 22A	F3A

¹⁶⁷ OCP 2002, Eveleigh Carriageworks CMP: 223

¹⁶⁸ NSW Office of Environment and Heritage, State Heritage Inventory Register listing sheet for 'Eveleigh Chief Mechanical Engineers Office'.

1997 CMP Room Number	Updated 2022 Room Number	1997 CMP Room Number	Updated 2022 Room Number
Room 11	G2A, G2B	Room 22B	F9
Room 11A	G27	Room 22C	F15
Room 11B	G28	Room 22D	F15
Room 11C	G29	Room 22E	F3B

4.3.2. CME Building – Ground Floor (Updated 2022 Room Numbers)

Please refer to Figure 4.14 below when referencing allocated room numbers on the ground floor of the CME Building

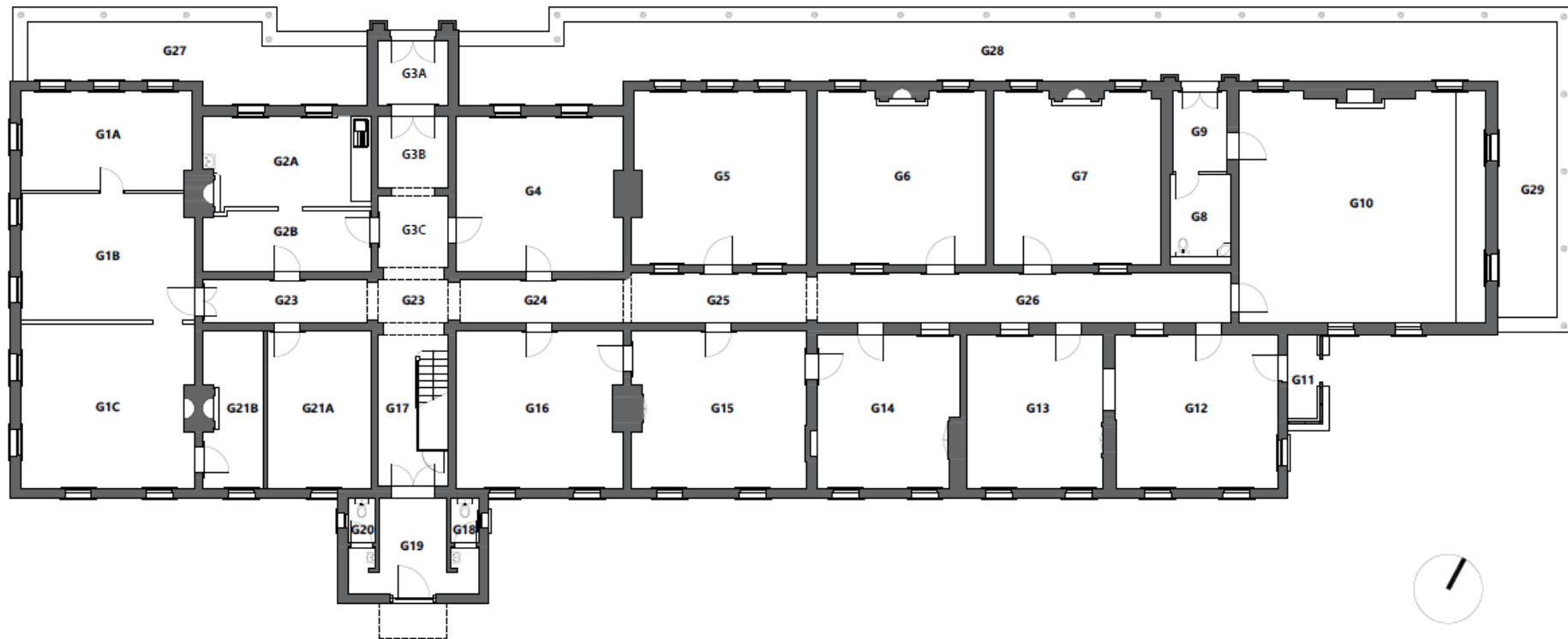


Figure 4.14: Chief Mechanical Engineers Building – Ground Floor Plan (Source: Curio Projects)

4.3.3. CME Building – First Floor (Updated 2022 Room Numbers)

Please refer to Figure 4.15 below when referencing allocated room numbers on the ground floor of the CME Building.

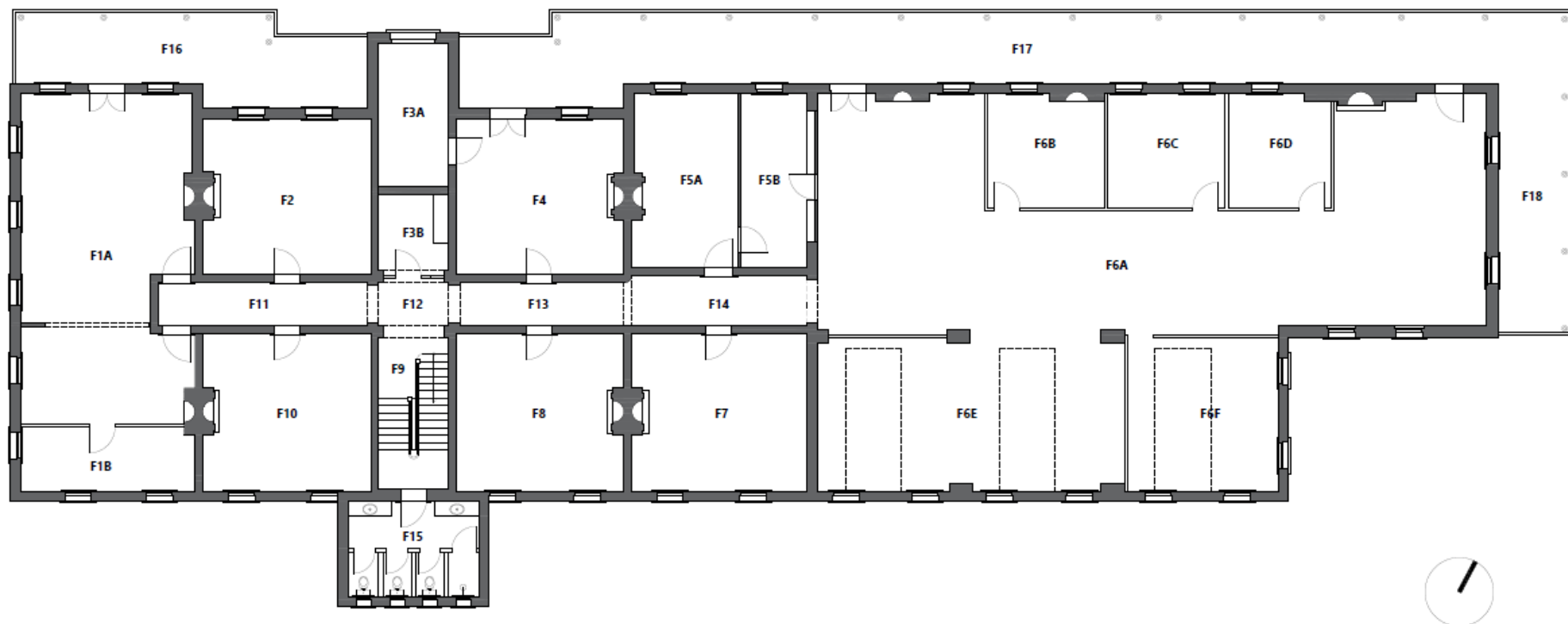


Figure 4.15: Chief Mechanical Engineers Building – Ground Floor Plan

4.4. Phases of Construction



Figure 4.16: Ground floor plans of the CME building with the three main phases of construction. (Source: Rappoport & Caldis Cook Group, 1997 with Curio additions)

4.5. CME Building – Interiors

The Victorian style of the building was preserved across all three main phases of the building (1887, 1900 and 1920). A number of original 1887 features have been retained and remain in situ, such as the original 1887 staircase, 1900s bathrooms, the former CME office constructed in 1900 (Room G10) as well as marble and timber mantel pieces, decorative plaster cornices and archways, tessellated tiles, timber panelled doors, architraves and more. The room configuration has been mostly retained throughout the building although a number of timber partitions have been introduced in several rooms in later years.

For room number references, please refer to Table 4.1, Figure 4.14 and Figure 4.15.

4.5.1. Floors

Previously covered with carpet, the floorboards in the CME Building are now exposed in every room, providing evidence that the majority of the CME Building flooring has been constructed using suspended tongue and groove timber floorboards on timber joists and bearers. Brick piers provide additional support on the ground floor level. The materiality of the floorboards has been identified as most likely to be Kauri Pine, with an imperial measurement of 6" wide (145mm).

There are various degrees of general damage to the floorboards in the CME Building as a result of water damage, termites, square service cuts, mismatched floorboards, services, and rot. Room G15 and Room F5A were previously replaced by plywood as a result of termites and the 1997 CMP states that repairs to the floor within the CME Building were carried out in 1997.

Select rooms on the ground floor of the CME Building also contain concrete square slabs potentially used as previous machine base footings when the CME Building was also being used for scientific purposes.

Tessellated tiles are located in the main Wilson Street entry space (Room G3A) in a black, white and red geometrical pattern. Room G8 and G9 also have tessellated tile geometrical patterns as part of the CME's private entranceway and bathroom. A recess is noted to be located at the Wilson Street door entrance likely for a floor mat. Room G18, G19 and F15 have ceramic tile flooring with Room G19 covered in concrete flooring.

A detailed description of the condition and materiality of the floors in each of the rooms is contained in the *Physical Condition and Works Methodology Report*, prepared by Curio, December 2022 and as attached as Appendix B.



Figure 4.17: Floorboards (Room F10)



Figure 4.18: Contrast between floorboards in Room F6



Figure 4.19: Water damage (Room F8)



Figure 4.20: Raised floorboards due to water damage (Room G5)



Figure 4.21: Square concrete machine footing (Room G5)



Figure 4.22: Square service floor cut (Room G4)



Figure 4.23: Tessellated Tiles (Room G3A)



Figure 4.24: Tessellated Tiles at CME Private Entrance way (Room G9)



Figure 4.25: Ceramic bathroom square tiles (Room F15)



Figure 4.26: Outdoor square tiles (Room G11)



Figure 4.27: Ceramic bathroom square tiles (Room G20)



Figure 4.28: Concrete floor surface (Room G19,)

4.5.2. Ceilings

There are a range of different types of ceilings in each room of the CME Building which are outlined in Figure 4.17 and Figure 4.18. The following types of ceilings within the CME Building include lathe and plaster, corrugated iron, pressed metal, corrugated I-beam vaulting, plasterboard, internal tongue-and-groove timber, external tongue -and- groove- timber and exposed roof sheeting.

No original ceilings from the 1887 construction are believed to remain insitu. Room 23 which was recorded as the only lathe and plaster ceiling remaining in the CME Building, in recent years, was badly water damaged and in August 2022 collapsed.

Within Room F6 along the 1920s addition of the building, three skylights are installed across this area. All three skylights are currently boarded up.

Intrusive elements have damaged and disturbed the ceilings within the CME Building, such as services, water damage, lighting, T-Bar system etc. The suspended T-Bar system is installed in the majority of rooms within the CME Building.

Rooms that include the suspended T-Bar system are listed below along with the rooms ceiling type.

Ground Floor

Room G5	Corrugated iron
Room G15	Timber tongue and groove boarding
Room G16	Timber tongue and groove boarding
Room G2	Timber tongue and groove boarding
Room G21A	Pressed Metal
Room G1	Timber tongue and groove boarding

First Floor

Room F10	Timber tongue-and-groove boarding
Room F1	Corrugated Iron
Room F2	Timber tongue and groove boarding
Room F8	Corrugated Iron
Room F4	Timber tongue and groove boarding
Room F5A	Corrugated Iron
Room F5B	Corrugated Iron
Room F7	Corrugated Iron

Table 4.2: Suggested CME Building ceiling timeline as written in the 1997 CMP

Year	Event
1887	Original lathe and plaster ceilings installed throughout building
1900	Corrugated iron ceilings installed to the extension. Pressed metal ceilings installed in Room.
1902	A fire destroys plaster ceilings. Rooms that were affected are replaced with corrugated iron (Rooms F1, F8 and F7) to match the newly installed 1900 addition ceilings.
1908	Another fire occurs at the CME Building where damaged ceilings are replaced with timber tongue and grove ceilings (Rooms G15, G4, G16, G2, G1, F10, F2 & F4) potentially due to the economy at the time.
1920	Corrugated iron ceilings are installed in the 1920 addition to keep consistent with the ceilings in the rest of the CME Building.
1970	Suspended T-bar ceilings are installed across all ceilings within the CME Building. Existing ceilings remain concealed. The year 1970 is not the confirmed date of the installation of the suspended T-bar system. Although as there are no solid records of the date, the 1997 CMP states it was the probable year due to the commercial popularity of the system around that time.



Figure 4.29: Ground Floor Ceiling Type Plan of the CME Building



Figure 4.30: First Floor Ceiling Type Plan of the CME Building

A detailed description of the condition and materiality of the ceilings in each of the rooms is contained in the *Physical Condition and Works Methodology Report*, prepared by Curio, December 2022 and as attached as Appendix B.

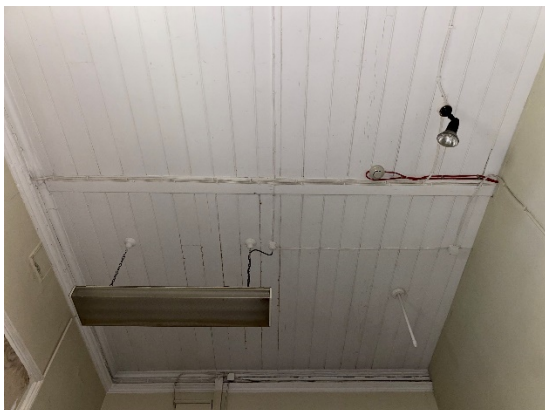


Figure 4.31: Timber tongue and groove floor ceilings (Room G2)



Figure 4.32: Pressed Metal Ceiling with ceiling rose visible (Room G21A.)



Figure 4.33: Corrugated Iron Ceilings with suspended T-Bar system (Room G5)



Figure 4.34: Pressed Metal Ceiling in CME Office (Room G10,)

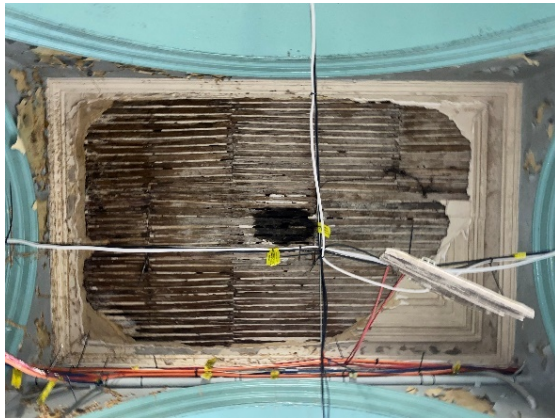


Figure 4.35: Damaged lathe & plaster ceiling which recently collapsed due to water damage (Room G23)



Figure 4.36: Masonite ceiling covering the timber tongue and groove ceiling (Room G1)



Figure 4.37: Corrugated Iron ceiling with ceiling rose visible and suspended T-Bar system (Room F6)



Figure 4.38: Masonite ceiling (Room F3A)

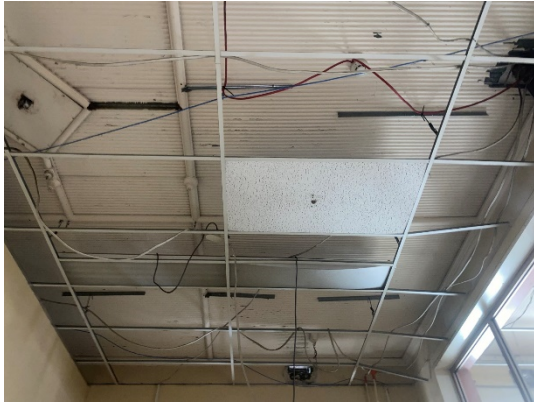


Figure 4.39: Corrugated iron ceiling with diamond centre piece Room F5B



Figure 4.40: XX (Room G19)



Figure 4.41: Damaged corrugated iron ceiling with suspended T-Bar system (Room G25)



Figure 4.42: Damaged corrugated iron ceiling (Room F13)



Figure 4.43: Corrugated Iron Ceiling (Room F8)

4.5.3. Doors

The CME Building contains a mixture of two, three and four panel doors with the majority incorporating operatable fanlights above the door threshold. The doors accessed via the corridors usually have the upper panels of the doors glazed (see, for example, Figure 4.53).

All doors located along the northern façade of the CME Building on both ground and first floors have two leaves except for one door connected to Room F6. Additional doors along the northern façade, except for the customised main Wilson Street front entrance (see Figure 4.46), are French doors. In addition, most external doors have heavy bolection moulding with inlay moulding to the blinded and glazed panels on both sides of the doors.

The door leading into G2A is distinctive from the rest, due to the historically significant role it played as part of the former pay office processes. The door operates as a unique vertical sliding door with a slidable upper panel that was opened, weekly, to pay ERW workers (See Figure 4.52).

The door created for the payroll office (G2A) and the additional doors leading into Rooms G3C and G4 from the corridor were not in the original 1887 construction drawings and were a later addition (see Figure 4.51). The doors between G2A and G3C were sealed shut and appear to have not been in use for a period of time prior to the building's closure.

Room F15 include a number of Art Deco female toilet doors (see Figure 4.49). Two doors that were linked to Room F3B were bricked in after the 1900 addition which once provided access to the balcony as part of the 1887 construction (see Figure 4.56). Another doorway that was bricked-in post 1900 and previously provided access to the balcony was a French door in Room F5 which was part of the original 1887 construction.

The door leading to Room G16 is currently not attached to the door frame and is currently being stored within Room G16 itself (see Figure 4.55). Room F1 on the first floor has a separate double doorway entrance to Room F1 although one door is missing. A door located on the eastern end of

Room F6 that provides access to the balcony is currently boarded up internally (see Figure 4.57). Examples of the different door types are shown in Figures 4.46 to Figures 4.58.

Floor plans showing the location of all internal and external doors, with door numbers included as Figures 4.45 and 4.46.

Table 4.3: provides a summary of the locations of the different styles of doors and fanlights located within the CME Building (as described in the 1997 CMP and verified by Curio)



Figure 4.44: Plan of Ground Floor of CME Building with Door Numbers

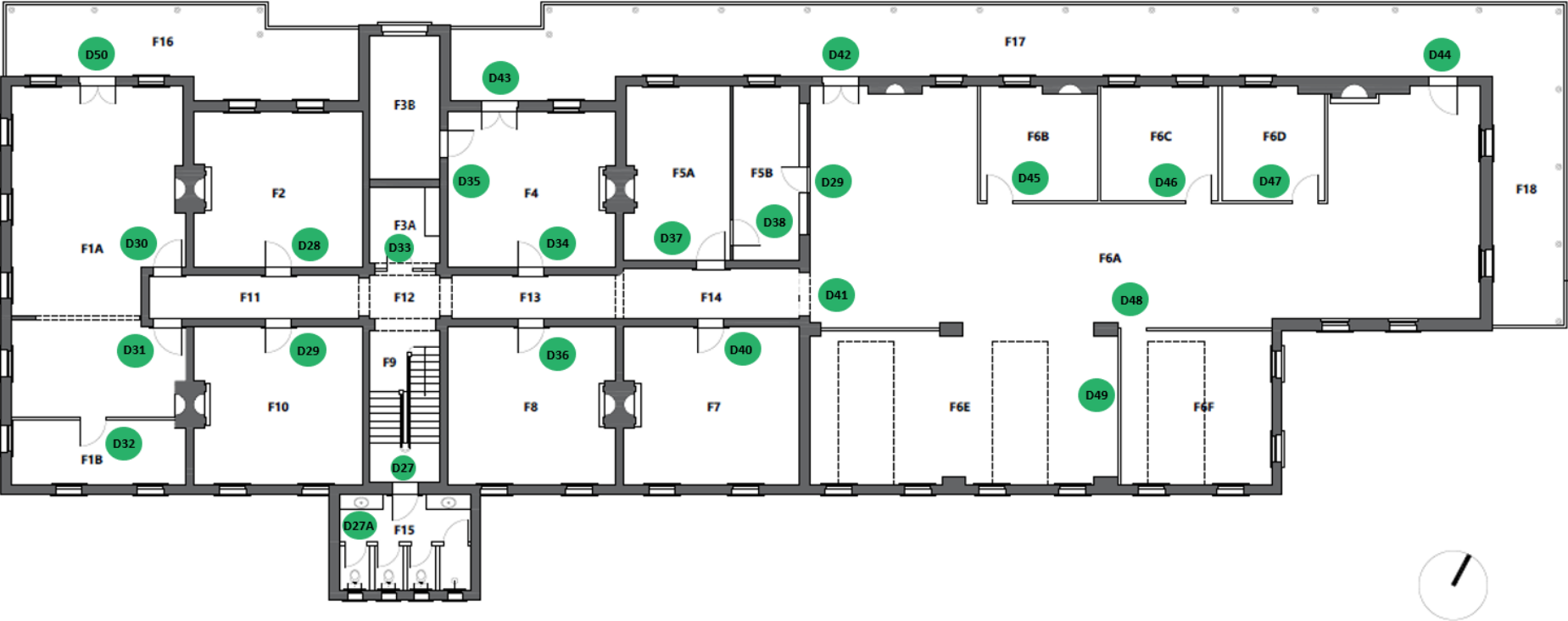


Figure 4.45: Plan of First Floor of CME Building with Door Numbers

Table 4.3: Types of Doors and Fanlights located within the CME Building (Source: 1997 Rappoport & Caldis Cook CMP)

Door No.	Panel	Leaf	Fanlight	Room No.
1	4	1	Pivot	G10
2	4	1	Pivot	G10
3	4	1	Fixed	G8
4	2	2	Arch	G9
5	Nil	1	Nil	G11
6	2	1	Fixed	G12
7	3	1	Pivot	G12
8	4	1	Pivot	G7
9	3	1	Pivot	G13
10	4	1	Pivot	G6
11	4	1	Pivot	G14
12	3	1	Pivot	G14
13	4	1	Pivot	G15
14	3	1	Pivot	G16
15	4	1	Pivot	G5
16	4	1	Pivot	G16
17	4	2	Nil	G23
18	4	1	Pivot	G4
19	4	1	Pivot	G4
20	3	2	Nil	G3a
21	6	2	Arch	G3a
22	4	1	Pivot	G2A, G2B
23	3	1	Pivot	G2A, G2B
24	4	1	Pivot	G21A
25	2	2	Pivot	G1A, G1B, G1C
26	Nil	1	Nil	G21b
27	3	1	Pivot	F15
27A	5	1	Nil	F15
28	4	1	Pivot	F2
28A	5	1	Nil	F15
29	4	1	Pivot	F10
30	4	1	Pivot	F1
31	4	1	Pivot	F1
32	Nil	1	Nil	F1
33	4	1	Nil	F3A
34	3	1	Pivot	F4
35	4	1	Board	F3B
36	3	1	Pivot	F8
37	Nil	1	Nil	F5A
38	Nil	1	Nil	F5B
39	Nil	1	Around	F5B
40	3	1	Pivot	F7
41	2	1	Pivot	F13, F14
42	2	2	Fixed	F6A to F6F
43	2	2	Fixed	F4
44	2	1	Nil	F17
45	1	1	Nil	F6A to F6F
46	1	1	Nil	F6A to F6F
47	1	1	Nil	F6A to F6F
48	1	1	Nil	F6A to F6F
49	1	1	Nil	F6A to F6F

Door No.	Panel	Leaf	Fanlight	Room No.
50	2	2	Fixed	F16
51	5	1	Nil	G18 & G20
52	5	1	Nil	G18 & G20

Figures 4.46 to Figure 4.58 on the following pages provide examples of the different door styles, materials and types represented at the CME Building.



Figure 4.46: Room G3A CME Building Wilson Street Main entry door



Figure 4.47: Internal doorway from Room G3A to G3B



Figure 4.48: Room G19 CME Building main southern entranceway



Figure 4.49: Room G8 CME Private Bathroom



Figure 4.50: Room G9, CME Private Entranceway



Figure 4.51 Doorway into Room G2A from Room G3C



Figure 4.52: Doorway into Room G2A (former Pay Office) with pay window visible



Figure 4.53: Room G12 doorway showing upper panel glazing and fanlight above



Figure 4.54: Room F6 French Doors leading to the Wilson Street balcony



Figure 4.55: Room G16 door previously removed and currently located within Room G16



Figure 4.56: Room F17, bricked in doorway to Room F3B visible



Figure 4.57: Room F6, doorway boarded up internally

Figure 4.58: Southeastern access to the CME Building via Room G11 and door leading to Room G12

4.5.4. Windows

The Ground and First Floors feature timber doors and double-hung sash windows with sandstone sills, although most of them are currently boarded up.

The majority of windows within the CME Building have been modified in some way. With the introduction of reverse cycle air conditioning (RCAC) units to the building in the late 20th century, a number of window modifications were undertaken to fit these air conditioners to the upper or lower sash of a window. During the 2016 Urban Growth restoration works to the building, the reverse cycle air conditioning units were removed. The windows added during the 1900 addition included the standard sash windows but that were also fitted with a glazed upturn panel at the sill.

Variants of other types of windows include:

- High level 500mm high x 1100wide
- Small bathroom type
- Small Main Entry Pediment type
- Fixed glazed panel in timber frame
- Internal full height sash window

Two windows within rooms G6 that were previously bricked in were unbricked during the 2016 restoration works undertaken by Urban Growth and are now partially reinstated. The windows connected to Room F3B were bricked-in sometime after the 1900 addition and remain bricked in, today.

Along the ground floor corridor (G25 and G26) are a number of internal high-level windows that were installed during the 1900 and 1920 additions to the CME Building to provide more regular airflow and natural light across the building still remain insitu. Room F5B includes nearly an entire wall of internal glazed windows which likely replaced the original 1900 windows sometime in the late 20th century.

Most windows in the CME Building remain boarded up and only partially accessible at the time of Curio's site visit in November 2022. This made updating Table 4.4 from the 1997 CMP difficult and it is recommended that once boards are removed from the windows in the CME Building, Table 4.4 will be updated appropriately. No plan of the window number locations were found in the 1997 CMP.

Table 4.4: Window Types and Modifications from the 1997 CMP within the CME Building

Window No.	Type	Modification (1997 CMP)	Room No.
1	Standard 2200mm high x 1100 wide	No modifications	F1
2	Standard 2200mm high x 1100 wide	No modifications	F1
3	Standard 2200mm high x 1100 wide	No modifications	F1
4	Standard 2200mm high x 1100 wide	Boarded up	G2A, G2B
5	Standard 2200mm high x 1100 wide	Boarded up	G2A, G2B
6	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	G4
7	Standard 2200mm high x 1100 wide	No modifications	G4
8	Standard 2200mm high x 1100 wide	No modifications	G5
9	Standard 2200mm high x 1100 wide	Previously bricked in	G5
10	Standard 2200mm high x 1100 wide	Previously bricked in	G5

Window No.	Type	Modification (1997 CMP)	Room No.
11	Standard 2200mm high x 1100 wide	No modifications	G6
12	Standard 2200mm high x 1100 wide	Lower sash fitted with RCAC	G6
13	Standard 2200mm high x 1100 wide	No modifications	G7
14	Standard 2200mm high x 1100 wide	No modifications	G7
15	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	G10
16	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	G10
17	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	G10
18	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	G10
19	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	G10
20	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	G10
21	Fixed glazed panel in timber frame	No modifications	G11
22	Standard 2200mm high x 1100 wide	No modifications	G12
23	Standard 2200mm high x 1100 wide	No modifications	G12
24	Standard 2200mm high x 1100 wide	Extra pane in lower sash	G12
25	Standard 2200mm high x 1100 wide	No modifications	G13
26	Standard 2200mm high x 1100 wide	Lower sash fitted with RCAC	G13
27	Standard 2200mm high x 1100 wide	No modifications	G14
28	Standard 2200mm high x 1100 wide	Lower sash fitted with RCAC	G14
29	Standard 2200mm high x 1100 wide	Lower sash fitted with RCAC	G15
30	Standard 2200mm high x 1100 wide	No modifications	G15
31	Standard 2200mm high x 1100 wide	Extra pane in lower sash	G16
32	Standard 2200mm high x 1100 wide	No modifications	G16
33	Small Bathroom Type	No modifications	G18, G20
34	Small Bathroom Type	No modifications	G18, G20
35	Standard 2200mm high x 1100 wide	Lower sash fitted with RCAC	G21A
36	Standard 2200mm high x 1100 wide		G21B
37	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	G1A, G1B, G1C
38	Standard 2200mm high x 1100 wide	No modifications	G1A, G1B, G1C
39	Standard 2200mm high x 1100 wide	No modifications	G1A, G1B, G1C
40	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	G1A, G1B, G1C
41	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	G1A, G1B, G1C
42	Standard 2200mm high x 1100 wide	No modifications	G1A, G1B, G1C
43	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	G1A, G1B, G1C
44	High level 500mm high x 1100 wide	No modifications	G6
45	High level 500mm high x 1100 wide	No modifications	G7
46	High level 500mm high x 1100 wide	No modifications	G13
47	High level 500mm high x 1100 wide	No modifications	G12
48	Standard 2200mm high x 1100 wide	No modifications	F1
49	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	F1
50	Standard 2200mm high x 1100 wide	Lower sash fitted with RCAC	F2
51	Standard 2200mm high x 1100 wide	No modifications	F2
52	Small main entry pediment type	Boarded up	F3B
53	Small main entry pediment type	Boarded up	F3B
54	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F4
55	Standard 2200mm high x 1100 wide	No modifications	F5A
56	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F5B
57	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F6A to F6F

Window No.	Type	Modification (1997 CMP)	Room No.
58	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F6A to F6F
59	Standard 2200mm high x 1100 wide	No modifications	F6A to F6F
60	Standard 2200mm high x 1100 wide	No modifications	F6A to F6F
61	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F6A to F6F
62	Standard 2200mm high x 1100 wide	No modifications	F6A to F6F
63	Standard 2200mm high x 1100 wide	No modifications	F6A to F6F
64	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	F6A to F6F
65	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	F6A to F6F
66	Standard 2200mm high x 1100 wide	No modifications	F6A to F6F
67	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	F6A to F6F
68	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	F6A to F6F
69	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F6A to F6F
70	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F6A to F6F
71	Standard 2200mm high x 1100 wide	Extra pane in upper sash Extra pane in lower sash Glazed upturn at lower sash	F6A to F6F
72	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash Extra pane in lower sash	F6A to F6F
73	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	F6A to F6F
74	Standard 2200mm high x 1100 wide	Extra pane in upper sash Glazed upturn at lower sash	F6A to F6F
75	Standard 2200mm high x 1100 wide	Extra pane in lower sash Glazed upturn at lower sash	F7
76	Standard 2200mm high x 1100 wide	Glazed upturn at lower sash	F7
77	Standard 2200mm high x 1100 wide	No modifications	F8
78	Standard 2200mm high x 1100 wide	Lower sash fitted with RCAC	F8
79	Small Bathroom Type	No modifications	F15
80	Small Bathroom Type	No modifications	F15
81	Small Bathroom Type	No modifications	F15
82	Small Bathroom Type	No modifications	22 F15d
83	Small Bathroom Type	No modifications	2 F152d
84	Small Bathroom Type	No modifications	F15
85	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	F10
86	Standard 2200mm high x 1100 wide	No modifications	14 F10
87	Standard 2200mm high x 1100 wide	Extra pane in lower sash	F1
88	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	F1
89	Standard 2200mm high x 1100 wide	No modifications	F1
90	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	F1
91	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC Extra pane in lower sash	F1
92	Standard 2200mm high x 1100 wide	Upper sash fitted with RCAC	F1
93	Standard 2200mm high x 1100 wide	No modifications	F1
94	Internal full height sash window	No modifications	G5
95	Internal full height sash window	No modifications	G5
96	High level 500mm high x 1100 wide	No modifications	G14

Figure 4.59 to Figure 4.66 represents the different window types found at the CME Building, including the range of condition, materiality and state of repair.



Figure 4.59: Southern façade of the CME Building showing sash windows.



Figure 4.60: Southern wall of Room G13 with one window boarded



Figure 4.61: Two bricked up windows linked to Room F3B



Figure 4.62: Northern wall of Room G5. Previously bricked up windows (two windows on the east) were unbricked during the 2016 Urban Growth work



Figure 4.63: One of three skylights located within the 1920s addition area of Room F6 CME Building, boarded up,



Figure 4.64: View of Room F5B from Room F6 and the internal windows.



Figure 4.65: Eastern wall of Room G15 with original 1887 window visible



Figure 4.66: Western wall of Room G14 with bricked-in side of the original 1887 window visible

4.5.5. Skirting

As described in the 1997 CMP, there are two types of skirting used for the offices and corridors of the building. They are both of moulded timber variety. however, one represents an expression of classic proportions, while the other is less elegant and utilitarian in appearance.

Curiously, the skirting in the 1887 construction matches that of the 1920 addition. while the skirting used in the 1900 addition is noticeably different. The 1887/ 1920 skirting is the more sophisticated of the two and is 360mm high with finely expressed scotia, quirk and fillet moulds. By comparison. the '1900 skirting' is squat and less embellished with classical detail.

We know from the 1900 addition drawings that electrical and telecommunication services were incorporated into the design. From physical analysis, the skirting is abnormally wide, almost squat in appearance. The drawings indicate wire grounds and casings for the carrying of electrical. lighting and telephone wiring. Such grounds or casings may have been run up vertical sections of wall or carried along the wall horizontally. In tum, these casings connect to the skirting and the whole room is thus wired up for electric lighting. telephones and power. Although the casings no longer exist, the skirting remains insitu.¹⁶⁹

Remnant skirting surround the previous fireplaces in several rooms but has been completely removed from other rooms, such as Rooms F4 and G1 (as shown in Figure 4.73 and Figure 4.74).

¹⁶⁹ Rappoport, P & Caldis Cook Group Pty Ltd 1997, *Chief Mechanical Engineer's Building, 327 Wilson Street, Chippendale. Eveleigh Locomotive Workshops, Conservation Management Plan*. Prepared for State Rail Authority of NSW.



Figure 4.67: 1887 skirting type (Room G4)



Figure 4.68: 1900s skirting type (Room 25)



Figure 4.69: CME Office 1900 skirting (Room G10)



Figure 4.70: First floor 1900s skirting (Room F6)



Figure 4.71: Skirting cut off around fireplace (Room G5)



Figure 4.72: Termite Damage to skirting (Room G3A)



Figure 4.73: Skirting removed (Room F4)



Figure 4.74: Skirting removed (Room G1)



Figure 4.75: Majority of skirting in Room G5 has been previously removed.



Figure 4.76: Skirting on first floor of 1887 section of the CME Building (Room F11)

4.5.6. Architraves

Architraves surround the majority of doors, windows and fanlights within the CME Building. Some architraves were removed during early alterations to the CME Building to allow for windows to be bricked, such as the windows in Room G5 (as shown in Figure 4.78 below). Both windows were unbricked during the 2016 Urban Growth works although, to date, the architraves surrounding the windows have not been reinstated.

Most of the door and fanlight architraves were restored and painted during the 2016 Urban Growth works although the window architraves were not completed. The window architraves in Room G13 are damaged and have not been recently painted (see Figure 4.81). It appears that work stopped halfway through the works program as the window architraves in Room G1 were completed and in other rooms it appears they were not touched besides the removal of the reverse air conditioner recycling units.

Figure 4.77 to Figure 4.81, on the following pages, represent the different styles of archives discussed in this sub-section of the CMP.



Figure 4.77: Architraves surrounding door and fanlight in Room G14,15,16



Figure 4.78: RoomG5 with no architraves surrounding window



Figure 4.79: Architraves within corridor area Room G13

Figure 4.80: Architraves surrounding door and fanlight at the entrance to Room F5



Figure 4.81: Architraves surrounding windows in Room G13

4.5.7. Fireplaces

The 1887 construction included 16 fireplaces, one for every office on the ground floor, and were placed within transverse walls which sat centrally within the office walls. Fireplaces related to the 1887 construction period of the CME Building that remain insitu are Victorian in style. Most fireplaces are, however, either bricked in or boarded over with no remaining mantel (see Figures 4.82 – 4.88, and Figure 4.91).

Fireplaces related to the 1900 addition are generally Federation in character and are only located along the northern wall of the CME Building.

Fireplaces constructed as part of the 1920s addition were built into the internal walls of the CME Building and are either bricked in or have been converted to cupboards (See Figures 4.89-4.90).

The design and materiality of the fireplaces throughout the CME Building vary from marble and timber through to ceramic tiles. Many fireplaces have been damaged through either vandalism, partial or whole demolition and/or removal of elements. The only fireplace with an insitu hearth surrounds (in marble), is Room G10 within the CME's office (see Figure 4.83 below).

Figure 482 to Figure 4.93, on the following pages, represent the different styles and levels of intactness or disrepair of the fireplaces, hearths and mantles discussed in this sub-section of the CMP.



Figure 4.82: Timber mantle and surround of fireplace from the 1887 construction of CME Building (Room F2)



Figure 4.83: Fireplace with marble mantle and surround within CME Office (Room G10)



Figure 4.84: Fireplace with marble mantle and surround within 1900 addition section of CME Building (Room G6)



Figure 4.85: Fireplace within the original 1887 phase of the CME Building (Room F7)



Figure 4.86: Damaged fireplace with mantle and surrounds removed (Room F6)



Figure 4.87 : Fireplace boarded up with marble surrounds from original 1887 phase of construction (Room F5A)



Figure 4.88 : Fireplace previously boarded up and mantel and surrounds removed located within original 1887 phase of construction of the CME Building (Room G1)



Figure 4.89: Fireplace with mantel and surrounds intact and firebox converted to a cupboard. Located within 1920s section of the CME Building (Room G13)



Figure 4.90: Fireplace with mantel and surrounds removed and firebox converted to a cupboard. Located within 1920s section of the CME Building (Room G16)



Figure 4.91: Fireplace bricked-in and marble/ surrounds removed within 1887 phase of the CME Building (Room G4)



Figure 4.92: Fireplace partially exposed. Half boarded up with marble mantel and surrounds intact within 1887 phase of construction of CME Building (Room F1)



Figure 4.93: Fireplace with mantel and surrounds removed and firebox and grate still intact (Room F6)

4.5.8. Paintwork

Paint throughout the building internally is generally in poor condition, unstable and weather damaged. Consideration should be put towards stripping all lead paint completely from all surfaces

and sanding all surfaces under HAZMAT conditions as an immediate course of action. This is the best risk minimisation for future ongoing use of the building.

If the complete stripping of internal paint cannot be achieved, paint strip areas of loose or flaking paint, where the damp has affected it and where invasive works needs to be completed.

Externally the paint is in relatively sound condition, having been repainted during the Urban Growth 2016 works program. Ideally the building should be repainted in its current external colour scheme. Where redundant services are removed, invasive works are completed or repairs are undertaken, patch repairs should be completed locally prior to complete repainting.

Figures 4.94 to Figures 4.101 showcase the various degrees of internal paint work throughout the CME Building.



Figure 4.94: Paintwork peel and exposing previous paint colours in Room G3B



Figure 4.95: Paintwork peeling in Room G3C



Figure 4.96: Paintwork peeling in Room G10



Figure 4.97: Paintwork peeling in Room G12



Figure 4.98: Paintwork in Room G5



Figure 4.99: Paintwork peeling in Room F6

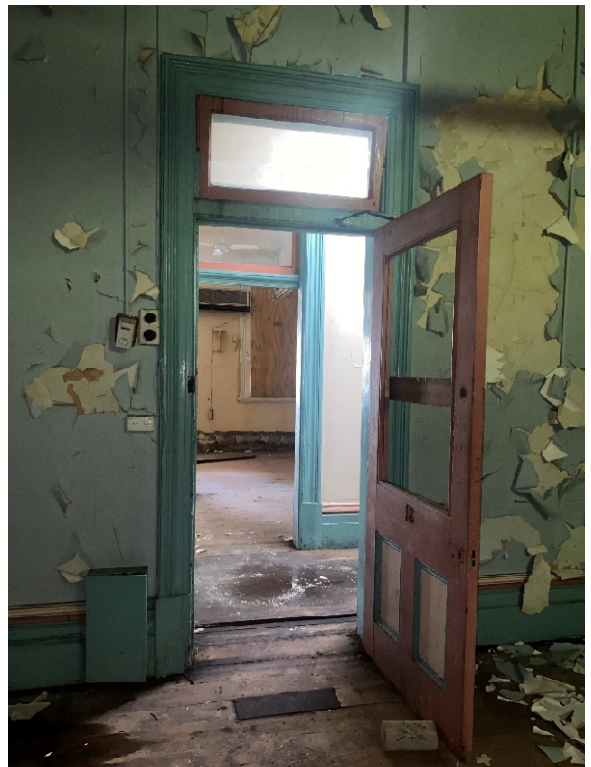
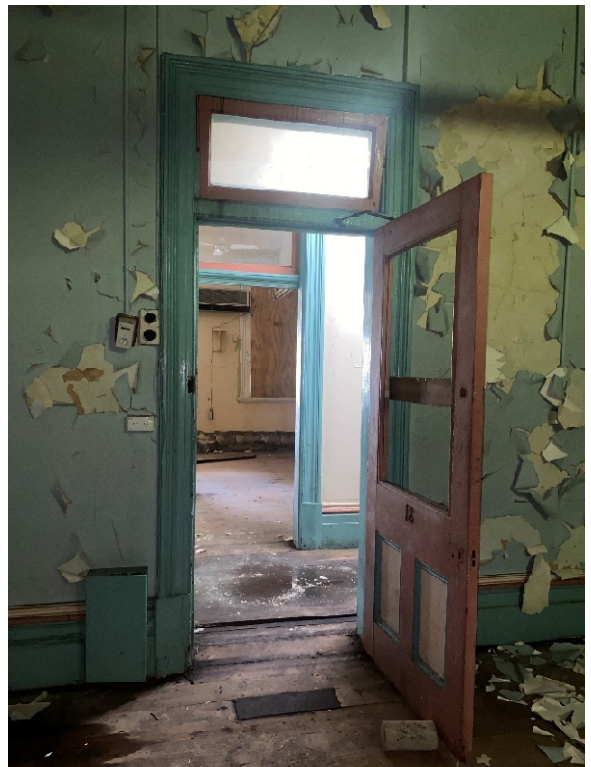


Figure 4.100: Paintwork in Room G8



Figure 4.101: Paintwork peeling in Room F8



4.5.9. Staircase

The only access to the first floor of the CME Building is via the original 1887 staircase located within the main north to south orientated hallway opposite the main Wilson Street entrance. The stairs are 1.06 meters in width and measure 3.23 metres in length on the ground floor. There is 4.37 metres between the ground floor and first floor. The female bathrooms are located off the stair landing at 3.12 meters from the ground floor.

The timber staircase is made up of 15 steps to the first landing, providing access to the female bathrooms (Room F15), and then nine steps to the first floor with 182mm height per step. A moulded timber handrail continues from the ground to the first floor of the CME Building with ornate floral timber patterns located below the scotia board below the stairs. Two turned timber banisters are located for each tread. A newel post is located on the ground floor.

A timber door is located behind the ground floor staircase where many of the banisters that have been previously removed are now stored.



Figure 4.102: Ground floor access to the CME Building staircase (Room G17)



Figure 4.103: Room G17 ceiling and entrance to landing where female bathrooms (Room F15) are located.



Figure 4.104: Ground floor remaining bannisters in poor condition with newel post in view.



Figure 4.105: View of ground floor banisters and handrail.



Figure 4.106: Four panel timber door located below the ground floor staircase



Figure 4.107: View inside small room located below the ground floor staircase with remaining banisters



Figure 4.108: View downstairs to ground floor from the Room F15 landing

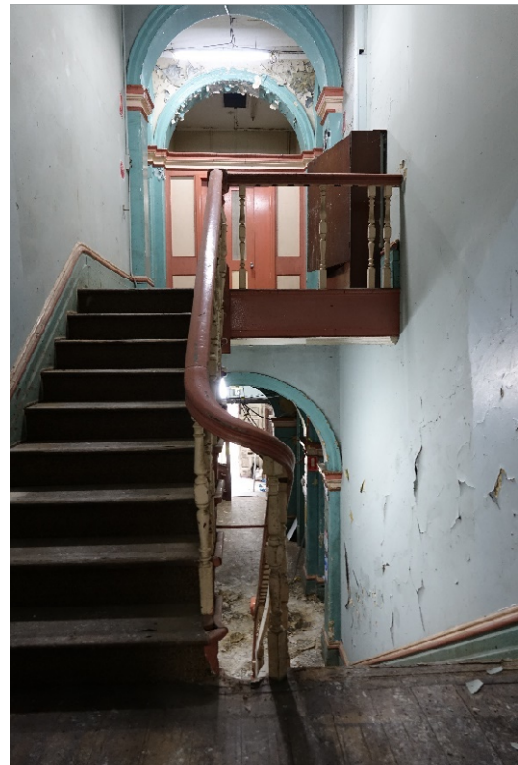


Figure 4.109: Landing between the ground and first floor



Figure 4.110: View from the first floor down the staircase to the landing and female bathroom entrance



Figure 4.111: First floor (F9) towards staircase and female bathrooms

4.6. CME Building – Exteriors

The CME Building, the subject site, is a two-storey masonry and brick building that sits to the east of the Scientific Services Building No. 1. The final form of the building includes the original fabric of the 1887, 1900 and 1920 phases, all of which consistent to its Victorian style.

The building is 55m long and 12m wide with a neoclassical pediment in the centre facing Wilson Street with the letters 'NSWGR' above the doorway. A secondary entry is located further east on the northern façade and provides direct access to the former CME office. The building can also be accessed from the southern (rear) façade and from a small vestibule on the south-eastern corner.



Figure 4.112: Chief Mechanical Engineers Building (CME Building) from Wilson Street. Source: Curio, Projects, 2021.

On the First Floor, a balcony runs the north and east lengths of the building with cast-iron columns and decorative iron brackets and balustrade. The Ground Floor features a bullnose verandah of the same extent as the balcony above it, comprising decomposed granite flooring with a sandstone edge.

The Ground and First Floors also feature timber doors and double-hung sash windows with sandstone sills, although most of them are currently boarded up. The roof is hipped and clad in corrugated iron with brick corbelled chimneys. The eaves feature a dentilled cornice¹⁷⁰.

Facing Wilson Street, there is a modern steel picket fence on a concrete plinth extending to the length of the eastern garden. Two sandstone plinths, which appear original, support an iron picket gate.

To the east of the site, the triangular garden area occupies approximately 375 square metres and is separated from the main building by a security fence. The garden still retains what seems to be the original timber flagpole. As discussed in Section 3, the former Victorian garden was part of the 1900 addition and was well-maintained until the 1990s; however, it is currently in poor condition as described by the State Heritage Inventory listing for the site:

Once famous for its extensive and elaborate grounds, these have been neglected and comprise chiefly now of open space, unkept grass and a row of mature, formerly-bollarded London or hybrid plane trees (Platanus x hybrida) lining Wilson Street, Redfern.

4.6.1. The Balcony

On the First Floor, a balcony runs the north and east lengths of the building with cast-iron columns and decorative iron brackets and balustrade.

¹⁷⁰ NSW Office of Environment and Heritage, State Heritage Inventory Register listing sheet for 'Eveleigh Chief Mechanical Engineers Office'.

The CME Building balcony timber floorboards now water-stained in areas (adjacent to Rooms F16, F17 and F18) are believed to have been replaced or restored in 2016 due to the poor condition of the original balcony floor.

The balustrade, trelliswork, lattice and columns are mostly original cast iron fabric. The 1900 addition to the east extended the balcony east and was consistent in design, materiality and style with the original 1887 Victorian style. The access to the balcony from the adjacent interior rooms also changed after the 1900 addition was constructed.

The two gable ends of the balcony roof are decorated with a scrolling timber pattern.



Figure 4.112: Room F16 of the CME Building which was part of the original 1887 phase of construction



Figure 4.113: Room F17 of the CME Building showing the original 1887 phase of construction area



Figure 4.114: Room F17 of the CME Building which was part of the 1900 addition



Figure 4.115: Room F18 of the CME Building which was part of the 1900 addition and provided view lines across the entire ERW precinct



Figure 4.116: Doorway leading from the eastern end of Room F6 to the balcony (Room F17)



Figure 4.117: French Doors leading from the western end of Room F6 to the balcony (Room F17) as part of the 1900 addition



Figure 4.118: Room F17 and F18 part of the 1900 addition of the CME Building



Figure 4.119: The exposed ironwork of the western end of the balcony (Room F16) as part of the 1887 construction of the CME Building with the Scientific Services Building visible in the background

4.6.2. Verandah

The Ground Floor features a bullnose verandah of the same extent as the balcony above it and comprises decomposed granite flooring with a sandstone edge. The verandahs are enclosed by the balconies directly above them and have cast-iron columns equally spaced along their length.

In 1887, the year of the building's original phase of construction, no direct access to the verandahs was provided, which indicates that they were built primarily for aesthetic purposes. Investigations undertaken by Curio¹⁷¹ concluded that the original verandah flooring was composed of a layer of decomposed granite at the surface, followed by a layer of sand deposited on top of the soil, further supporting the theory that the verandahs were built for their aesthetics rather than usability.

After the 1900 addition to the site, the creation of a direct entry (G9) access to the CME Office (G10) enabled the eastern side of the northern verandah to be accessed from within the building, while the west side of the northern verandah remained without direct access.

Figure 4.120 to Figure 4.125 represent key details of the verandah discussed in this sub-section of the CMP.



¹⁷¹ Curio Projects, 2022. *Chief Mechanical Engineers Building—Condition Report and Schedule of Conservation Works*.

Figure 4.120: Ceiling of Room G28 and G29 of the CME Building



Figure 4.121: Exposed flagstones and cast iron columns in Room G28



Figure 4.122: Ceiling of Room G28 of the CME Building



Figure 4.123: Exposed flagstones and cast iron columns



Figure 4.124: Brick Vent exposed

Figure 4.125: Room 29 of the CME Building

4.6.3. Roof & Chimneys

The roof, installed as part of the 2016-2017 restoration works by Urban Growth is hipped and clad in corrugated iron and retains several brick corbelled chimneys. The eaves feature a dentilled cornice¹⁷². It is currently in poor condition, however, and allows water to permeate the interiors of the building, thus requiring urgent remediation.

The CME Building originally had at least ten chimneys. During the 2016-2017 Urban Growth works on the building, up to four chimney flues were removed as part of the roof replacement and are now stored in room G21A.

Overall, despite the existing roof being a later addition to the building, it has been sympathetically designed to match the original roof and, therefore, it is a compatible insertion within the heritage context of the site.

¹⁷² NSW Office of Environment and Heritage, State Heritage Inventory Register listing sheet for 'Eveleigh Chief Mechanical Engineers Office'.



Figure 4.126: View of the northern façade of the CME Building from Wilson Street showing four remaining chimneys which were added during the 1900 addition works.



Figure 4.127: View of the northern eastern façade of the CME Building from Wilson Street showing the three chimneys added during the 1900 addition



Figure 4.128: Two original 1887 chimneys are visible from Wilson Street

4.7. Landscape - North

The northern landscape along the Wilson Street side of the CME Building has a modern green metal picket fence on top of an older early 20th century wall base constructed from concrete and reused railway tracks. The fence line creates the northern boundary of the CME Building study area.

The main entranceway to the study area is through a gate flanked by two original 1887 sandstone posts on either side of the gate and located in front of the CME Building main entrance. The gate located between the two sandstone posts is modern fabric that is consistent with the materiality of the green metal fence and the arched metal latticework above the gate (see Figure 4.129). It has been designed to stop trespassers entering the unoccupied site.

A concrete pathway continues on a north to south orientation with two steps up to the main CME Building door. To the east and west of this pathway between the fence lines and verandah is a bare, mulched landscape that borders the driveway to the west, as well as the north, south and eastern fence lines.



Figure 4.129: Main entranceway via gate along Wilson Street with two sandstone plinths on either side



Figure 4.130: Fenceline along the northern boundary of the study area with early to mid 20th century cement wall with railway tracks



Figure 4.131: Northern entrance pathway with two steps between the gate and front door of the CME Building



Figure 4.132: Northern entrance pathway with two steps between the gate and front door of the CME Building



Figure 4.133: Mulched landscape between the northern fenceline and terrace



Figure 4.134: Mulched landscape between the northern fenceline and terrace at the eastern end of the CME Building



Figure 4.135: Driveway located along the western façade between the CME Building and Scientific Services Building



Figure 4.136: Mulched landscape between the northern fenceline and terrace at the western end of the CME Building

4.7.1. Landscape -East

The landscape to the east of the CME Building is mostly made up of a garden space that is enclosed by a modern security fence. The fence runs north to south between the building and garden space to the east of the building cutting off accessibility to the CME Building and leaving only a small gateway further south along the fence line. The existing fence interrupts the movement routes within the site, restricts access to highly significant areas, and visually interferes with significant view lines throughout, in particular between the CME building and the eastern garden.

The topography of the eastern landscape is relatively flat and one of the highest points across the entire ERW Precinct until it starts sloping down along the southeastern boundary of the landscape. Geo-fabric covers the eastern garden entirely beneath a layer of soil and the south-eastern slope (Figure 4.138).

The eastern landscape has a number of remnant mature trees located on the outskirts of the garden and retains a relatively open space surrounding the central flagpole. The historic flagpole and sandstone edging remain insitu.



Figure 4.137: The eastern garden surrounded by a green metal picket fence on all sides with historical flagpole in the centre of garden



Figure 4.138: Northwestern view of CME Building study area from carpark in RNE showing the south eastern boundary fence and topography of study area



Figure 4.139: View of Eastern façade of the CME Building from the eastern garden



Figure 4.140: Grassed lanscape between the eastern verandah and north to south orientated fence before eastern garden



Figure 4.141: Grassed lanscape between the eastern verandah and security fence.



Figure 4.142: Area of eastern garden with geo-fabric, suggest previous inground works, within the eastern garden area



Figure 4.143: Western view of the eastern garden and eastern façade of the CME Building



Figure 4.144: Fenceline adjacent to eastern garden along the northern boundary



Figure 4.145: Eastern fenceline along the boundary of the current CME Building study area



Figure 4.146: Rough sandstone blocks surrounding flagpole



Figure 4.147: Flagpole located to the east of the CME Building

4.7.2. Landscape- South

The south (rear) of the CME Building consists of a hard asphalt service which runs from the southern fence line, located above the southern slope, up to the base of the southern façade of the building.

Mature trees, located outside of the study area, overhang the southern rear entrance to the CME Building site. A gate is located along the southern boundary of the study area opposite the rear entrance to the CME Building. The gate leads to stairs that allow access to the railway level of the RNE Precinct. Downpipes to the rear of the building lead to historic square brick drains.

The CME Toilet Block is located just west of the rear entrance which connects to the Scientific Services Building No.1 that is located adjacent to the west of the building.



Figure 4.148: Western view of southern landscape of CME Building study area



Figure 4.149: Eastern view of southern landscape of CME Building study area



Figure 4.150: Southeastern landscape of CME Building study area and view of where eastern terrace abuts asphalt hardscaping.



Figure 4.151: CME Toilet Block located southwest of the CME Building



Figure 4.152: Eastern view of the southern landscape of the CME Building from the western driveway

4.7.3. Landscape - West

The western landscape of the CME Building is made up of a hard asphalt surface which is used as a shared driveway between the CME Building and Scientific Services Building No.1. A vehicle access gate is located along Wilson Street that then connects with the driveway and rear of the CME Building.

Additional historic square brick drains are located along the western facade of the CME Building.



Figure 4.153: View facing south from the driveway west of the CME Building



Figure 4.154: View of the western façade and driveway from the front of the Scientific Services Building

4.8. Moveable Heritage

The CME Building includes a number of items of moveable heritage.

The State Heritage Register listing for the *Eveleigh Chief Mechanical Engineer's Office and Moveable Relics* (SHR #01139, gazetted 2/4/1999¹⁷³) lists the following moveable relics.



- 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)

In December 2012 OHM Consultants conducted a Moveable Heritage Study for the CME Building and adjacent Scientific Services Building.¹⁷⁴ It was noted that a number more items were listed on register at the time (**Error! Reference source not found.**) yet many could not be located and were likely subject to theft or vandalism as they had not been relocated to RailCorp's Moveable Heritage collection at Eveleigh.¹⁷⁵

OHM recorded that the self-closing seat of the toilet was absent, the timber cabinet was a large plan and filing cabinet with 6 sections with many drawers, and they could not locate the wall mirror.¹⁷⁶ The three items remaining in the CME Building listing on the SHR register suggests that the additional items were not located, the unlocated 'wall mirror timber frame' remained on the register which Curio believes to be the rectangular mirror located in Room 11.

The 2012 report¹⁷⁷ noted the following items in the CME Building as moveable heritage:

Table 4.1: 2012 OHM Report – Moveable Heritage Items

Item	Room	Description	SHR	Image
Built-in cabinet	G10	Plan drawers of multiple sizes, some for large plans, some for suspension files. The suspension files are made of inferior material and are likely not original to the cabinet.	Y	
Marble fireplace surround	G10	Marble fireplace surround in CME office 1. Shows the standard of fixtures required for the CME as a person of importance in NSW railways. Other fireplaces within the building are considered part of the building and not moveable.	N	


¹⁷³ NSW Government State Heritage Inventory, *Eveleigh Chief Mechanical Engineer's Office and Moveable Relics*, SHR Item, accessed August 2022, < <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5014147>>

¹⁷⁴ OHM Consultants, 2012, *Chief Mechanical Engineer's Office and Scientific Services Building Moveable Heritage Study*, report prepared for NSW Public Works, Dec 2012

¹⁷⁵ OHM Consultants, 2012, *Chief Mechanical Engineer's Office and Scientific Services Building Moveable Heritage Study*, report prepared for NSW Public Works, Dec 2012, p. 5.

¹⁷⁶ OHM Consultants, 2012, *Chief Mechanical Engineer's Office and Scientific Services Building Moveable Heritage Study*, report prepared for NSW Public Works, Dec 2012, p. 5.

¹⁷⁷ OHM Consultants, 2012, *Chief Mechanical Engineer's Office and Scientific Services Building Moveable Heritage Study*, report prepared for NSW Public Works, Dec 2012,

Item	Room	Description	SHR	Image
Toilet, washbasin and cistern	G8	Toilet (damaged) washbasin and Y cistern in private toilet for Chief Mechanical Engineer. According to the listing, the toilet used to feature a self-opening/closing lid, which is now missing. CME building employees constructed the lid.		

OHM Consultants recorded a number of additional items with potential heritage significance within the CME Building which had not been included on the SHR listing. OHM identified items 8-11 (Table 4.2) as providing insights into the methods by which metal objects were tested.¹⁷⁸

The report noted that all moveable items which were portable and could be stored were removed, wrapped, labelled, numbered and stored in a nominated secure storeroom in the Photography Lab of the Scientific Services Building. The OHM report noted that all the fireplaces in the CME building, excluding that in Room G10, should be protected and managed as part of the building and not moveable heritage.

Table 4.2: 2012 OHM Report – Additional Items with Potential Heritage Significance

Item	Room	Item Name	Description	No. of Items
8	G1	Rail flaw detector	Device for detection flaws in metal. Consists of detector and power supply. Used specifically to check for flaws in rails, and possibly rail welds. Associated with items 9, 10 and 11.	2
9	G4	Broken welded rails	2 pieces of flat-bottomed rail of differing sizes. Have been welded together but weld has been broken. Possibly used to test bad welds. Associated with items 8, 10 and 11.	2
10	G1	Photo sheets of metal defects	Four posters of pictures of metal defects of various kinds. Also featuring loco components. Associated with items 8, 9 and 11.	4 posters
11	G1	Rail flaw type books	Book showing types of rail weld flaws and sheets for recording flaws. Associated with items 8, 9 and 10.	1 folder, 1 book

On 7 October 2021, Curio conducted a site visit to the CME Building as part of the research for the Non-Aboriginal Heritage Study & Statement of Heritage Impact for the Paint Shop Sub-Precinct. The following moveable heritage items were noted:



- Marble fireplace and surround
 - Toilet, washbasin and cistern
 - Safe
 - Communication station/panel

After being commissioned for the CME Upgrade project, Curio Projects undertook a site visit in August 2022 and identified the following additional items of moveable heritage (Table 4.3):

¹⁷⁸ OHM Consultants, 2012: p. 110.

- Toilet bowl with counterweight seat (AA24) in Room G1
- Wall mirror timber frame, 0.6/1.0 (AM06) believed to be the NSWTD mirror found in Room G2A

Table 4.3: Additional Items of Moveable Heritage Identified by Curio

Item	Room	Description	SHR	Curio Notes	Images
Wall mirror timber frame, 0.6/1.0 (AM06)	G2	Rectangular mirror on northern wall of Room G2. White timber frame with 'N.S.W.T.D' etched across the glass.	This item is believed to be the SHR-listed mirror	The mirror is in good condition with minor scratches on the frame and minor tarnishing on the glass. It is secured to the wall via 4 slotted head screws.	
Safe	G10	Olive green rectangular safe located in east-west corner of room G10.	N	Olive green safe, cream numbers '1292' painted along the top of the front face. Minor wear and discolourisation evident from a mark beneath a former label. Interior not able to be observed.	

4.8.1. Fireplace surrounds as moveable heritage

As noted above, OHM recommended that the c.1900 marble fireplace surround in Room G10 should be considered separately to the other fireplaces as 'moveable heritage'. This fireplace was separately considered from the other fireplaces in the building due to its location in the 1900 CME Office. This CMP recommends that the item is not moveable heritage, but forms part of the built heritage fabric of exceptional significance that should be retained insitu.

5. Archaeology

5. Archaeology

5.1. 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. Historical Archaeology

Information of the Historical Archaeology for the subject site has been summarised below from the *Chief Mechanical Engineers Building—Historical Archaeological Assessment* prepared by Curio (2022). For a full overview of the archaeological background of the subject site, reference should be made to the original report.

5.2.1. Summary of Archaeological Potential in the Study Area

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 assessment found that the study area has the following non-Aboriginal 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.

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.

5.2.2. 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*.¹⁷⁹ 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 significance at a local or State level.¹⁸⁰ Definitions of archaeological significance are presented in Table 5.1.

Table 5.1: 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.

5.3. Aboriginal Archaeology

Information of the Aboriginal Archaeology for the subject site has been summarised below from the *Chief Mechanical Engineers Building—Aboriginal Due Diligence Assessment* prepared by Curio (2022) (Appendix I). For a full overview of the Aboriginal background of the subject site, reference should be made to the original report.

¹⁷⁹ Australia ICOMOS, 2013, Burra Charter

¹⁸⁰ Heritage Branch Department of Planning, 2009, p11

5.3.1. Desktop Assessment

Aboriginal Archaeological Predictive Model and Potential

Predictive modelling plays an important role in understanding the remnant archaeological potential of a site, and thus factors into the development of appropriate management recommendations and mitigation strategies. Archaeological predictive modelling integrates information about environmental context, previous historical activities, and ground disturbance, and known locations of surrounding sites (excavations and registered AHIMS sites) to assess and predict the nature of archaeology that may be present within the subject site.

For Aboriginal archaeological sites to be present in situ, they require the retention of natural soil profiles prior to 1788. Portions of the subject site that may have the highest potential for natural soils to be present (and corresponding potential for intact Aboriginal archaeological deposits) are areas where the lowest levels of historical development and excavation have been undertaken.

In consideration of all these above factors across the subject site, the following predictive model has been developed:

- Landforms within the Blacktown soil landscape have the potential to contain Aboriginal archaeological deposits, however, this greatly diminishes when urbanisation and development have occurred.
- The most likely site type in the area would be PADs or low-density artefact sites.
- The subject site is not considered to be situated in an area likely to be as favoured for resources as locations closer to the coast, although it would still provide some resources.
- The Blacktown soils in this area are deemed to be shallow, so historical disturbances associated with land clearance and building construction are likely to have impacted any potential subsurface archaeological resources.

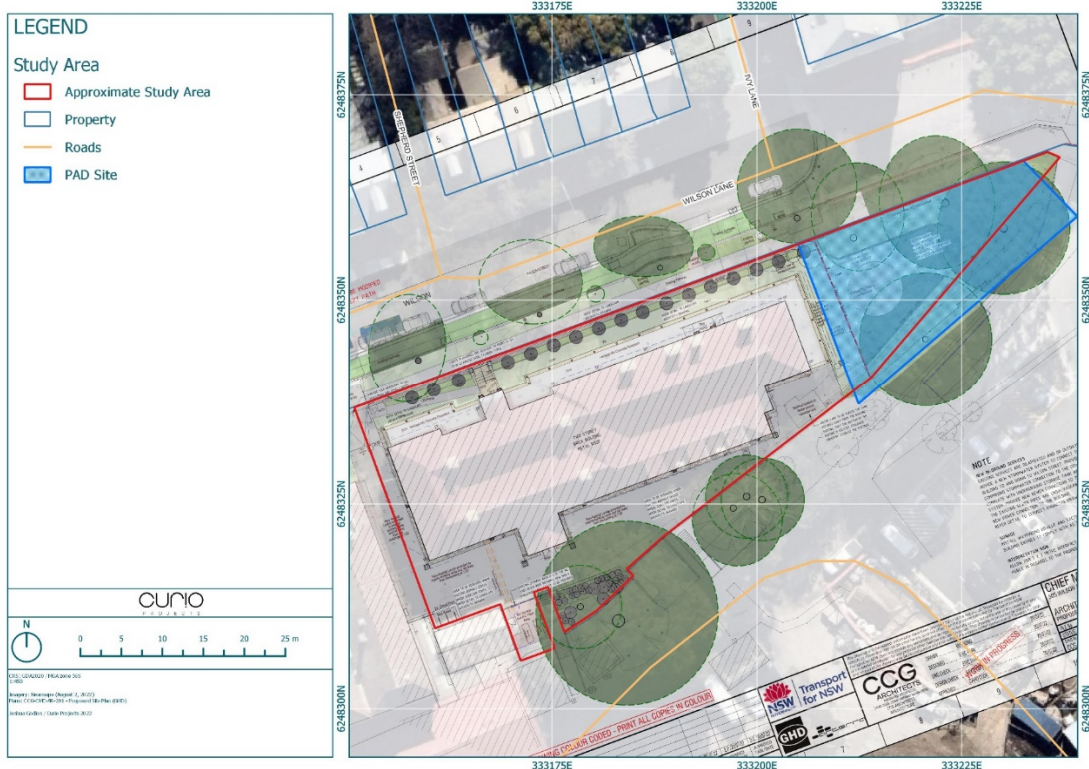


Figure 5.1: Close-up of RNE-PAD01 within the subject site. Source: Curio 2022

5.3.2. Summary of Desktop Assessment

This desktop assessment has concluded that:

- The subject site has one known registered site within its boundary.
- The wider area does not consist of large numbers of previously registered Aboriginal sites, with the closest registered site being a PAD within the boundaries of the subject site, east of the CME subject site.
- PAD and low-density artefact sites are the most common site types within the boundaries of the AHIMS search.
- The subject site is not considered to be situated in an area likely to be favoured for resources used by Aboriginal communities and therefore is less likely to be a place of continuous or high-density use or occupation.
- The site has been subject to varying levels of ground disturbance, significantly reducing archaeological potential.

Overall, the subject site has low potential to contain subsurface Aboriginal objects, with nil-low potential for any sites within the footprint of the CME Building based on the analysis of the landscape and understanding of the historical disturbances to the site over time. However, the presence of the registered PAD site within the subject site should be recognised and an Aboriginal Cultural Heritage Assessment Report (ACHAR) should be completed prior to any works proposed in the area

6. Significance

6. Significance

6.1. Previous Statements of Significance

6.1.1. ERW

The statement of significance for the overall Eveleigh Railway Workshops SHR site, below, has been extracted from the OCP Architects 2022 *Eveleigh Railway Workshops Overarching CMP*:

The Eveleigh Railway Workshops complex is of exceptional heritage significance to the state of NSW for its major contribution to the establishment, operation and growth of the NSW railways, which was essential to the growth and development of NSW from the late nineteenth century onwards. The operation of the railway workshops and stores at Eveleigh is associated with the phenomenon of railway networks that allowed the unprecedented development of Sydney suburbs and rural NSW at the end of the nineteenth century and the early twentieth century. The Workshops complex is significant as a rare remaining example of a relatively intact, large-scale nineteenth century railway workshops that retains unity of character as well as continued links to railway operations for over one hundred years to this day.

The complex is significant as one of only a limited number of such facilities within the country, with individual states within Australia generally having established a single major railway workshop facility for maintenance and also manufacture of rolling stock and engines, supplemented by smaller workshops. As such, the Eveleigh Railway Workshops represent one of the largest industrial enterprises in Australia and the large-scale infrastructure demonstrates Government confidence in establishing and expanding rail networks in the late nineteenth century. The site retains the ability to demonstrate a range of characteristics that are typical of major railway construction and maintenance workshops in Australia, including the range of building types providing similar functions, aesthetic qualities and comparable history in terms of growth and expansion, involvement in wartime production, subsequent decline and adaptive reuse. There are opportunities to undertake further detailed research to identify potential national values, particularly in the context of the integrity of former railway workshop sites in Australia. Similarly, there are opportunities for further investigation of international railway workshop facilities to clarify the potential significance of the Eveleigh Railway Workshops in an international context.

Historically the site is important for its links to an early phase of railway development in NSW, with onsite evidence remaining intact from as early as 1887. Though many structures and items have been removed, the remaining site evidence reads as a living interpretation of the technological, administrative, social and cultural developments in over 100 years of railway operations in NSW, including the major transition from steam to diesel and electric powered train operation. The layout of the extant site elements is also indicative of the functional and administrative arrangements during the period of the site's operation.

The Eveleigh Railway Workshops site is associated with the life and work of the early railway engineers John Whitton and George Cowdery, individuals whose life and work made significant contributions to the establishment, development and operation of railways in Australia and NSW. Whitton, Chief Engineer of the NSW Railways between 1856 and 1899, was responsible for the major restructuring of the rail system which resulted in the resumption of land at Eveleigh and the relocation of the old Redfern

Workshops (Sydney's first railway yards) to Eveleigh. George Cowdery, Engineer for Existing Lines, executed the detailed design at Eveleigh.

The Eveleigh Railway Workshops have considerable aesthetic significance as an industrial landscape formed by the complex of functional buildings and associated infrastructure. Aesthetic and technical significance is demonstrated in the high-quality design and construction of the original buildings, which are substantially intact and display finely detailed polychrome brickwork and well-articulated facades that embody the pride of the late Victorian era. The simple, strong functional forms of the workshop buildings have landmark quality, not only as important townscape elements in the Redfern/Eveleigh area, but as part of the visual train journey of thousands of passing commuters. The combination of the southern locomotive sheds at the Australian Technology Park and the former Carriage and Wagon Workshops provide a distinctive landmark in the Sydney landscape and define views to and from the site.

The Workshops are of social value to generations of railway employees past and present as a workplace producing high quality craftsmanship utilising state-of-the-art technology. The place served as a training ground for thousands of apprentices, tradesmen and engineers and was one of the biggest employers in New South Wales. Workers of the Eveleigh Railway Workshops centred their social activities on the workplace and social events were organised by and for workers both on the site and beyond. The site also has social value as a heritage icon for current local communities, which is reinforced by ongoing community interest in the place.

The remaining tangible evidence and intangible site values reflect the technological, social and cultural development of the NSW railways, as well as broader important historical events. The Eveleigh Railway Workshops has a strong historical association with union activities and is credited as being pivotal in the Australian Labour Movement, with the formation of the Amalgamated Railway and Tramway Service Association (ARTSA) in 1886. Eveleigh was seminal in many major industrial strikes, the ramifications of which were felt throughout the nation. In addition, several significant figures in the labour movement worked at Eveleigh, including James McGowan, the first Labour Premier of NSW.

The Workshops represent significant research potential for their ability to inform through remaining physical, documentary and oral evidence the functions and operations of a large-scale nineteenth and twentieth century railway workshops. The site also retains an exceptional and rare collection of historically and technically significant heavy machinery, although many items have been removed in the process of modern site development.¹⁸¹

6.1.2. Eveleigh Carriage Workshops

The following statement of significance for the Eveleigh Carriage Workshops area (i.e., North Eveleigh Precinct) has been reproduced from the Otto Cserhalmi & Partners 2002 *Eveleigh Carriageworks CMP*:

The Eveleigh Carriageworks together with the Eveleigh Locomotive Workshop site forms the ERW complex, which is of exceptional significance nationally and internationally as one of the best surviving examples of railway workshop complexes.

¹⁸¹ OCP Architects, 2022. *Eveleigh Railway Workshops Overarching CMP*: 101-102

Buildings, open spaces, circulation, rails, machinery, moveable items and services demonstrate the processes of railway manufacture, as well as the maintenance of engines and carriages and the evolution of these processes to technological and operational change between 1887 to the present day. The site layout divided by the main railway line is rare in comparison to other railway workshop complexes.

The site and its fabric demonstrate the history and operation of the NSW Government Railways, as well as reflecting world trends, in the phases of establishment, expansion, and decline and closure. It is associated with the life and work of the early railway engineers, Whitton, Cowdery, Elston, Thow, Lucy, and Burnett all of whom were individuals whose life and work made significant contribution to these phases. The site evidences Australia and NSW embracing 19th century railway technology and Government confidence in rail as a major future transportation mode, which is associated with unprecedented development of rural NSW and Sydney suburbs at the end of the nineteenth century and the early twentieth century. In contrast to international railway systems, the site is part of a railway infrastructure developed by Government rather than private companies and evidences the practice of colonial exportation of British railway technology and models.

The main workshop buildings at Eveleigh are among the finest industrial buildings to be built in Sydney in the late Victorian period. This is because of the innovative use of materials and structure, finely developed aesthetic arising from their scale, sophisticated proportions and the rhythm of the classically derived facade treatment, their carefully composed with pediments, columns and panels and brick detailing. The design of the main workshop buildings exhibits technical innovation in the large runs of brickwork without construction joints, and metal-framed windows. The site elements combine to produce a pure functionalist aesthetic which is expressed by design, materials and detail evolving from the late Victorian railway architecture through to 20th century. The aesthetic is evident in key elements including the rails and traversers, the unpretentious brick and the corrugated iron buildings with exposed structural elements, the situation of buildings at rail level and the use of rails in all sorts of structures including fences and lean-to additions.

The Eveleigh Carriageworks has landmark qualities experienced in the views and vistas to the site, particularly from the railway line, where the size of the complex, the scale of the facades the spatial arrangement of the buildings and elements on the site distinguish it from other sites. Viewed from a passing train, the Carriage Workshops on one side and the old Locomotive Workshops on the other, it is one half of a gateway that visually defines a point on a journey to or from the city. The site is iconographic, symbolising the past phenomenon of the greatness of railways.

The workshops were integral to the development of the surrounding suburbs and have an important physical and social association with these areas. The place has strong cultural, social or spiritual associations for substantial numbers of the community, including post WW II migrants and apprentices who worked on the site. Many former employees retain a strong sense of pride and identification with the place as one of excellence, service and a symbol of Australia's ability to compete and excel on a world scale. The yard as a whole was a key site in many union activities such as the great strike of 1917 and is expressed in the physical evidence of improved working conditions gained by the unions. The closure of the works was

seen by many as the end of a micro-community and is perceived by many as representing a past approach to work and life.¹⁸²

The 2002 Otto Cserhalmi & Partners *Eveleigh Carriageworks CMP* also includes the national significance of the Eveleigh Carriageworks, as noted below:

The largest intact, high quality workshops site that survive from the steam era in Australia. The Carriageworks represent the prestige of the New South Wales Railways at its peak and its fabric tracks the changes and eventual decline of the industry until its closure in 1988. In contrast to the railways of other nations, the NSW Railways, hence Eveleigh, were a government enterprise rather than privately owned. The main workshops building is a rare surviving example of the work of George Cowdery and the high level of technological innovation and design undertaken by local industries and builders. It is also associated with John Whitton, who was instrumental in establishing the NSW Railways. Many of the buildings retain a high level of integrity and authenticity along with some of their ancillary structures, including the line shafting that powered machinery, rails and cranes.

An historical landmark in the area. Viewed from the train line, with the Locomotive Workshops on the other side, the Eveleigh Railway Complex is a gateway into and out of the southern end of the city. It is also from the main line that the industrial scale and proportions of the site can be appreciated.

A place of high potential for industrial archaeology and interpretability. Underfloor components include rails and pits exist in some bays. The high retention of many of the site's buildings and systems have the potential to demonstrate the former industrial processes.

The contribution that the place made to the development of the surrounding suburbs and associated community, state and nation is immense. Eveleigh was seminal in many major industrial strikes, the ramifications of which were felt throughout the nation. It is of national significance for its part as one of the biggest employers of migrant labour and for its history in the employment of women starting with World War II. The place is held in high esteem by former workers and the surrounding community, confirmed by their reminiscences and community interest in the place.

6.1.3. Redfern North Eveleigh Paint Shop Sub-Precinct

A statement of significance was produced as part of Curio's 2022 *Redfern North Eveleigh Paint Shop Sub-Precinct Non-Aboriginal Heritage Study*, the entire sub-precinct located east of Carriageworks:

The Paint Shop Sub-Precinct is of exceptional heritage significance to the state NSW due to the key role it played as part of the major industrial site of the ERW complex, which itself was key to the development, growth and operation of the NSW Railways Department from the late nineteenth century.

The Paint Shop Sub-Precinct is historically significant as part of the establishment of the railway in NSW. The evidence remaining on site symbolises and demonstrates the technological, administrative, social, and cultural developments which occurred in this location for over a century and was a contributing factor in the transition from

¹⁸² OCP, 2002. *Eveleigh Railway Carriageworks CMP*: 265

steam to diesel and electric powered train operation. The layout of the site continues to represent its past functions and management regimes.

The Paint Shop Sub-Precinct is associated with many key influential figures, in the development, management, and establishment of railways in NSW and Australia. John Whitton, Chief Engineer of the NSW Railways from 1856 until 1899 at Eveleigh, was in charge of the restructuring of the rail system. George Cowdery implemented the detailed design at Eveleigh in his role as the Engineer for Existing Lines. Whitton and Cowdery are two examples of influential figures associated with the Paint Shop Sub-Precinct.

The aesthetic significance of the Paint Shop Sub-Precinct is reflected in its industrial environment, which is demonstrated through its high-quality designs and construction of the earlier structures that are still in considerably good condition. The Paint Shop is an example of the Victorian era workshops which is made up of polychrome brickwork and articulated facades. The appearance of the workshops and structures within the Paint Shop Sub-Precinct was important as a landmark to the general public as hundreds of onlookers on the train line passed it every day.

The Paint Shop Sub-Precinct holds social significance to railway employees, past and present, as the home of training for apprentices, tradesmen, and engineers with the latest technology, the operation becoming one of the largest employers in NSW. Many social activities were organised by the Eveleigh workers, for themselves and for others from outside of the ERW. Numerous union activities and strikes occurred at the Eveleigh workshops with the workplace environment being catalytic for the union movement with major industrial strikes playing a role in the evolution of the site, the repercussions of which were seen across Australia

The technological advancement and contribution of the work undertaken at the ERW, and the Paint Shop Sub-Precinct was pivotal in the evolution of the railway in NSW. Therefore, there is significant research potential through the physical, documentary, and oral evidence providing information on the functions of the activities undertaken at the 19th to 20th century railway workshops.

The Paint Shop Sub-Precinct is rare in NSW, especially associated with the ERW and retains a rare collection of heavy machinery.¹⁸³

6.1.4. Chief Mechanical Engineers Office - Heritage NSW

The CME Building is listed as an individual heritage item on NSW Heritage's State Heritage Register as "Eveleigh Chief Mechanical Engineers Office and movable relics" (SHR #01139).

The SHR listing identifies that the CME Building has historical associative (Criterion b), aesthetic (Criterion c), and rarity (Criterion f) significance at a State level. The gazetted SHR Listing provides the following Statement of Significance for the Chief Mechanical Engineers 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

¹⁸³ Curio Projects, 2022. Redfern North Eveleigh Paint Shop Sub-Precinct: Non-Aboriginal Heritage Study

(mainly under the control of the Mechanical Branch) indicates 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 St, Redfern, particularly its close proximity to the railway workshops.¹⁸⁴

6.1.5. Surrounding Heritage Listings

The following *Statements of Significance* for the heritage listings and HCAs surrounding the study area, of relevance to the heritage assessment detailed in subsequent sections of this report, have been extracted from the relevant heritage listings and reproduced below, edited or truncated where relevant for the key topics of relevance to the assessment of the CME Building study area.

Redfern Railway Station Group (SHR)

Redfern Railway Station Group is significant at a state level as a major suburban station which played an important role in the development of the surrounding residential and industrial suburbs. The overhead booking office is a rare remaining example of the Queen Anne style of railway architecture and along with the 1884 station building on Platform 1 remain as some of the last examples of these types of structures to survive in the metropolitan area. The booking office retains its overall form and much original detail. The platform buildings on platforms 2-10 are consistent in design and represent the largest group of such buildings in the system at one site, reflecting the location's importance as a junction for commuters and for its access to the adjacent Eveleigh workshops. The addition of platforms and their associated platform buildings, including the Eastern Suburbs Railway, represent the importance of the Station as a commuter hub and reflect the expansion of Redfern Station and the Sydney network generally through the later nineteenth and into the twentieth century. Structures such as the air vents or chimneys connected to the underground engine dive, on Platform 1, are indicators of the adjacent industrial uses of the Eveleigh Yards and are unusual features on a suburban station.

The early station buildings and structures indicate the high quality of buildings provided during the mid-Victorian period of railway construction and the former importance of Redfern as an industrial and residential area in the development of the Sydney suburbs. The pair of newel posts is an example of colonial cast-iron work and represents the end of the era of ornamentation brought about by Railway Commissioner Eddy.¹⁸⁵

Golden Grove HCA (Sydney LEP)

The Golden Grove Estate has historic significance as the earliest grant in the area and as a representative area of late nineteenth century residential subdivision and late nineteenth century housing. The area developed largely within the period 1880-1890, illustrating the influence of the ERW on the surrounding area. The terraces and streetscapes are substantially intact and have aesthetic value for their harmony and

¹⁸⁴ NSW Heritage 2022, State Heritage Inventory Datasheet *Eveleigh Chief Mechanical Engineers office and movable relics*. Accessed from <https://apps.environment.nsw.gov.au/dpcheritageapp/ViewHeritageItemDetails.aspx?ID=5014147>

¹⁸⁵ Heritage NSW SHR 'Redfern Railway Station Group'

consistency and in their ability to represent working class and middle-class housing and community in the late Victorian period.¹⁸⁶

Darlington HCA (Sydney LEP)

Darlington Heritage Conservation Area is historically significant as a representative area of mid nineteenth century residential subdivision and mid to late nineteenth century working class housing. It illustrates the principal characteristics of a working-class district of the period 1860-1890. The area demonstrates the impact of the ERW on the development of the surrounding area. The establishment of the Railway Workshops introduced a unique and powerful influence which stimulated development, particularly housing to meet the requirements of employees of the Workshops. The Conservation Area illustrates the impact of the railway line, Cleveland Street and the topography of the area on the street pattern, which is dominated by narrow twisting streets with changing views ending in T-intersections and long bent through streets. The area's basically residential character is intact and consists of rows of terraces hugging the curving streets. There is a complementary mix of light industrial buildings, largely sympathetic in scale and alignment to the terraces. The residential buildings are low scale and austere in their presentation, occupying narrow deep allotments. The form, layout and location of the buildings demonstrate the urban forms of the pre-motor car, pre-electricity era for working class people in Sydney and express the social conditions and environment of that time. The area is significant as a relic of mid to late nineteenth century urban development and illustrates the principal characteristics of a working-class district in this period.¹⁸⁷

6.2. Assessing Significance Methodology and Criteria

The Burra Charter Australia (Australia ICOMOS 2013) defines cultural significance as:

...aesthetic, historic, scientific, social, or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places, and related objects. Places may have a range of values for different individuals or groups. (Australia ICOMOS 2013: 2).

Based on 2013 Burra Charter definition of cultural significance (historical, aesthetic, scientific, social, spiritual), the NSW Heritage Council (2001) developed seven significance criteria that are used to assess the level of significance of a place/item/relic/building etc. The following criterion are listed below.

Criterion A —Historical Evaluation

An Item is important in the course or pattern of NSW's cultural or natural history (or the cultural or natural history of the local area)

Criterion B— Historical Association

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

¹⁸⁶ OEH Golden Grove HCA

¹⁸⁷ OEH Darlington HCA

Criterion C — Aesthetic Value

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

Criterion D— Social/ Cultural Value

An item has strong or special associations with a particular community or cultural group in NSW (or the local area) for social, cultural, or spiritual reason

Criterion E— Technical/Research Potential

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

Criterion F— Rarity

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

Criterion G —Representativeness

An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural and natural environments.

6.3. Criteria for Assessment of Cultural Heritage Significance

This section presents an updated assessment of the heritage significance of the CME Building, following the NSW heritage criteria in accordance with the guidelines. The heritage significance of the CME Building is influenced by its evolving history, both physical and intangible (associative), as well as its social and cultural values through time. This significance assessment has been undertaken with reference to the entire curtilage of the CME Building.

6.3.1. Criterion (a) – Historical Significance

'Important in the course, or pattern, of NSW' cultural or natural history (or in the cultural or natural history of the local area)'.

- The South Sydney area is culturally significant to First Nations Peoples and is home to the Gadigal people of the Eora nation, who have maintained their connection to Country despite the major impacts brought by colonisation.¹⁸⁸
- The expansion of the Chief Mechanical Engineer Building and associated later Scientific Services Buildings, reflects the broader expansion of the ERW which was the largest railway construction and maintenance workshop in the Southern Hemisphere.
- The building is a rare, highly intact example of a late Victorian era railway office of large scale in NSW. The layout also reflects sensitive additions and alterations, made in 1900 and 1920, in order to adapt to the growing activities at the ERW. The layout and structure of the building is fundamentally unchanged since the 1920 addition.
- The building was constructed to accommodate the engineers whose designs, research, and technical innovations were pivotal to the historical development of the railway system in NSW. In addition, the engineers had important managerial functions within the ERW precinct such as tendering and purchasing materials, as well as the administration of budgetary constraints.

¹⁸⁸ Cox Inall Ridgeway, 2021. *Central Precinct Renewal Project: Consultation Report for Aboriginal Heritage Interpretation Strategy*. Prepared for Transport for NSW

- The ERW site, including the CME Building site, was central to the development of the union movement in NSW and was instrumental in the Great Strike of 1917, the strike which led to the improvement of working conditions during the early twentieth century.¹⁸⁹
- The broader precinct of the ERW, including the CME Building, was pivotal in the key expansion of the suburbs surrounding the ERW (such as Alexandria, Eveleigh, Redfern, Darlington, Macdonaldtown) due to being a major employer in NSW for many decades.
- The CME Building was continuously used as administration offices related to the railway from its establishment in 1889 until it was abandoned and boarded up during the early 2000s.
- The CME Building and Scientific Services Building No.1 are directly linked as each played a role in the functioning of the other throughout the 20th century. Together with the Scientific Services Wing the CME demonstrates the role and growth of the Office in the NSW railway network.

6.3.2. Criterion (b) – Associative Significance

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

- The CME Building, as part of the broader ERW precinct and due to its distinctive aesthetic and prominence within the local area, is a significant part of the cultural fabric of the surrounding neighbourhoods, including Eveleigh, Redfern and Darlington.
- The building is representative of, and associated with, the leading railway men and engineers whose work significantly contributed to the establishment, development, and operation of the railway historical development in Australia, and more specifically at Eveleigh Railway Workshops. Such engineers included John Whitton, George Cowdery, William Thow, Edward Ernest Lucy and Con Cardew.
- **John Whitton:** Appointed 'NSW Railways Engineer-in-chief' in 1856 of the NSW Government Railways between 1856 and 1890. Conceived the idea of the ERW designed to be the major railway workshop in NSW. One of the early railway engineers who made a significant contribution to the establishment, development and operation of railways in Australia and NSW, Whitton was responsible for restructuring the rail system which included the resumption of land at Eveleigh and relocation of the old Redfern Workshops to Eveleigh.
- **George Cowdery:** Engineer for Existing Lines, executed the detailed design at Eveleigh.
- **William Thow:** First Chief Mechanical Engineer of ERW (1889-1911), was responsible for all the locomotive, wagon and carriage workshops in NSW. Thow was focused on the process of the potential for electrification and was present for the earliest conversations from steam to electric locomotives.
- **EE Lucy:** Assisted in the production of some of the period's most ambitious civic projects like the Sydney Harbour Bridge and city's underground railway system. Introduction of mainstream electric trains across the state. Lucy was also responsible for managing the Railways during the collapse of infrastructure transportation during the Great Strike of 1917; managing the effect of the First World War on operations at ERW, and the beginning of the Great Depression. Lucy was the First Assistant Chief Mechanical Engineer under Thow from 1906. He was the Chief Mechanical Engineer during the Golden Age period when there were 16,000 men and 26,000,000 miles of track to supervise.
- **Cardew:** Contributed by improving a number of important designs for steam engines that were implemented at Eveleigh. These included the 'Cardew Blower Ring', automatic release cylinder drain cock'.

¹⁸⁹ GML, 2013. ATP CMP: 89

Cardew Track Depression Indicator'. His innovations are an example of the type of work CME produced which not only could be used at ERW but more widespread across NSW and Australia. Cardew worked at the CME Building for nearly 40 years.

6.3.3. Criterion (c) – Aesthetic Significance

'An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)'.

- The CME Building is aesthetically significant as a rare and fine example of a large-scale two storey late Victorian railway office in NSW and represents the highest standards of a purpose-built railway office during its period of construction.
- The CME Building is a prominent building within the ERW site and is a significant landmark in the surrounding Eveleigh, Redfern and Darlington local areas. Sitting on the highest area of land within the precinct, the building is an important component of ERW with significant view lines to the entire ERW complex.
- Internally and externally the 1900 and 1920 additions are seamless and consistent with the 1887 building architectural style, materiality and design.
- The CME Building's architectural design, scale and finishes, including the c.1900 and c.1920 expansions, is symbolic of the peak and greatness of the ERW and the railways.
- The CME building design and detailing represent the highest standards architecturally of a railway office building of the late Victorian period in NSW, and includes remnant decorative features such as the pressed metal ceilings, marble fireplaces, the original tessellated tile entryway and bespoke cabinetry in the Chief Mechanical Engineer's Head Office.
- The inclusion of a balcony and verandah was not common on two-storey buildings at the time, particularly as the verandah attributed no primary function to the building and was built purely for aesthetic purposes.

6.3.4. Criterion (d) – Social Significance

'An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons'.

- The South Sydney area is culturally significant to First Nations Peoples and is home to the Gadigal people of the Eora nation, who have maintained their connection to Country despite the major impacts brought by colonisation.¹⁹⁰
- The ERW precinct, including the CME building, was one of the largest employers in NSW during the late 19th and 20th centuries. The precinct is greatly significant to the former and current railway workers as the local community for the role it played in the development of NSW Railways, the way the ERW shaped the development of the surrounding local area, including the every day lives of many generations of workers, or families associated with former workers, within local community.
- The growing operation of the ERW site contributed directly to the workforce of NSW planning, design, and expansion of the surrounding suburbs (such as Eveleigh, Alexandria, Darlington, Macdonaldtown, Erskineville and Redfern) that grew as a direct result of the precinct activities and work demands that the Chief Mechanical Engineer instigated, managed and oversaw.

¹⁹⁰ Cox Inall Ridgeway, 2021. *Central Precinct Renewal Project: Consultation Report for Aboriginal Heritage Interpretation Strategy*. Prepared for Transport for NSW

- The ERW site, including the CME Building site, was central to the development of the union movement in NSW and was instrumental in the Great Strike of 1917, the strike which led to the improvement of working conditions during the early twentieth century.¹⁹¹
- The CME Building within its context of the broader ERW precinct are considerably significant to the former and current railway workers, as well as the local community, unions, historians and train enthusiasts. This includes groups involved in the NSW railways and as a result the site is home to a number of important and meaningful stories connected with the industrial working environment, a multicultural workplace and social clubs and activities. The precinct today signifies a source of pride to these groups, even though ERW is no longer in operation, as it represents the growth and capacity of Australian industry and the high level of trade and technical skills of the workers.
- The CME Building is significant to the engineering community for its contribution to the history, development and evolution of engineering in NSW during the nineteenth and twentieth century.
- Opportunities for women to take more active roles in the workplace increased as a result of the ERW, in particular at the CME Building which provided administration positions for women. The introduction of more women to the workplace is also reflected in the 1920 additions to the CME Building to include female toilets in the design.
- The CME Building holds social significance for former workers and those families who were employed from generation to generation with a strong identification and pride in the place.
- The CME Building is symbolic, both in the past and the present, to the workers and surrounding community as the overarching, key managerial building of the ERW.

6.3.5. Criterion (e) – Technical/ Research Potential Significance

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

- The CME Building subject site still houses a number of redundant, remnant features which provide evidence of former management and operational processes undertaken within the building and how the building adapted to the change and growth of the ERW over time.
- The building has the potential to yield further information in relation to the registered PAD (Aboriginal Heritage site) located east of the CME Building.
- There is the potential to further examine and interpret the remnant fabric of the building and the historical archaeology to further understand and interpret the operations and expansion of the CME Building over time, as well as the site's former phases of historical occupation and use.
- Phases of the railway and expansion of the industrial phenomenon are visible through the 1900 and 1920 addition of the original 1887 structure which were required in order to keep up with the growing industry. The expansion of the CME, within the context of the ERW has the potential, upon further investigation, to provide us with new information about the impacts of the railway expansion on the site itself, and its surrounding local area.

¹⁹¹ GML, 2013. ATP CMP: 89

6.3.6. Criterion (f) – Rarity

An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).

- The CME is one of the best surviving examples of a late Victorian managerial railway building of such a large scale. It is, intrinsically, related to one of the longest serving and extensive railway workshop complexes at a State, National and International scale.
- The CME, due to its architectural design, including its expansive scale and location, was the 'jewel in the crown' of the entire ERW complex which provided the pivotal role in the management, oversight and functioning of the ERW and wider NSW railways.
- The CME Building is not common on a State or National level, and it is unusual for it to survive, generally intact since the additions of the 1920s, within the context of the remaining railway buildings and wider ERW complex with which it was originally associated.
- The subject site represents a formative group of engineers that worked for over a century in the CME Building managing the functions and growth of the wider NSW railway system.

6.3.7. Criterion (g) – Representativeness

'An item is important in demonstrating the principal characteristics of a class of NSW's

- *Cultural or natural places; or Cultural or natural environments*
- *(or a class of the local area's cultural or natural places; or cultural or natural environments)*

- The CME Building is a fine representative example of a late Victorian managerial railway building of large scale located within its wider workshop complex.
- The wider ERW, including the CME Building subject site, is representative of the large-scale industrial centre and technical working environment related to railway workshop operations in the nineteenth and twentieth centuries.

6.4. Summary Statement of Heritage Significance

The Chief Mechanical Engineers Building is of State significance and is a rare surviving example of a late Victorian managerial railway building of large scale that remains within its broader context, the Eveleigh Railway Workshops. It was the key managerial building, 'the jewel in the crown', within the C19th Eveleigh Railway Workshops complex, the largest railway construction and maintenance workshop in the Southern Hemisphere.

The CME Building played an important role in engineering and scientific advancements in the NSW railway network. The site, as part of the ERW complex, made a large contribution to the development of the surrounding area, such as Eveleigh, Redfern, Darlington and Alexandria.

The CME Building has associations with the leading railway men and engineers whose work significantly contributed to the establishment, development, and operation of the railway historical development in Australia (such as John Whitton, George Cowdery, William Thow, Edward Ernest Lucy and Con Cardew).

The historical purpose and function of the Chief Mechanical Engineers Building is visible today through the scale of the structure and its overarching dominant position at the highest point of the landscape within the ERW. The modifications and additions, particularly the 1900 and 1920 addition,

are consistent with the 1887 original construction of the CME Building which represents the expansion and growth of the ERW over the 19th and 20th century which the building directly adapted to due to the increase of work.

The Chief Mechanical Engineers Building is of State significance as a landmark building within the historical, social, operational and architectural context of the Eveleigh Railway Workshops.

The CME Building site holds social significance to the surrounding community, railway workers, Aboriginal community and engineers past and present.

The wider ERW, including the CME Building subject site, is representative of the large-scale industrial centre and technical working environment related to railway workshop operations in the nineteenth and twentieth centuries.

6.5. Significant Views

Three primary view lines of heritage significance tied to the CME Building and its role within the overall ERW precinct are included below:

- Views from the Level 1 balcony of the CME Building provide views east, south and southwest across the workshops to South Eveleigh.
- Views from the south and east of the CME Building subject site to the North Eveleigh and other significant heritage buildings.
- Views west from the CME Building to the Scientific Services No.1 building

6.6. Heritage Curtilage

The State Heritage Register and lot boundary of the Chief Mechanical Engineers Office (SHR #01139) listing, which the CME Building subject site partially is located within, is presented in Figure 6.1. The CME Building listing is adjacent to the Eveleigh Railway Workshops site (SHR #01140) to the east, south and west of its curtilage (Figure 6.2). Wilson Street sits to the North of the site.

The installation of a metal fence in 1997 to the north, east and south of the building redefined the curtilage of the CME Building. The addition of the fence to the north, east and south of the building cut off the CME Building from the eastern garden, surrounding North Eveleigh precinct and community public access.

Heritage curtilage is defined as the following in the 1996 Heritage Curtilages document produced by the Heritage Office.

... the term "heritage curtilage" means the area of land (including land covered by water) surrounding an item or area of heritage significance which is essential for retaining and interpreting its heritage significance. It can apply to either:

- *land which is integral to the heritage significance of items of the built heritage; or*
- *a precinct which includes building, work, relic, trees or place and their setting.*¹⁹²

The expanded heritage curtilage of the CME Building is included within the ERW site boundary (Figure 6.2) as a key building in the function and management of the overall ERW site.

¹⁹² Heritage Office, 1996. *Heritage Curtilages*: 3



Figure 6.1: CME Building State Heritage Register Curtilage outlined in red (Source: Heritage NSW)

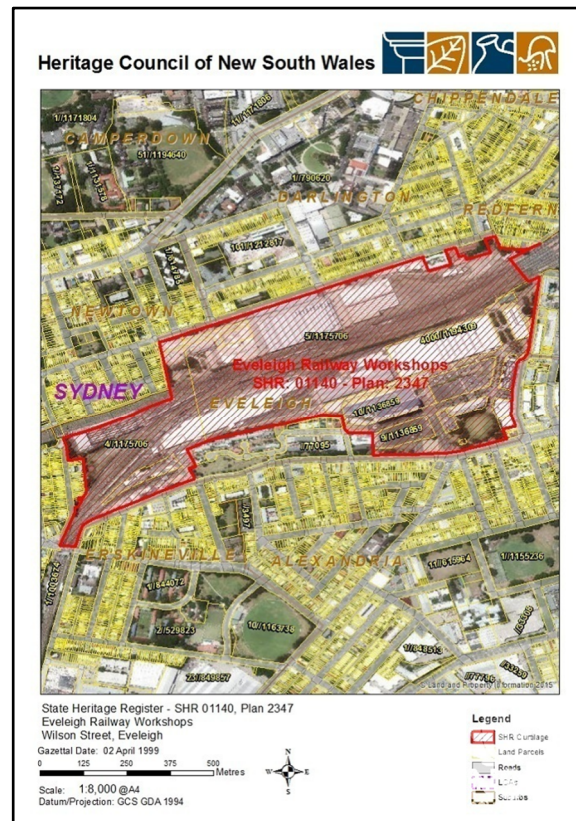


Figure 6.2: ERW SHR Curtilage (Source: State Heritage Inventory)

6.7. Gradings of Significance

The CME Building forms part of the State Significant ERW complex. Accordingly, previous heritage assessments (including the OCP 2022 CMP) have assessed the heritage significance of the CME Building as part of the overall ERW site, reflecting its contribution and surrounding structures and element to the overall state significance of the wider ERW complex. The 2022 Eveleigh Railway Workshops Overarching CMP provides the following clarification regarding gradings of significance for the ERW heritage items:

Grading reflects the contribution the element makes to the overall significance of the item (or the degree to which the significance of the item would be diminished if the component were removed or altered).¹⁹³

Gradings of significance described in this section are based on the established criteria in the NSW Heritage Manual Assessing heritage significance, 2001 and that in the Overarching CMP prepared by OCP Architects in 2017 and as updated by Curio in 2022. An additional criterion, *Neutral Significance*, which is defined as 'modern elements that are required as part of the ongoing use of the site that neither add nor detract from the overall significance of the site' has been included as part of the grading of significance.

¹⁹³ OCP, 2017: 100

The overarching management recommendations for fabric and spaces of the various gradings of significance has been developed by Curio and has evolved from the initial gradings of significance across the various ERW management plans and documentation.

In particular, the management recommendations are provided as a baseline for the future reuse of the site, given that the site has remained unoccupied for more than 20 years and therefore, has a high level of non-compliance with current standards and compliance (such as Building Code of Australia and Australian Standards)

Table 6.1: Gradings of Significance

Grading	Description of Grading	Management Recommendation
Exceptional	<p>Rare or outstanding element directly contributing to an item's local or State significance.</p> <p>Usually, high degree of undisturbed fabric or attributes that embody heritage significance. Loss or alteration, or incompatible works to it or in its vicinity would greatly diminish its heritage value. Has a high degree of interpretability.</p>	<p>Preserve, restore, reconstruct in accordance with the Burra Charter.</p> <p>If minor adaptation is necessary for the continued use of the item, minimise changes, and do not remove or obscure significant fabric or spaces.</p> <p>Any major changes to exceptionally significant fabric or spaces should be reversible, or be able to be 'made good' in the future.</p> <p>Clear, evidenced justification must be provided where intervention, including any major impacts to fabric or spaces of exceptional significance are deemed essential as part of Australian Standards compliance upgrades.</p>
High	<p>High degree of original or early fabric. Demonstrates a key element of the items' (site's) significance. Alterations do not detract from significance.</p> <p>Existing disturbance and evidence of change does not detract from its individual or contributory significance. Loss or unsympathetic further disturbance or change of it or in its vicinity would diminish significance.</p>	<p>Preserve, restore, reconstruct in accordance with the Burra Charter.</p> <p>If adaptation is necessary for the continued use of the item, minimise changes, and do not completely remove or obscure significant fabric or spaces, where possible.</p> <p>Any major changes to highly significant fabric or spaces, including modification and/or removal of fabric should be reversible, or be able to be 'made good' in the future, where possible.</p> <p>Clear, evidenced justification must be provided where intervention, including any major impacts to fabric or spaces of high significance are deemed essential as part of Australian Standards compliance upgrades or to secure the ongoing use of the site.</p>

Grading	Description of Grading	Management Recommendation
Moderate	<p>Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item (site).</p> <p>The elements are capable of being interpreted. Loss or unsympathetic further disturbance or change is likely to diminish heritage significance.</p>	<p>Conservation of fabric, overall form and configuration is desirable.</p> <p>If adaptation is necessary to secure ongoing use and/or compliance with Australian Standards, or to reveal fabric or spaces of greater significance, then there is the flexibility for careful change.</p> <p>Additions, where possible, should be reversible. Intervention including demolition of fabric or spaces must be well justified in terms of overall heritage impact.</p>
Neutral	<p>Modern elements that are required as part of the ongoing use of the site that neither add nor detract from the overall significance of the site.</p> <p>The elements are compatible with, and/or sympathetic to the overall significance of the site.</p>	Removal, replacement or repair, as required as part of future use is acceptable, provided that any changes will not cause further damage to more significant fabric or spaces.
Little	<p>Alterations may detract from significance and may be difficult to interpret.</p> <p>Includes modifications where, although they indicate the changes in use over time, the actual fabric is not significant.</p>	Fabric of little significance may be retained, modified or removed as required for the future use of the place, provided that any changes cause no damage to more significant fabric or spaces.
Intrusive	<p>Elements that, in their present form, damage the item's heritage significance.</p> <p>This category includes visually intrusive fabric, which obscures the reading of more significant uses and periods of development.</p>	Remove or alter intrusive fabric to reduce the adverse impact when the opportunity arises, whilst minimising damage to adjacent fabric or spaces of significance.

Table 6.2: Grading of Significant Elements

Element Description	Grading of Significance
Exteriors	
Building Envelope (including façade configurations, scale, form and mass)	EXCEPTIONAL
Sash Windows	EXCEPTIONAL
Sandstone Windowsills	EXCEPTIONAL
External Panelled Doors	EXCEPTIONAL
Perimeter Walls	EXCEPTIONAL
Roofscape	HIGH
Chimneys	EXCEPTIONAL
Balcony	EXCEPTIONAL

Element Description	Grading of Significance
Cast Iron Balustrade	EXCEPTIONAL
Cast Iron Column	EXCEPTIONAL
Verandah	EXCEPTIONAL
Dormers	EXCEPTIONAL
External balcony decorative mouldings	EXCEPTIONAL
Southern Door Awning	MODERATE
Eastern Window Awnings	EXCEPTIONAL
External Air Vents	EXCEPTIONAL
Lights	NEUTRAL
Southern Building Gate	INTRUSIVE
Interiors	
Floors	HIGH
Original Ceilings	HIGH
Hallways, Archways and Entry Foyer	EXCEPTIONAL
Chief Mechanical Engineer's Office & Personal Entry	EXCEPTIONAL
Payroll Offices	EXCEPTIONAL
Original Fireplaces	EXCEPTIONAL
Architraves	MODERATE
Cornices	NEUTRAL
Skirting	HIGH
Original Air Vents & Chimney Breast Vents	EXCEPTIONAL
Non-Original Air Vents & Chimney Breast Vents	LITTLE
Tessellated Tiles	EXCEPTIONAL
Suspended T-Bar Ceiling Grid	INTRUSIVE
Partition Walls	INTRUSIVE
Modern Services	INTRUSIVE
Heritage Movable Items (including cabinetry, toilet bowl, mirror)	EXCEPTIONAL
Surrounding Landscape Elements	
Northern Fence	INTRUSIVE
Sandstone Plinths (abutting the northern gate)	EXCEPTIONAL
Sandstone Pillars, Steps and Wrought iron gate - (Northern Gate)	EXCEPTIONAL
Flagpole	HIGH
Eastern Garden Curtilage	EXCEPTIONAL
Southern Hardscape	INTRUSIVE
Northern Garden Curtilage	EXCEPTIONAL

6.8. Significant Diagrams

6.8.1. Elevations

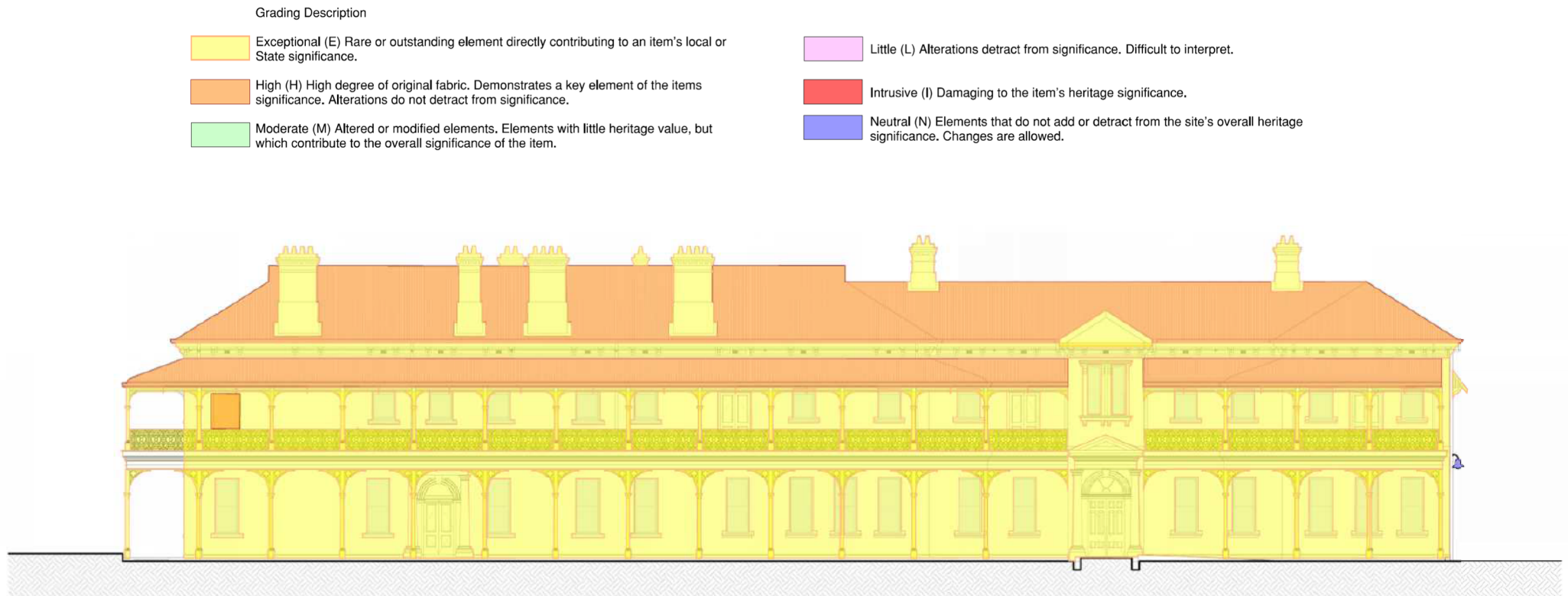


Figure 6.3: Significance - CME Building northern façade (front) (Source: CCG Architects with Curio additions)




Grading Description	
	Exceptional (E) Rare or outstanding element directly contributing to an item's local or State significance.
	High (H) High degree of original fabric. Demonstrates a key element of the items significance. Alterations do not detract from significance.
	Moderate (M) Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.
	Little (L) Alterations detract from significance. Difficult to interpret.
	Intrusive (I) Damaging to the item's heritage significance.
	Neutral (N) Elements that do not add or detract from the site's overall heritage significance. Changes are allowed.



Figure 6.4: Significance - CME Building eastern façade (side) (Source: CCG Architects with Curio additions)

Grading Description

	Exceptional (E) Rare or outstanding element directly contributing to an item's local or State significance.		Little (L) Alterations detract from significance. Difficult to interpret.
	High (H) High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.		Intrusive (I) Damaging to the item's heritage significance.
	Moderate (M) Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.		Neutral (N) Elements that do not add or detract from the site's overall heritage significance. Changes are allowed.



Figure 6.5: Significance - CME Building southern façade (back) (Source: CCG Architects with Curio additions)

Grading Description	
<div></div>	Exceptional (E) Rare or outstanding element directly contributing to an item's local or State significance.
<div></div>	High (H) High degree of original fabric. Demonstrates a key element of the items significance. Alterations do not detract from significance.
<div></div>	Moderate (M) Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.
<div></div>	Little (L) Alterations detract from significance. Difficult to interpret.
<div></div>	Intrusive (I) Damaging to the item's heritage significance.
<div></div>	Neutral (N) Elements that do not add or detract from the site's overall heritage significance. Changes are allowed.



Figure 6.6: Significance - CME Building western façade (side) (Source: CCG Architects with Curio additions)

6.8.2. Floor Plans

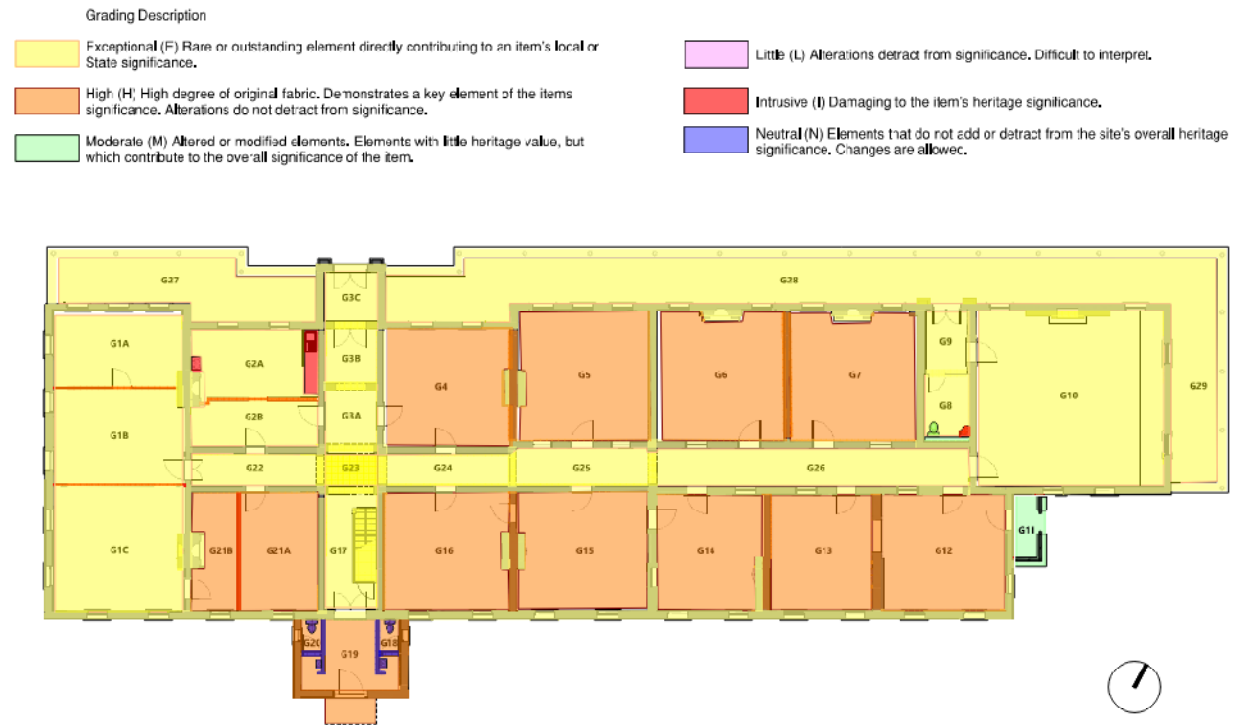


Figure 6.7: Significance Plans- CME Building Ground Floor (Source: CCG Architects with Curio additions)

Grading Description







- | | | | |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|  | Exceptional (E) Rare or outstanding element directly contributing to an item's local or State significance. |  | Little (L) Alterations detract from significance. Difficult to interpret. |
|  | High (H) High degree of original fabric. Demonstrates a key element of the items significance. Alterations do not detract from significance. |  | Intrusive (I) Damaging to the item's heritage significance. |
|  | Moderate (M) Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item. |  | Neutral (N) Elements that do not add or detract from the site's overall heritage significance. Changes are allowed. |



Figure 6.8: Significance Plans- CME Building First Floor (Source: CCG Architects with Curio additions)

6.9. Summary Statement of Archaeological Significance

6.9.1. Historical Archaeological Significance

The following table has been extracted from the 2022 *CME Building Historical Archaeological Assessment* by Curio Projects.

Table 6.3 Assessment of Archaeological Significance

Occupation phase	Assessment of Archaeological Significance
Phase 1 1788-c1822 Post- European arrival	<p>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.</p> <p>Potential Phase 1 archaeological resources are unlikely to reach the threshold for local or State significance.</p>
Phase 2 John Chisolm Estate 1822- 1885	<p>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.</p> <p>Potential Phase 2 archaeological resources are unlikely to reach the threshold for local or State significance.</p>
Phase 3 Construction of first rail line 1885- 1887	<p>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.</p> <p>Potential Phase 3 archaeological resources may reach the threshold for local significance or may be considered 'works' under the Heritage Act.</p>
Phase 4 Chief Mechanical Engineers Building 1885-Early 2000s	<p>Archaeological evidence of Phase 4 would not meet the threshold for local or 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.</p> <p>Potential Phase 4 archaeological resources are unlikely to reach the threshold for local or State significance.</p>

6.9.2. Aboriginal Cultural Heritage Significance

The Aboriginal cultural heritage archaeological significance assessment was completed by Artefact Heritage in 2022 as part of their Aboriginal Cultural Heritage Study for the RNE Paint Shop Sub-Precinct which included the CME Building subject site. Table 6.4 has been extracted from Artefact's report.

Table 6.4: Archaeological significance assessment, RNE Paint Shop Sub-Precinct (Source: Artefact 2022)

Criteria	Rating
	Moderate
Research Potential	Little is known of Aboriginal resource utilisation in the local Blacktown soils to the north of the more frequently researched sand bodies that are associated with waterbodies near Waterloo in the south.
	Low
Representativeness	The potential preserved soils of RNE {PAD001 are not representative of current soil conditions in the subject site.
	Moderate
Rarity	There are no other locations of potential preserved soils in the subject site. Archaeological excavations summarised in this report that have been carried out in the surrounds of the subject site have encountered disturbed soils and very low artefact quantities.
	Moderate
Education Potential	RNEP-PAD001 has the potential to illustrate the relationship between on the one hand local pre-existing and ongoing Aboriginal lifeways and on the other hand local nineteenth century industrial and residential development.


Below is a quote from Artefact's 2022 Aboriginal Cultural Heritage Study for the RNE Paint Shop Sub-Precinct of the cultural landscape.



The Aboriginal cultural landscape of the RNEP is highly valued by Aboriginal people because of their long and complex relationship with the land, both pre- and post-contact. The area, part of the traditional lands of the Gadigal, has a wealth of intangible and tangible Aboriginal heritage values. Intangible heritage values are communicated through story and song and should only be shared through meaningful consultation with knowledge holders (see Section 5.0). More tangible heritage values, communicated through Aboriginal sites, are recorded and cared for through the AHIMS database, which is continually updated with new archaeological discoveries.¹⁹⁴

¹⁹⁴ Artefact, 2022. RNE Paint Shop Sub-Precinct: Aboriginal Cultural Heritage Study: 66


6.10. Comparative Analysis

Table 6.4: Comparative Analysis

Address	Date & Style	Statutory Listing	Significance, Integrity, and Other Detail	Image
Works Managers & Timekeepers Office, Eveleigh	c.1887 Late Colonial Georgian Style	(LEP#3)	<p>The Works Managers & Timekeepers Office (Works Manager’s Office) is a local and state heritage significant item constructed during the same period as the CME Building in the late 19th century. The Works Manager’s Office was established for timekeeping staff office and clerical work located in South Eveleigh of the Eveleigh Railway Workshops. It was also the office of the General Works Manager.</p> <p>The building held a historically important role in the administration, primarily focused on the timekeeping of workers, at ERW. The bronze bell was an important element as part of the site’s timekeeping mechanism.</p>	

Address	Date & Style	Statutory Listing	Significance, Integrity, and Other Detail	Image
19-31 York Street, Sydney	1935 Inter-war Art Deco Style	(SHR #01271)	Transport House is significant on a state level and was constructed in the early 1930s for the purpose as the administrative centre and headquarters of NSW Railways who were previously located at Central Station. This also included the CME who previously worked at the CME Building within the ERW. The architects who designed the structure were Henry E Budden and Mackey who won awards for their design. ¹⁹⁵	
Railway Institute Building, Central Station	1891 Queen Anne Style Federation Anglo-Dutch Style	(SHR #01257)	The Railway Institute Building at Central Station is known for being the first Railway Institute building in Australia which was used as an important education facility in the late nineteenth to twentieth century. The building is a rare known example of work by the architect Henry Robinson and has a representative social significance from its important role as a railway institute which today is still valued by the community.	

¹⁹⁵ https://dictionaryofsydney.org/entry/transport_house_building

Address	Date & Style	Statutory Listing	Significance, Integrity, and Other Detail	Image
67 Spencer St, Melbourne Victoria	1893 Victorian Free Classical Style	Victorian Heritage Register (#H0699)	<p>The Victorian Railways Administration Office Building, also known as the Victorian Railways Department Engineering Office, was used as the head office of the Victorian Railway department from 1888 until 1985 in Melbourne, Victoria. This building is at a state level of heritage significance and was the largest nineteenth century office building in Victoria during its time. In 1912 a fourth floor was added and then a Neo-French style attic in 1922.</p> <p>The site has a long association with the railways after being developed on the site of the first railway terminus in 1852.¹⁹⁶</p>	

¹⁹⁶ http://vhd.heritage.vic.gov.au/local/result_detail/800?page=1&type=user

Address	Date & Style	Statutory Listing	Significance, Integrity, and Other Detail	Image
Royal Engineers Building 2 Davey St, Hobart	c1846-47 Gothic Revival	Tasmanian Heritage Register (#2280)	<p>The Royal Engineers Building is significant on a state level due to its ability to demonstrate the principal characteristics of a Victorian Tudor administrative building. It's recognised for its historical significance with its townscape associations and association with Major J.C. Victor, a Royal Engineer, and Director of Public Works.</p> <p>Initially established for senior members of the Royal Engineers who were responsible for planning all works in the colony. The building was used by the Tasmanian Main Line Railway Company headquarters from 1873 until 1938.</p>	
233 Denison Street, Rockhampton, Queensland	1886 Classicism	Queensland Heritage Register (#602367)	<p>The former Railway Administrative Building at Rockhampton is at a state level government office building designed for a sub-tropical climate. Constructed in 1886, this building was included as part of a wider rail precinct and is one of the most substantial purpose-built railway administration building in Queensland.</p> <p>The building is known to be significant for the quality of its architecture displaying a good example of design work of the Office of the Chief Engineer of Railways in the late nineteenth century.¹⁹⁷</p>	

¹⁹⁷ <https://apps.des.qld.gov.au/heritage-register/detail/?id=602367>

7. Opportunities & Constraints

7. Opportunities & Constraints

7.1. Background

The Eveleigh Railway Workshops (ERW), including the Chief Mechanical Engineer's Building site, evolved throughout its history to meet the changing industrial requirements of the New South Wales Government Railways and its successors. The exceptional heritage significance of the whole of the Eveleigh Railway Workshops complex lies partly in the relative intactness of the remaining buildings, their settings, the machinery and associated railway lines which together contribute to an understanding of the workings on the site.¹⁹⁸

Despite its exceptional significance, much of the original physical evidence associated with the site's former industrial use as the ERW across both North and South Eveleigh was lost as a result of the ERW ceasing use. The closure of the ERW, followed by the removal of machinery and structures which in many instances reflected the evolving nature of activities across the site, has impacted on the readability of site as a whole.

The remaining buildings have been subject to various management regimes, under numerous owners resulting in differing opportunities and limitations being applied across the multiple sub-precincts over the last 30 years. Major redevelopment projects such as that at South Eveleigh have led to the conservation and adaptive reuse of the Locomotive Workshops, the New Locomotive Workshops and the Work Manager's Building, as well as the introduction of new buildings and uses into the precinct (including but not limited to, the Commonwealth Bank, Biomedical Building, Channel 7). Generally, only the Large Erecting Shop, at South Eveleigh has remained close to its original configuration and use during this time, with only minor repairs and maintenance undertaken over the last 30 years. Just recently, it too, ceased being utilised for housing locomotives.

North Eveleigh has been subject to lesser change during the same timeframe, with the introduction of affordable housing in the North-West Precinct; the creations of the Carriageworks Arts Precinct and the Blacksmith's Farmers Markets (North Eveleigh); through to the continued light-touch partial use of the Paint Shop. A majority of the buildings within North Eveleigh, however, have fallen into various states of disrepair and have remained unoccupied, are mothballed and have been subject to vandalism and weathering for more than 20 years (such as the Clothing Store, Telecommunications Building, Suburban Car Workshop, Scientific Services Building No. 1). The Chief Mechanical Engineer's Building has remained disused and mothballed for over 20 years.

Much of the difference in the management and redevelopment of the North and South sub-precincts is as a result of the opportunities and limitations associated with investment into the conservation, BCA upgrades and adaptive reuse of the significant heritage buildings being achieved is as a direct result of a masterplan implementation program which facilitates conservation, adaptive reuse and new development.

The Eveleigh Railway Workshops Overarching CMP, prepared by OCP and as updated by Curio (2022), including the addendum prepared by Curio in 2022, is an important tool in ensuring that there is a consistency in the approach to managing assets across the whole of the site, regardless of whether, elements of the site remain in public or private ownership, both now and in the future.

¹⁹⁸ North Eveleigh West Conservation Management Plan, OCP ARCHITECTS, 2017:215

As noted by OCP Architects in their North-Eveleigh West CMP, the:

Best heritage practice seeks alternate uses that are related to the original use of a place. In the case of a major industrial site, however, there are no viable related uses and uses compatible with reasonable community expectation must be found...

The adaptive reuse of a large industrial site, including the introduction of new construction, poses a number of challenges.

It is important that the heritage values of the site and adjoining sites are maintained. It is also important that the new urban precinct that is created is of viable design and in this regard, opportunities must be made for flexibility in the location and scale of new buildings.¹⁹⁹

As also noted previously, this CMP, including the following opportunities and constraints, builds upon the significant work undertaken by Paul Rappoport & Caldis Cook Group for the original *Chief Mechanical Engineer's Building, 327 Wilson Street, Chippendale. Eveleigh Locomotive Workshops, Conservation Management Plan*, prepared for State Rail Authority of NSW in 1997.

Additional opportunities and constraints arise from the significance of the CME Building as a part of the whole of the ERW, and as such, for continuity sake are consistent with, and have drawn upon the opportunities and constraints arising from the endorsed Godden Mackay Logan, 2013, *Australian Technology Park Conservation Management Plan Vol.1* and as acknowledged as such.²⁰⁰

The opportunities and constraints have also been prepared in accordance with the following heritage management documents:

- Balarinji, 2022. *RNE Paint Shop Sub-Precinct: Connecting with Country Framework*. Prepared for TfNSW.
- Curio Projects, 2022 *Large Erecting Shop – Rezoning Proposal: Aboriginal Cultural Heritage Study & Statement of Impact*. Prepared for TAHE
- Curio, 2022a, *RNE Precinct Renewal – Paint Shop Sub-Precinct Non-Aboriginal Heritage Study*. Prepared for Transport for NSW
- Curio Projects, 2022b, *Opportunities and Constraints*, Addendum to the CMP, prepared for TfNSW.
- Curio Projects, 2022b. *Redfern North Eveleigh Paint Shop Sub-Precinct Heritage Interpretation Strategy*. Prepared for TfNSW.
- Curio Projects, 2022d, *Physical Condition Report and Works Methodology*
- OCP Architects, with minor edits and updates by Curio Projects, 2022, *Eveleigh Railway Workshops Overarching Conservation Management Plan*, prepared for TfNSW²⁰¹
- Otto Cserhalmi + Partners 2002a, *Eveleigh Carriage Workshops: Conservation Management Plan- Volume 1*, Prepared for State Rail Authority NSW.
- Otto Cserhalmi + Partners, 2002b. *Eveleigh Carriage Workshops: Conservation Management Plan- Volume 2.*, Prepared for State Rail Authority NSW.

7.2. CME Building & Site – Opportunities and Constraints

¹⁹⁹ OCP ARCHITECTS, 2017:215

²⁰⁰ GML HERITAGE 2013:102

²⁰¹ OCP Architects, 2022. *ERW- Overarching Conservation Management Plan*, Prepared for UrbanGrowth NSW, as updated by Curio Projects (2022).

This chapter identifies the key opportunities and constraints associated with the repair, conservation and future adaptive reuse of the CME Building and its surrounds. The identified opportunities and constraints are intended to provide a positive, sustainable, heritage conservation outcome for the CME Building as part of any future reuse intended for the site.

7.2.1. Legal & Statutory Obligations

From a management perspective, the most relevant consideration in the day-to-day management of the conservation and future planning for the CME Building site arise from the listing of the site on the NSW State Heritage Register (Item No. 01139) and the implications associated with the responsible management of the heritage significance of the site as part of any proposed future development and/or change of use.

The legal and statutory obligations including planning controls and guidelines, land use and zoning, building regulations, and health and fire safety regulations are outlined in detailed in *Section. 2: Statutory Context* of this CMP. This subsection of the report, therefore, does not seek to replace Section 2 of the CMP, as it extensively detailed. This sub-section instead serves as a point to cross-reference back to Section 2 of the CMP, as part of any future decision-making process that may impact on the fabric or use of the site.

7.2.2. Significance

The CME Building subject site is identified as having State Heritage Significance, therefore, the opportunities and constraints that arise from the Cultural Significance of the site are underpinned by the need to conserve the ongoing significance of the tangible and intangible values associated with the CME Building subject site, within its broader context.

Opportunities

The heritage significance of the CME Building subject site does not preclude sensitive changes to the place that can enhance its uses and long-term viability, however all and any proposed changes must be clearly considered and well-justified from both a heritage and buildability perspective.

This CMP supports the reinstatement of a continuous, new use within the CME Building as the best way to protect the site's heritage significance and to ensure its conservation for the future, provided the ongoing use is compatible with the values of the whole of the ERW site, and retains the core significance of the CME Building and its surrounds, both tangible and intangible.

Constraints

Chapter 6 of this CMP provides a detailed assessment of the significance of the CME Building Subject Site and provides various gradings of significance for the fabric and spaces within the site. The gradings of significance have associated overarching management recommendations that highlight the differing levels of tolerance for change, which are then supported by individual conservation policies in Chapter 8 of this CMP.

7.2.3. Site Ownership & Management

Practical and effective policies for the heritage conservation of the CME Building subject site need to consider opportunities and constraints arising from the needs of:

- the site owner (currently TAHE),
- the statutory heritage management authorities (Heritage NSW & City of Sydney) ;
- the tenant/users of the site, including staff and visitors; and

- key interest groups with a strong connection to the ERW, including the local community, Redwatch and interest groups, such as the local Aboriginal community, former workers, unionists, engineers, historians, architects and train enthusiasts.

Opportunities

- Opportunity for revitalisation and activation of the disused CME Building which has been left unoccupied and subject to major dilapidation for more than 20 years.
- Opportunity for activation of the landscape and site surrounding the CME Building that has been fenced off and inaccessible to the public for more than 20 years.
- Opportunity to conserve and restore the key internal spaces of the CME Building whilst allowing sensitive adaptive reuse of less significant internal spaces.
- Opportunity for site owners to introduce interpretation external to, and within the building, to allow visitors and tenants to connect and understand the significance of the building and the role it played in NSW's incredible ERW Rail history.
- Activation of the site allows the opportunity for future generations to experience and embrace the site for the first time in more than 20 years.
- Ongoing use of the site presents an opportunity to enhance and improve the CME Building site's profile within the ERW Precinct and within the context of surrounding landscape.
- The design of the future use and planning for the site is strongly encouraged to consider the increased pedestrian traffic and precinct visitation in line with the proposed future vision of the ERW Precinct, including the proposed redevelopment of the Paint Shop Sub-Precinct.

Constraints

- The CME Building is a heritage building of state significance that allows only for well-designed sensitive impacts as part of future plans for revitalisation and adaptive reuse of the site.
- The Site Owner and/or Manager and Tenants are required to adhere to this *CME Building Conservation Management Plan* for any future proposed works within the subject site, including compliance with heritage statutory controls at a State and Local level.
- Must ensure compliance with the recommendations included in the *Chief Mechanical Engineer's Condition Report and Schedule of Conservation Works* prepared by Curio Projects, 2022 as part of any future proposed works program
- Any major refurbishment will require the careful introduction of appropriate, safe and equitable access to, from and circulation within, the CME Building.
- There is the need to ensure that adequate time and budget set aside to ensure appropriate heritage expertise is factored into any conservation and adaptive reuse upgrade works
- Any new tenant lease should include a written requirement that the CME Building is to be open to the public for a specific number of heritage dates or during key heritage events.

7.2.4. External Factors

The CME Building Site is the subject of a multitude of external opportunities and constraints arising from the slated further development plans for the broader Central to Eveleigh Corridor in which ERW is a key site. There is the need to offset the redundancy of the whole of the ERW's site's significant industrial use which ceased more than 30 years ago with its the ability to be adaptively reused and redeveloped in a meaningful way for residential, commercial and retail purposes, to ease the pressure on housing and commercial requirements within close proximity to the CBD and readily accessible transportation networks.

Opportunities

- The CME Building Subject Site presents an unparalleled opportunity within the heart of Sydney to create an ongoing and sustainable financial return, whether in public or private ownership to ensure that the CME Building and its associated grounds can continued to be conserved, utilised and adaptively reused so that it will once again actively contribute to the environmental heritage fabric of the local community, NSW and beyond both in the present and future;
- The NSW Government recognises that there is a need for private sector investment to ensure the affordability of maintaining and revitalising significant heritage assets, such as the CMBE Building Subject site for the future and that as part of this offset, there is a need for return on development within such precincts. This provides the rare opportunity for sensitive, compatible adaptive reuse of the CME Building after 20 years of disuse.
- The opportunity to contribute to the broader ERW heritage precinct's interpretation and promotion of the complex history of the site, both Aboriginal and non-Aboriginal, and to actively create new interpretation, education and cultural tourism opportunities associated with the significance of the CME Building and its prominence in the heart of the Redfern;
- There are a range of key opportunities for the future conservation and use of the ERW buildings, including the CME Building, and the site as a whole to showcase the Aboriginal and non-Aboriginal cultural heritage significance of the precinct in the past, the present and the future. These opportunities can allow ERW to better demonstrate and communicate its industrial past and respond to key related places in the area also undergoing considerable change.

Constraints

- There is the need to carefully balance any redevelopment offsets utilised to fund, conserve and maintain use at heritage sites, such as the CME Building Subject Site into the future with community expectations for a level of accessibility, conservation of core heritage values, opportunities for involvement in meaningful consultation about future site uses and outcomes.

7.2.5. Overall Context and Setting

The CME Building is situated on the highest point of the landscape across the ERW complex which, historically, ensured a key and prominent view over the ERW precinct. The CME Building is also surrounded by former industrial sites and bounded by suburbs and heritage conservation areas where the houses are generally nineteenth century terraces or workers cottages, no more than two-three storeys in height. This existing and historical context requires recognition and consideration during planning for future development.

Opportunities:

- The CME Building Site would benefit from the removal of modern, intrusive metal security fencing and its replacement with more visually permeable fencing (should fencing be required at all) and the reinstatement of an associated garden within its site boundaries to enhance the aesthetic and landmark quality of the site in views from Wilson Street, Little Eveleigh Street, Redfern Station, from within the Paintshop Sub-Precinct and when viewed from the main western railway lines.

- There is an opportunity to improve the connection of the CME Building site with the remainder of the ERW precinct through improved permeability and access to and from the site to the north, east, south and west.
- There is the opportunity to reinstate an appropriate garden setting befitting the CME Building within its existing curtilage.
- There is also the opportunity to introduce meaningful Aboriginal Co-Design within any upgrades to the garden and hardscaping, being designed as part of any future adaptive reuse of the site.

Constraints:

- The significance of CME Building site and its standout aesthetic and rarity, in terms of railway architectural significance, when compared to the significant but vastly industrial nature of the rest of the aesthetic associated with the ERW precinct, is an integral part of the state significance of the CME Building site. Adverse impacts to either the building itself, or its immediate setting, including any reduction in curtilage, loss of garden areas or major changes to the external built form has the potential to diminish the heritage values of the site.
- The historical context of the CME Building, including its purposeful, landmark location at the highest point of the ERW workshops will influence future landscaping choices, particularly, in terms of ensuring that the setting and long-term readability of the CME Building is protected.

7.2.6. Views and Viewscapes

The views and vistas created as a result of the historic relationships between the activities and buildings on site, such as those that exist between the CME Building and its viewlines to the rail functions at Redfern, North Eveleigh and South Eveleigh should be enhanced, retained and interpreted, as much as possible, throughout future development works.

Opportunities:

- There is an opportunity to retain and incorporate key heritage view lines into future development at the site, including embedding these views into the holistic design and landscaping of any new redevelopment on site.
- By retaining a visible connection between the CME Building and Wilson Street to the North, Little Eveleigh Street to the Northeast, Redfern Station to the Southeast and the ERW Precinct as a whole (east, south, west) the public will continue to appreciate the physical and visual relationship between the CME Building and the rest of the ERW site and Redfern Station.

Constraints

- Significant heritage views to and from the CME Building should be considered and retained as part of any future adaptive reuse of the site. This includes the need to carefully consider the location and positioning of proposed new landscaping, include scale and bulk, to ensure that key visual connections between existing heritage items and the overall ERW site and the surrounding streetscapes are maintained.
- Significant heritage views that will require consideration and retention in any future redevelopment of the site include:
 - Views from Wilson Street and Little Eveleigh Street into the site (High significance).

- View lines between North and South Eveleigh including the views from CME Building to the Locomotive Workshops across the railway line (Exceptional Significance).
- Views between North Eveleigh and the Redfern Railway Station (High Significance).
- The loss of views within key viewsapes noted above would impact the readability and visual comprehension of the key functionality, connectivity, and operational nature of the site, including the key visual relationships that currently exist between the CME Building and the remaining heritage buildings within the Paint Shop Sub-Precinct.
- The introduction of new elements, including new buildings within the CME Building curtilage have the potential to irreversibly impact on historically significant views and vistas both within the CME Building site itself and beyond. The loss of views and vistas as a result of new additions could impact on the readability of the site as a whole, including the readability of the former relationships between each of the ERW sub-precincts.

7.2.7. Threshold for Change

The Chief Mechanical Engineer's Building is a decommissioned and unoccupied significant historic asset that is in poor condition due to lack of use, vandalism, environmental impacts (weather and animal ingress) and a suspended maintenance program over the last 20 years. As a result, to bring the site up to Australian Standards (including BCA, DDA and Fire upgrades) for occupation again, a major works program is required prior to any type of future reuse of the site.

Therefore, the CME Building's threshold for change must balance the need for change and/or impacts associated with the ongoing conservation, repair, reconstruction and/or replacement of existing fabric with the need to provide a functional, compliant, economically viable asset that can be occupied, celebrated and maintained in the long-term.

The reactivation of the CME Building through a mix of conservation and adaptive reuse works will require some impacts and/or changes to fabric and spaces to ensure that the site is tenable.

Opportunities

- Reoccupation of the site through adaptive reuse provides the opportunity for sensitive modifications, including some internal changes. as appropriate to the form, history, and significance of the CME Building and will allow for the conservation, interpretation and enhancement of the overall heritage significance of the CME Building and its garden, within the broader ERW precinct.
- There is the opportunity to prioritise changes to internal fabric for the installation of core, functional elements such as accessible lifts, and new amenities given that the external built form of the building has exceptional significance, whereas the internal spaces have varying levels of significance.
- There is an opportunity to reconsider the design and fabric of the c.1920s rear entry to the CME Building to allow for improved access, both physical and visual, to the southern ground floor of the CME Building of the site, given that as part of the broader Paint Shop Sub-Precinct works, the southern façade of the CME Building will no longer be read as the 'back of house', but as part of a broader precinct-wide revitalisation with greater visual and physical access to the precinct in the future.
- As the CME Building was used for over 100 years as an office space (previously for administration staff, engineers, CME office) the building is recommended to be reactivated for commercial uses as a continuation of the traditional site use of the building. However, commensurate non-commercial uses (i.e retail, café, community space etc), if demonstrated

to have an overall low impact on the heritage significance of the site as whole, should not be precluded from consideration.

- The opportunity to reuse the previous service penetrations within the building to minimise the impact to the heritage building should be prioritised over the design of new penetrations.
- Upgrades to the site to make the building more accessible to those that require wheelchair accessibility should be a priority for the site (interiors and exteriors), even if it requires some level of impact to significant fabric to achieve an equitable outcome for all.
- There is the opportunity to replace the external hard surfaces to the south and west of the site, including the shared driveway, with a more compatible material that is sympathetic to the aesthetic significance of the CME Building, in terms of materiality, finishes, colour and general aesthetic.
- The sensitive adaptive reuse of the site, with a focus on careful internal rather than external changes creates the opportunity to retain and interpret the heritage significance and enduring aesthetic significance of the CME Building and its landmark location with the broader ERW and local neighbouring communities.
- Where possible, enhancing and/or re-establishing view lines between the State significant buildings (i.e., Paint Shop, TEC, Scientific Services Building No.1, Carriage Workshops, Locomotive Workshops, LES) present opportunities to enhance the visual and historical connections between the site's significant buildings.
- Conservation and reuse of the site provides the opportunity to engage in local Aboriginal community consultation to identify and physically interpret Aboriginal cultural heritage values associated with the CME Building subject site and surrounds.
- Removal and/or replacement of intrusive site elements, such as the modern safety fences provides the opportunity to enhance and improve the overall readability and cultural heritage significance of the site within the ERW site and the broader local community.
- Providing a new use for the site is vital in enhancing the overall significance of the ERW precinct as a whole.

CONSTRAINTS

- The context of the CME building intentionally located at the highest visual point in the ERW site, combined with the low-scale character of the surrounding heritage conservation areas and suburbs limit the opportunity to introduction any new buildings or major additions within the curtilage of the site.
- The CME Building is of State significance and therefore must be retained, conserved, and used in order to ensure its ongoing viability for the future.
- Any major new built form, including the addition of new levels to the existing building would have an adverse impact on the heritage significance of the site within its immediate setting and surrounding precincts.
- Any adaptive reuse of the site should conserve and enhance the aesthetic and landmark qualities of the site in views from the main western railway lines, Redfern Station and the surrounding area.
- The extent, scale, design and intactness of the CME's built form, when viewed externally, should be retained intact, with little to no impact on fabric in the form of new additions,

major alterations or removal of significant fabric, as part of any future works program, except where previously identified, with respect to the rear entrance to the site (on the Southern Façade), where there is scope for possible, sensitive change.

- The need to update services across the subject site, in particular within the CME Building which in some areas were not built for services, will require careful consideration so as to not to introduce new intrusive physical or visual impacts within the curtilage of the CME Building Site (such as that caused by large-scale fire hydrants, service pods, sub-stations etc).
- Where external/internal spaces and fabric are identified as having exceptional significance they must be retained, conserved and reused in their general configuration with repair, conservation reinstatement, or replacement of like for like, of exceptional fabric prioritised.
- Where external/internal spaces and fabric are identified as having high significance they should be retained, conserved and reused in their general configuration with repair, conservation and reconstruction, or replacement of like for like, of highly significant fabric prioritised over demolition and removal, where possible.
- Where external/internal spaces and fabric are identified as having moderate significance retention, conservation and reuse in their general configuration to be prioritised over demolition and removal, where possible.
- Where external/internal spaces and fabric are identified as having neutral or little significance, then removal or demolition that would lead to the recovery of fabric or spaces of higher significance is encouraged, where possible.
- Where external or internal spaces and fabric are identified as being intrusive, then removal or demolition that would lead to the reinstatement, enhancement or recovery of fabric or spaces of higher significance should be prioritised as part of any future redevelopment of the site.
- The level of demolition, intervention into and the redevelopment of key internal spaces of the building is determined by their grading of significance, demonstrated ability of fabric to be conserved, repaired or reinstated and/or need to impact fabric to provide compliance with Australian Standards and must be undertaken as part of a heritage impact assessment process undertaken by a qualified heritage consultant.
- Access to the site is currently constrained by the requirement to keep the site secure, having been unoccupied and subject to vandalism over the last 20 years. As the site is redeveloped and activated, security of the site perimeter may no longer be a priority and could be revisited.
- The current physical condition of building is highly dilapidated, as outlined in the *Physical Condition Report and Work Methodology* prepared by Curio Projects (dated December 2022) and requires urgent maintenance works as a priority prior to any reoccupation of the site.
- There will be a requirement for fabric impacts during the process of updating the building to comply with current Australian Standards.
- Hazardous material and contamination are highly likely within the subject site and must be appropriately managed as part of any reuse of the site.

7.3. Landscaping

The implementation of landscaping works proposed as part of the Paint Shop Sub-Precinct Renewal project would assist in creating a cohesive landscape scheme between the CME Building and the

surrounding Redfern North Eveleigh Precinct and would support the connection and unification of the heritage buildings across the precinct.

The CME Building includes remnants of the historic garden and the historic flagpole which form an important part of the curtilage and history of the subject site. Unfortunately, however, the CME garden is currently not maintained, has deteriorated over the years due to neglect, and is bound by a visually intrusive modern security fence.

7.3.1. Opportunities

- There is a large amount of non-significant or invasive vegetation across the site. A comprehensive landscape strategy for the CME Building Subject Site would allow for management of this vegetation, including the opportunity for replacement with more appropriate plantings.
- Depending on the overall proposed use of future development of the site, particularly where it includes public access, event space, retail or external dwell spaces integration of additional green space, gardens and trees may be appropriate as part of site use to improve public amenity, shade, sustainability aims.
- Appropriate locations for new landscaping and plantings etc, could be informed by the history of the site, e.g. the north-eastern area of the site that was originally the site of the CME Building associated gardens and entrance from Wilson Street.
- Appropriate selections of trees and shrubs should be used to highlight the history and nature of the site.
- New large trees, or groups of trees should avoid being planted along or blocking significant heritage view lines.
- Existing significant trees and landscaping as identified in the Arterra Greenscaping report (i.e., particularly in the vicinity of the CME Building) should be retained as much as possible (arborist condition assessment and recommendations notwithstanding) and incorporated into any new landscaping plan for the site.
- Strong and careful consideration should be given to how best integrate the interpretation of earlier landscapes, including the former natural environment that was destroyed as a result of the evolution of the site, in order to ensure all the stories associated with place are appropriately told.²⁰²
- There is an opportunity to include indigenous cultural plantings within the landscape design within the subject site that will connect to the wider precinct.
- The opportunity to reinstate and/or co-design with the Local Aboriginal Community compatible gardenscape within the former landscaped curtilage of the CME Building Subject site.
- New landscaping could open up the subject site and create a more accessible and approachable space for the public to use.

202

- Removal of the external security fencing would allow for the public to appreciate the CME Building, its history and connection to the wider precinct.
- The CME subject site is deemed a more appropriate space and setting for new landscaping and plantings to occur, due to the history associated with gardens in this area of the precinct, than in other areas of the Paint Shop Sub-Precinct that have never had intentional plantings and greenery due to their function as a high operational railway yard.
- Development of future landscaping schemes should consider both the aspirations of the new development, as well as the nature of the site's state significance heritage.

Constraints

- A number of cultural plantings have been identified along the eastern and southern perimeter of the subject site that will need protection.
- A registered AHIMS site (RNEP-PAD001) was identified by Artefact and is located in the eastern portion of the subject site, across the garden area, and will require an ACHAR process and potential test investigations before any landscaping works begin.
- Area of land fronting Wilson street along the northern façade of the CME Building to appropriately reflect the previous landscape elements if possible.
- Requirement for an archaeologist to assess impacts of any landscaping works and to monitor any below ground impacts within the subject site.
- Depending on location of plantings, the introduction of large groups of new mature trees has the potential to block significant views and should therefore, be carefully planned to ensure that future maturation of trees does not cause this level of impact.
- Excessive greening or landscaping strategies, if not developed sensitively, has the potential to overwhelm the CME Building, visually, and obscure the significance of the relationships between the CME Building, the Paint Shop Sub-Precinct and broader ERW.

7.3.2. Moveable Heritage Collection – Opportunities

- There is the opportunity to conserve the few remaining items of the CME Building moveable heritage collection for use as meaningful and engaging interpretation elements.
- The Plan drawers and cabinets in Room 1 are excellent examples of furniture built for purpose and should be retained in situ and interpreted.
- The incorporation of suitable moveable heritage items into future heritage interpretation can create an opportunity for positive and engaging heritage outcome for the site to encourage site users to understand and experience elements of how the site previously worked.
- There is the opportunity for the site to provide evidence of 100 years of engineering processes and equipment, including significant technological innovation, through the building design.
- The treatment of the Machinery and Moveable Heritage Collection at South Eveleigh provides a great deal of potential as a template or a blueprint for creating engaging interpretation across other sub-precincts within the broader ERW precinct, including for the CME Building Subject Site.

- The management of the moveable heritage collection should comply with Policies 19.1 Moveable Heritage and Policies 19.2 of the Overarching Conservation Management Plan.

Constraints

- Since the decommissioning of the CME Building, almost the entire collection machinery and moveable heritage has been removed from the site, either through decommissioning and de-acquisition processes. The context of the remnant few moveable heritage items is now limited with little human or operational connection.
- Loss of knowledge due to the closure of ERW and the CME Building
- Original moveable heritage elements and objects that are directly related to the CME Building are stored in facilities off site.
- The location of some of the moveable heritage objects located previously listed on the *Chief Mechanical Engineer's Office and Scientific Services Building Moveable Heritage Survey* document by OHM Consultants in 2012 are currently unknown. An updated survey of all SHR moveable heritage items and items identified as significant on the *Chief Mechanical Engineer's Office and Scientific Services Building—Moveable Heritage Survey* (OHM Consultants, 2012) should be undertaken.

7.3.3. Archaeology

The heritage significance of the site extends beyond the extant structures. Appropriate management measures should also be taken to ensure the archaeological resource is appropriately investigated and recorded prior to any action which may disturb or remove it.

Appropriate management requires the archaeological investigation of areas of sensitivity as it relates to Aboriginal and non-Aboriginal archaeology.

Future development of these areas would need to accommodate the timely management and investigation of potential archaeological resources in accordance with statutory requirements, including

- *the archaeological provisions of the NSW Heritage Act 1977 (historical archaeology); and*
- *the archaeological provisions of the National Parks & Wildlife Act 1974 (Aboriginal archaeology).*

Historical Archaeology

The approach to, methodologies, and management, of historical archaeological resources within the Paint Shop Sub-Precinct should be relatively consistent with that applied to the management of archaeological resources at South Eveleigh, as both are part of the same significance and resource of the overall ERW site. This includes allowance for a similar differentiation between 'relics' and 'works' (where relevant) to be applied to the Paint Shop Sub-Precinct as was applied at South Eveleigh (e.g. within the Locomotive Workshops building, and location of the former Foundry building, demolished by the NSW government in the 1990s), 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.

Aboriginal Archaeology

The CME Building Subject Site has been identified as having a Potential Archaeological Deposit (PAD) Any impacts to the PAD site, or it's boundary, located east of the CME Building (such as landscaping, services, removal, or any works to the boundary fence) will need a secondary ACHAR and

consultation process as recommended in the Artefact's 2022 *Aboriginal Cultural Heritage Study* and in line with the NPWS Act (1974).

Archaeology Opportunities

- The opportunity for the insitu retention and interpretation of significant archaeological resources, where possible is strongly encouraged.
- Ability to publicise any archaeological finds as a positive outcome of the adaptive reuse of the site using websites and potential open days (depending on the nature of the archaeology and site conditions) to allow the public to view archaeological monitoring and excavation works as they occur.
- Post excavation works offer an opportunity for a positive public heritage outcome as archaeological features, relics, and works etc. uncovered during site works into the permanent interpretation of the subject site. This gives the public an opportunity to see, understand and appreciate what can be tangible reminders of the site's history.
- These opportunities also exist for any potential Aboriginal archaeology uncovered at the site (see Artefact's *Heritage Aboriginal Heritage Study* for specifics on this topic).

Constraints

- The Paint Shop Sub-Precinct previously stated the area where the CME Building subject site is located has moderate archaeological potential for historical archaeological resources, deposits and relics to be present.
- The 2022 Curio Projects *Historical Archaeological Assessment* (HAA) for the CME Building includes four phases of use each ranging from nil to moderate potential
- The potential archaeology present within the site requires consideration as part of any redevelopment of the CME Building subject site and as part future works that propose below ground impacts.
- The first, and preferred, option to mitigate any identified impacts on the archaeological resource is redesign to avoid. Options may be sought to reposition (where possible) support columns or seek to span areas identified as having archaeological potential with two of more columns. A similar avoidance approach may also be employed with installation of services, either avoiding areas of the archaeological resource and redesigning the route of the services or identifying existing service corridors, trenches etc and laying new services within areas that have previously been subject to excavation disturbance. Finally, landscaping may also be redesigned to avoid physical impacts on the archaeological resource through changing the nature of the intended planting, i.e. low impact shallow rooted bushes rather than mature trees with the potential to create future damage through expansion of the root ball.
- If it is not possible to avoid through redesign or use of previously disturbed areas, then archaeological intervention may be necessary to provide a level of mitigation (i.e., recording the archaeology) prior to unavoidable disturbance or removal by the development. Archaeological management strategies as developed and proposed through a future Archaeological Research Design (ARD) would be specific to the location and nature of the works proposed.
- The appropriate approvals pathway depends on the nature and extent of works proposed, the identified significance of the potential archaeology present at the subject site and the corresponding impact to potential archaeological resources. This would be determined and

confirmed during preparation of an Archaeological Research Design specific to any ground disturbing site works proposed.

- Works which will impact historical archaeology within the CME Building Subject Site will require approval under Section 60 of the NSW Heritage Act 1977.
- Works which will impact Aboriginal archaeology within the CME Building Subject Site will require approval under Section 90 of the NSW National Parks and Wildlife Act, 1974.
- Should unexpected historical archaeological relics be discovered over the course of the works, works must cease immediately, and Heritage NSW must be notified prior to any works recommencing.
- Should unexpected Aboriginal objects be discovered over the course of the works, works must cease immediately, and Heritage NSW must be notified prior to any works recommencing.

7.4. Aboriginal Heritage

The Connecting with Country Framework for the Redfern North Eveleigh Precinct Renewal project in 2022 by Balarinji should be used as a guiding document for the CME project.

Opportunities

- A number of Aboriginal organisations and individuals have an enduring connection to the Eveleigh Railway Workshops, with the Aboriginal community in Redfern well-established when the workshops were in operation. There is the opportunity for the Aboriginal community to interpret their own cultural heritage by ensuring that the development of interpretative products/devices is led by Aboriginal voices from within the local community.
- Opportunities exist for the ongoing recognition, celebration, and interpretation of the significance of the site to the local Aboriginal community, both historically and in the present, through Aboriginal Co-Design and meaningful connection to country initiatives designed and implemented in accordance with the community's wishes and in accordance the Connecting to Country and Designing with Country guidelines (Government Architect NSW 2021).
- Any Aboriginal archaeological investigations within the PAD site could give us a better understanding and knowledge on the previous use of the landscape and Aboriginal cultural heritage.
- Opportunities exist to engage the local Aboriginal community in ongoing specific programs to identify and interpret cultural heritage in the future and to conduct detailed research that investigates the historical links to the workshops and the local area.

7.4.1. Constraints

- Consultation with relevant stake holders, the local community and local Aboriginal community (where interpretation is to address Aboriginal Any impacts to the PAD site, or it's boundary, located east of the CME Building (such as landscaping, services, removal, or any works to the boundary fence) will need a secondary ACHAR and consultation process as recommended in the Artefact's 2022 Aboriginal Cultural Heritage Study and in line with the statutory guidelines. This will be a 3–4-month process and will likely require test investigations with an experienced archaeologist.

- Key local Aboriginal Community Members and representatives are often called upon time and time again to provide input and advice in a 'voluntary capacity' without remuneration and/or compensation for their time and expertise. This can have a major impact on the ability of individuals to commit the time and resources to contribute in a meaningful way over a longer period of time.
- Involvement of Aboriginal Community Members and appointed representatives must be well-planned to ensure that the contribution to co-design outcomes is not at the expense of the of knowledge holders and community members, either financially or socially.
- Many of the limitations associate with the meaningful representation of Aboriginal Cultural Heritage Values on site arise from the involvement of the Aboriginal Community or Aboriginal Co-Design expertise too late in the process of planning for new buildings and/or changes to sub-precincts and a lack of understanding of how to balance the Aboriginal and non-Aboriginal values of the site in a meaningful way that is authentic and representative of the Aboriginal Significance of the site, whilst still retaining the industrial historic heritage significance of the site.
- In order for there to be meaningful engagement, Aboriginal involvement in co-design needs to occur early in the design process, and not as an overlay to an existing design.
- Due to the multiple layers of significance at the site, including the significance of the site, prior to the redevelopment of the site as the ERW, there are occasions where the Aboriginal Cultural Heritage Significance and the Non-Aboriginal Significance of the industrial fabric associated with the ERW will require careful consideration and negotiation to achieve an appropriate outcome (i.e., treatment of hardscapes for environmental regeneration, additions to heritage buildings using Aboriginal Co-Design).

7.4.2. Cultural Heritage Tourism, Education & Interpretation

7.4.3. Heritage Interpretation

The preparation of the overarching *Heritage Interpretation Strategy* for the Paint Shop Sub-Precinct has been coordinated between Curio (Non-Aboriginal Heritage advisor), Artefact Heritage (Aboriginal Heritage advisor), and Balarinji (Aboriginal Engagement advisor) and was finalised in July 2022.

Transport engaged Curio to focus specifically on identifying and developing opportunities for expressing non-Aboriginal stories of the site, while Artefact Heritage were engaged to address study requirements to 'recognise and celebrate Aboriginal connection to the precinct....', including preparation of the Aboriginal Heritage Interpretation Strategy (July 2022). The Aboriginal HIS was prepared by Artefact Heritage as an appendix to their "Aboriginal Heritage Study" report for the Paint Shop Sub-Precinct, designed to integrate with, and function as an appendix to, the overall HIS, and engages with the spiritual, intangible and cultural connections between the local Aboriginal community and the RNEP, to create a harmonious, creative overarching interpretive approach for the precinct, firmly grounded in community and Country.

As the Paint Shop Sub-Precinct holds strong connections to the nearby Redfern Railway Station and is part of the overall ERW landscape, consistency and continuity of themes, designs and content associated with existing and proposed heritage interpretation across all ERW sites play a key role in this plan. Heritage Interpretation within the Paint Shop Sub-Precinct aims to produce a fresh set of goals and stories that are tightly connected with the land directly associated with the subject site itself. By combining both strategies for interpretation, the HIS proposes a unique form of interpretation that is both practical and engaging, as well as relevant to future use of the site.

The ERW precinct, including the CME Building, is perfectly positioned to implement meaningful and engaging interpretation and cultural heritage tourism initiatives that link both North and South Eveleigh more broadly, and beyond, including the interpretation of the overall ERW precinct within the context of Redfern Railway Station.

The redevelopment of South Eveleigh and Redfern Station have commenced and already completed many interpretative elements in recognition of the precinct's cultural heritage potential, with both providing an opportunity to be used as a template that can be built upon across the whole of the precinct.

The CME site presents substantial opportunities to introduce both innovative and impactful heritage interpretation elements, installations and features that are both internal and external to the building itself.

The CME Building was continuously used as an administration office for ERW and NSW railways from its establishment (1887) until vacated (early to mid-2000s). Its lack of use over the last 20 years does not diminish the importance of the work undertaken at the site.

The traditional use of the site was predominantly as the workspace for administration offices, engineers, and the Chief Mechanical Engineer for the ERW precinct and NSW railways, a highly significant cog in the success and expansion of the NSW railway network as we know it today.

The CME building is deserving of being interpreted appropriately as part of any future renewal and adaptive reuse.

Opportunities

- Heritage Interpretation, Education and Cultural Heritage Tourism at iconic sites such as the ERW, including the Chief Mechanical Engineer's Building and the embedding of opportunities to communicate the significance of a site to those that visit, pass by, or use on a daily basis provides the basis for providing a better understanding of, and appreciation for, not just the CME Building, but the whole of the ERW site.
- The opportunity exists for heritage significance of the CME, within the context of the broader ERW precinct to be interpreted for the community including exhibitions, special events and regular heritage activities to support tourism and social participation.
- There is the opportunity to engage and enhance the social history of the site through community engagement, additional research, including oral histories (with former workers and residents who remember the CME Building site in use) for use in heritage interpretation in publicly accessible areas, as well as in key locations within the CME Building itself.
- There is the opportunity to highlight the significance of the site, including its Aboriginal and non-Aboriginal history, to the local community, with an appropriate consideration of the ongoing cultural connection to the subject site and wider precinct.
- Below includes a list of some of the former functions still evident in the fabric of the building that could be interpreted as part of any adaptive reuse options in the future.
 - Room 13, the Pay Office located on the ground floor, was where ERW workers would line up for their pay every week. A small window with a ledge in the doorway of Room 13 was used to deliver payment to each employee.
 - Documents and administration for the Scientific Services building.
 - Drawing offices

- Opportunity to interpret the insitu office cabinetry in Room 1 of the CME Building and other moveable heritage items
- Laboratory testing facilities
- Administration offices
- There is the opportunity within the CME Building and areas of landscaping that have the potential to enhance and/or reinterpret the heritage setting and aesthetic of the site which would present significant positive benefit to the wider community.
- There is the opportunity to acknowledge and consider interpretation opportunities that link to other interpretation initiatives, public art and strategies in the surrounding areas (e.g., North Eveleigh, Redfern Station, South Eveleigh).
- There is the opportunity to highlight several different themes and stories, which facilitate the engagement of a diverse range of audiences and interests including daily workers, students, and the local community; to engage with relevant historic and heritage aspects.

7.4.4. Constraints

- The redevelopment of the CME Building will likely be primarily for commercial uses that are not accessible on a daily basis to the general public. Therefore, the opportunities for regular cultural tourism activities will be restricted compared to other, more publicly accessible areas of the ERW Precinct.
- The content, form and locations selected for installation of interpretive elements should aim to be accessible and inclusive to all key stakeholders, including residents, workers, and visitors, regardless of age, cultural background, education, accessibility requirements or interests. Constraints for the CME Building subject site include the following.
- Financial considerations must be considered including ongoing maintenance, and care, and the need to protect both the artefacts/moveable heritage items on display.
- Need to consider safety requirements and protocols for signage, wayfinding, access, lighting, and naming of areas/spaces.
- The Interpretation must be consistent with the identity and visual appearance (look and feel) of the CME Building, as well as the broader precinct, when trying to respond to the uniqueness of this site's stories and culture.
- Weather consideration for interpretive products is required to ensure interpretive elements are as robust and durable as possible.
- Consideration of the nearby heritage interpretation installations, colour and form in the ERW Precinct, to ensure a cohesive, yet non-repetitive approach to the whole precinct and beyond.
- Keeping provenance items in, or as close to, their original locations on site. This would function as both an opportunity for heritage interpretation, as well as constraint with regards to tying heritage items to specific site locations.
- The subject site will be visited by a wide range of people, some of whom may require mobility access or be vision or hearing impaired. It is important that interpretation be made accessible where possible through the integration of Braille on interpretation panels, or where required large print handbooks and audio alternatives to written interpretation.

Please see Curio's 2022 *Redfern North Eveleigh Renewal Precinct Paint Shop Sub-Precinct Heritage Interpretation Plan* and Curio's 2022 *CME Building Heritage Interpretation Plan* for more information on interpretation for the CME Building.

COMMUNITY CONSULTATION

The extensive community consultation undertaken over recent years, including at South Eveleigh in particular has revealed a range of opportunities to harness community passion to conserve and communicate the heritage significance of the place.

Opportunities & Constraints

- Adaptive reuse, interpretation and new development on any part of the Eveleigh Railway Workshops site, including the CME Building should include meaningful community & stakeholder consultation.
- There is the opportunity to involve railway interest groups and other interested community groups and individuals in the development of proposals for the site as appropriate, and as identified in the individual conservation planning documents for each site.

7.5. Summary

In summary, the key opportunities and constraints considered with respect to the CME Building site include the:

- retention, conservation and sympathetic adaptive reuse of the CME Building for a viable (economic, social and environmental), long-term use;
- need to undertake appropriate Aboriginal archaeological investigations and an Aboriginal Cultural Heritage Assessment Report (ACHAR) within the registered PAD site east of the CME Building if any proposed works require landscaping, inground services, or any form of excavation within the PAD of the site are proposed;
- requirement to undertaken any new or adaptive reuse works in accordance with the policies and principles outlined in this CMP, and in accordance with the requirements of the *Burra Charter*;
- recognition, retention and enhancement, where possible, of connectivity and views between the CME Building site and the broader ERW site, as well as the surrounding local areas of Darlington, Eveleigh, Redfern, Golden Grove and beyond as part of any redevelopment of the CME Building site;
- opportunity to interpret the significant history and technological achievements associated with the operations of the CME Building as part of a broader ERW precinct-wide interpretative experience;
- There is a requirement to undertake any repair and replacement of fabric in accordance with the *Physical Condition Report and Work Methodology* report, prepared by Curio Projects (2022) using appropriately qualified heritage tradespeople.

8. Conservation Policies

8. Conservation Policies

8.1. Conservation Policy Development

Conservation policies are a key tool for the management of change. Therefore, conservation policies seek to safeguard that which is significant to an item or place of heritage significance within a process of change and development. It is essential to establish criteria, policies and recommendations for conservation and on-going use of a heritage item to ensure best practice heritage management and preservation of heritage significance for the future. Within this framework, owners and managers of the heritage item or place will be able to formulate suitable proposals, and planning authorities will be able to assess those proposals against the site-specific heritage criteria.

The conservation policies developed here for the CME Building subject site are intended to assist in the long-term use, maintenance, conservation and evolution of the site. These policies are intended to manage change, rather than prohibit it. The conservation policies provide the essential guiding aims for the site, which should be adopted by the CME Building subject site and the relevant approval authorities. The following fundamental principles provide the overarching context behind policy development:

- The future conservation and development of the place should be carried out in accordance with the principles of the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (Burra Charter) 2013.
- The approach and options recommended for the conservation of specific fabrics, spaces, elements and qualities of the place should be endorsed as a guide to future work, the recommendations having been related to the principles of the Burra Charter.
- Future potential uses should be developed for locations assessed as having lower levels of heritage significance, which do not compromise the character and significance of those areas or the wider site.
- Care should be taken in any future development to avoid or minimise any adverse effect on elements of the site with State heritage significance
- Policies should consider practical options for management of built fabric, both heritage and modern, and encourage opportunities for replacement of intrusive elements with more sympathetic options or seek to reinstate heritage finishes where possible.

Please note that a number of conservation policies included within the 1997 CMP by Caldis Cook & Rappoport and the OCP Architects 2022 ERW Overarching CMP have been incorporated in the policies below as they remain relevant and appropriate.

8.2. Conservation Policies

For clarity and ease of use, the conservation policies for the CME Building subject site have been grouped and presented below under five categories, seen to be those of critical importance to the conservation of the cultural significance of the site. Each category is accompanied by a brief explanatory segment intended to highlight the intent behind the policies.

The policy categories for the CME Building subject site include:

- Conservation Planning
- Conserving Heritage Significance
- Management of the Chief Mechanical Engineers Building

- Adaptive Reuse Opportunities
- Community Involvement & Consultation

Each policy is accompanied by a succinct background description followed by a series of explanatory and strategic guidelines to support the policy, to ensure that future decisions regarding heritage are made in an informed manner, ensuring the conservation of the significance of the place. For policies with directly associated action items, these are listed below the policy.

Table 8.1: Conservation Policies for the CME Building

1. Conservation Planning	
Policy	Policy Description
Policy 1.1	<p>Documentation & Updated Listings</p> <p>The present CMP should be used as the principal document to guide the conservation and management of the CME Building.</p> <p>This CMP should be adopted by TAHE and TfNSW.</p> <p>The SHR listing for the Chief Mechanical Engineers Building should be updated by Heritage NSW to reflect the findings of this CMP and the updated CMP prepared by OCP Architects and updated by Curio in 2022 (<i>Eveleigh Railway Workshops Overarching Conservation Management Plan</i>).</p>
	<p>Relevant Documentation</p> <p>Other relevant documentation prepared for the ERW site should be consulted in combination with this CMP, including:</p> <ul style="list-style-type: none"> • <i>S170 Heritage and Conservation Register</i>. • <i>Eveleigh Railway Workshops Overarching Conservation Management Plan</i> prepared by OCP Architects and updated by Curio in 2022. • <i>Eveleigh Workshops Management Plan for Moveable Items and Social History 1996</i> (or as revised). • <i>Redfern North Eveleigh—Precinct Renewal Paint Shop Sub-Precinct: Heritage Interpretation Strategy</i> prepared by Curio in 2022. • <i>Chief Mechanical Engineers Building—Condition Report and Schedule of Conservation Works</i> prepared by Curio in 2022. • <i>Redfern North Eveleigh Precinct Renewal Project - Heritage Interpretation Plan: Chief Mechanical Engineers Building</i> prepared by Curio in 2022. <p>In the event of any inconsistencies, this CMP should prevail.</p> <p>Heritage and planning aspects of future documents should be prepared to be consistent with this CMP.</p>
Policy 1.3	<p>Selling or Leasing the CME Building</p> <p>In the event the building is sold or leased on a long-term basis, adequate provisions should be included within the sale/lease contracts to ensure the conservation and maintenance of heritage assets on the site is carried out in accordance with this CMP. A copy of the CMP should be included as part of the sale/lease contract.</p>
Policy 1.4	<p>Updates to this CMP</p> <p>This CMP should be reviewed by the owner and a qualified heritage specialist every five years.</p> <p>Specific policies within the CMP should be reviewed and updated in light of new circumstances, including changes to the management or ownership of the site and to include recorded works (Policy 1.6) subsequent to the issue date.</p>

1. Conservation Planning

Policy	Policy Description
	Tenancy Guidelines In the event the building is leased to single or multiple tenants, a handbook should be prepared by the owner, in close consultation with a qualified heritage specialist, to provide guidelines for future tenants.
Policy 1.5	The handbook should include directions to ensure any future fit-out consists of a sympathetic and respectful insertion within the building, providing appropriate design specifications and/or references such as colour schemes, materiality, style, fixing methodologies, etc. In addition, the handbook should be read in conjunction with the policies of this CMP. Further fit out works remain subject to the relevant heritage approvals under the Heritage Act.
	Approvals All proposals involving the CME Building are subject to the provisions of the NSW Heritage Act 1977 and should be assessed against the conservation policies of this CMP.
Policy 1.6	A Statement of Heritage Impact (SoHI) should be prepared by a qualified heritage specialist to assess the works with the potential to have an impact on the heritage significance of the CME building, including works not permitted under the Standard Exemptions, and propose appropriate mitigation measures if necessary. A Photographic Archival Recording should be prepared for alterations to elements of moderate or above significance (as per Section 6 of this CMP), in accordance with Heritage NSW guidelines. Note: See <i>Guidelines for Photographic Recording of Heritage Sites, Buildings, Structures and Moveable Items</i> (1998), prepared by the Heritage Office.
Policy 1.7	Standard Exemptions Maintenance works, cleaning, and minor repairs should be undertaken in compliance with the Standard Exemptions under Section 57(2) of the Heritage Act. Any works that are not compliant with the Standard Exemptions are subject to the standard approval pathways. The CME Building is not subject to any site-specific exemptions.
Policy 1.8	Unexpected Finds The management of unexpected and unforeseen finds, including survival of early building fabric, moveable heritage or any previously unidentified significant elements, should comply with the policies in this CMP and be assessed prior to making decisions about its future management.

2. Conserving Heritage Significance

Policy	Policy Description
Policy 2.1	SHR Listing The CME Building and the moveable heritage items listed on the SHR are of State heritage significance and should be conserved and protected. Conservation of heritage values should inform all future decisions about the place including its interpretation.
Policy 2.2	Burra Charter Conservation of the CME Building and the moveable heritage items should be in accordance with the definitions and principles of <i>The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 2013</i> .

2. Conserving Heritage Significance

Policy	Policy Description
	Heritage Movable Items An audit of all SHR moveable heritage items and items identified as significant on the <i>Chief Mechanical Engineer's Office and Scientific Services Building—Moveable Heritage Survey</i> (OHM Consultants, 2012) should be undertaken and suitably documented.
Policy 2.3	Moveable heritage items should be managed carefully to protect their physical integrity. Where possible, the items should be incorporated into the heritage interpretation strategy for the site to ensure they are fully appreciated by users and visitors.
	Qualified Professionals All works with the potential to have an impact on the heritage significance of the site should be carried out and overseen by suitably qualified consultants and tradespersons with proven experience and qualifications in the field of heritage conservation.
	Impact on Significant Elements Adverse impacts on the significance of the site and its components should only be permitted in the following circumstances: <ul style="list-style-type: none"> • Where enables the recovery of aspects of greater significance; • Where collaborates to improve or ensure the security and viability of the place; • Where no feasible alternative is viable (e.g., safety, compliance, legal requirements); • Where adequate recording of the item, area, or other relevant aspects has been undertaken; • Where full assessment of alternative options has been undertaken to minimise adverse impacts. The Significance Assessment presented in this report (Section 6 <i>Significance</i>) should be used as a reference to identify the degree of contribution of individual elements to the significance of the CME when considering potential impacts of any proposed works. However, the potential heritage impact on the element should not be assessed in isolation. Any assessment should adopt a holistic approach, considering the cumulative impacts on the entire site and wider precinct.
	People & Communities The social significance of the CME Building to the local and Aboriginal community, former workers and the NSW railways community should be acknowledged. Community interest provides a valuable resource for understanding the interpretation of the significance of the place.
	Aboriginal Cultural Heritage Any future site work relating to Aboriginal Cultural Heritage should refer to the Connecting with Country Framework written in 2022 by Balarinji for the RNE Precinct and relevant legislation as outlined in Section 5 <i>Archaeology</i> .
Policy 2.7	Any physical impact across or abutting the registered AHIMS site (PAD -001) located in the gardens east of the CME Building, will require an ACHAR and Aboriginal community consultation prior to any works. Any future site works or initiatives relating to Aboriginal cultural heritage and significance should be consulted with the Aboriginal stakeholders.
	Historical Archaeology Any future works requiring excavation and/or below-ground impacts should be proceeded by a historical archaeological assessment, specific to the location and nature of the proposed impact.
Policy 2.8	

2. Conserving Heritage Significance

Policy	Policy Description
	<p>Where archaeological assessment determines that archaeological investigation of a potential historical archaeological resource is required within the CME Building subject site, archaeological investigation should be guided by a Historical Archaeological Research Design (ARD) and will require excavation permits in accordance with the NSW Heritage Act 1977 and a Section 60 Excavation Permit.</p> <p>All historical archaeological excavations undertaken within the site should be carried out under the supervision of an Excavation Director who meets the Heritage NSW criteria for directing archaeological excavations of local and/or State significance (depending on the nature of the potential archaeological resource being investigated).</p>
Policy 2.9	<p>Significant Visual Connections</p> <p>Significant visual connections and specific views within the site, to and from the former ERW precinct should not be obscured, in particular view lines from the former Chief Mechanical Engineer Office (G10) and Drawing Office (F6) to the wider precinct.</p> <p>If significant views are required to be impacted for the essential operation and/or adaptive reuse of the site and precinct, mitigative measures should be developed and undertaken, including implementing interpretive solutions to help offset the visual impact.</p>

3. Management of the CME Building

Policy	Policy Description
Policy 3.1	<p>Connection with the Eveleigh Railway Workshops</p> <p>Management of heritage significance must also consider the adjacent SHR curtilage for the ERW, as the CME Building historically forms part of the precinct.</p> <p>The relationships between the two sites, including visual sightlines, physical connection/access, historical background and others, should be conserved and highlighted where possible, to ensure the CME Building remains connected and cohesive with the wider ERW precinct.</p>
Policy 3.2	<p>Maintenance, Repair and/or Reconstruction</p> <p>Maintenance of the CME Building should be carried out regularly to monitor the physical condition and integrity of the significant fabric.</p> <p>Where necessary, significant fabric should be replaced or repaired on a like-for-like basis. Removal of original fabric should only take place where it has deteriorated to a condition beyond feasible retention. In this case, a representative sample of the original fabric should be recorded, catalogued, stored on site, and interpreted where appropriate.</p>
Policy 3.3	<p>Fire Safety</p> <p>A fire safety solution should be designed in consultation with BCA and qualified heritage specialist, with the final solution to:</p> <ul style="list-style-type: none"> • adopt an approach that minimises physical and visual heritage impacts; • be installed sensitively in keeping with the character of the building and its significant spaces. <p>If required, a sprinkler system (preferred option) and/or a second fire staircase should be installed to ensure fire safety for the occupants of the building.</p>
Policy 3.4	<p>Air Conditioning System</p> <p>An optimised air conditioning solution should be designed in consultation with a qualified heritage specialist, with the final solution to:</p>

3. Management of the CME Building

Policy	Policy Description
	<ul style="list-style-type: none"> • adopt an approach that minimises physical and visual heritage impacts; • be installed sensitively in keeping with the character of the building and its significant spaces. <p>Existing gas heaters, ceiling fans, window and/or wall-mounted air conditioners should be removed.</p> <p>New ductwork, pipework, cable work, or condenser units associated with the air conditioning system must be concealed appropriately and use existing ducts and penetrations where possible .</p>
Policy 3.5	<p>Services</p> <p>New services should be designed and installed in a sympathetic manner, minimising physical and visual intervention to original building elements. Therefore, exposed services, including wall and ceiling-mounted elements, new penetrations, or permanent fixings should be avoided.</p> <p>Updates and improvements to systems for more suitable solutions are encouraged if they do not require significant modifications, rework to original building elements or the obstruction of the original spatial configuration of the rooms.</p>
Policy 3.6	<p>Ceiling</p> <p>The suspended T-bar grid ceilings are intrusive and should be removed.</p> <p>Where possible, original lathe and plaster ceilings should be conserved and restored, including decorative cornices and ceiling roses.</p> <p>Where not possible, ceilings should be reconstructed based on available evidence, including the ripple iron ceilings and timber cornices.</p>
Policy 3.7	<p>Lighting</p> <p>Where traditional pendant lights and ceiling roses were originally installed, sympathetic contemporary light fittings should be reinstated.</p> <p>Surface-mounted lights or fittings, as well conduits, that will require new penetrations in original ceilings should be avoided and/or utilised in non-original ceilings only.</p>
Policy 3.8	<p>Roof</p> <p>Critical conservation and repair work to the roof and box gutter, as flagged by the contractor, should be undertaken to restore its physical integrity.</p> <p>The roof form and profile should be retained, and the original Victorian chimneys and pots conserved and restored. Any replacement or restoration works should be carried out based on available evidence and in close consultation with a qualified heritage specialist.</p> <p>Thermal upgrades should be considered to improve the efficiency of the roof without compromising the original fabric left and without having any additional visual impact on the CME Building when viewed from the surrounding precincts.</p> <p>Intrusive additions to the roof, including for plant and equipment, solar panels and skylights/ roof lights, should be avoided if possible. Where these elements are unavoidable, they should only be located in the valley of the roof where they are hidden from the view lines from the surrounding precincts.</p>
Policy 3.9	<p>Colours and Treatments</p> <p>Further investigation should be carried out to determine the original surface colours and treatments of internal and external surfaces.</p> <p>The results of the investigation should be taken into consideration when developing sympathetic colour schemes and treatments for future use of the site, including the preparation of the tenancy guidelines for future fit-outs within the building. Internal and</p>

3. Management of the CME Building

Policy	Policy Description
	external building treatments and finishes should maintain uniformity throughout to ensure that the building appears as a single unified building.
Policy 3.10	<p>Flooring</p> <p>Original timber flooring should be retained in situ, patched, polished and overcoated. Where replacement is necessary, additional timber should be sourced from second-hand yards and heritage building material recyclers and chosen to best match the original timber.</p>
Policy 3.11	<p>Verandah</p> <p>The current decomposed compacted granite is not original and is graded as Neutral. Any new finishes/ paving should be durable and sympathetic material consistent with the architectural style of the building such as sawn sandstone paving or in concrete using off white cement, river gravel and a locally sourced sand. Aim to keep levels low enough so that subfloor vents remain exposed and clear.</p>
Policy 3.12	<p>Balcony</p> <p>The balcony balustrade, columns, and filigree should be repaired and properly maintained as required. Alternative solutions should be investigated to meet the required BCA standards regarding the safety of the balustrade (e.g., height, climbability, etc.) without adversely impacting the item's significance or the façade composition.</p>
Policy 3.13	<p>Intrusive Fabric</p> <p>Remove all intrusive elements identified in the fabric analysis of this CMP (Section 6 <i>Significance</i>) as intrusive elements impact the overall heritage value of the CME Building.</p> <p>Remove all modern fixtures (e.g., sinks, laboratory equipment) and cabinetry, unless the items are considered appropriate for reuse as part of the heritage interpretation strategy for the site as physical evidence of the historical evolution of the CME Building.</p> <p>Refer to Section 9 <i>Inventory Sheets</i> for the grading of significance of such items.</p>
Policy 3.14	<p>Original Timber Elements and Joinery</p> <p>All original timber elements and joinery should be conserved, protected and repaired. Restoration works should be undertaken by an appropriately qualified and experience heritage tradesperson and in close consultation with a qualified heritage specialist.</p>
Policy 3.15	<p>Building Envelope</p> <p>Retain the original fabric and character of the CME Building envelope, including form, shape, scale, bulk and massing, as well as the façade composition, rhythm and articulation. Internal and external building treatments and finishes should maintain uniformity throughout to ensure that the building appears as a single unified building.</p> <p>Intervention to the envelope should be minimal and not detract from the significance of the site. New external openings (windows and doors) are not permitted unless deemed to deliver long-term ongoing benefit to the adaptive reuse of the CME Building.</p> <p>Intrusive and/or detracting fabric should be removed unless it is considered appropriate for reuse as part of the heritage interpretation strategy for the site as physical evidence of the historical evolution of the CME Building.</p> <p>Refer to Section 9 <i>Inventory Sheets</i> for the grading of significance of the existing fabric.</p>
	<p>Site Frontage</p> <p>Restore the historical importance of Wilson Street as the primary access to the site by:</p> <ul style="list-style-type: none"> re-establishing the main entry (G3) to the CME Building as the historical, primary entrance to the building;

3. Management of the CME Building

Policy	Policy Description
	<ul style="list-style-type: none"> retaining the original main front door and associated fanlight, NSWGR insignia and architectural mouldings; promoting equitable access to the northern entries (G3 and G8) to ensure the building is adequately adapted and can be fully appreciated by all users and visitors; improving the landscape qualities of the northern garden.
Policy 3.16	<p>Site Rear</p> <p>Improve the usability of the rear portion of the site to strengthen its relationship with the wider ERW precinct. Options to incorporate the rear portion of the site into the precinct landscape design are encouraged to reinstate the importance of the CME Building within the precinct.</p> <p>Intrusive and/or detracting fabric should be removed.</p> <p>Viewscape between the site and the wider precinct should be retained, in particular view lines from the former Chief Mechanical Engineer Office (G10) and Drawing Office (F6), to improve the relationship between the CME building and the wider ERW.</p>
Policy 3.17	<p>Garden</p> <p>A qualified landscape design specialist should be engaged to develop a restoration plan for the eastern Victorian garden based as much as possible on available evidence. If insufficient evidence is available, an Indigenous garden should be considered.</p> <p>Mature, native species should be maintained whilst weeds and intrusive planting be removed. The historic flagpole should be retained, restored, and properly structured to ensure safety and its longevity on site. The garden must be frequently maintained to retain its prestigious appearance.</p> <p>The northern (front) garden should allow for a simple, formal garden that compliments the Victorian architecture of the building and emphasises its streetscape contribution.</p>
Policy 3.18	<p>Fence</p> <p>Remove any intrusive modern fabric that detracts from the significance of the site, including the existing security fence. Alternative methods should be implemented to achieve security without impacting the movement routes around the site and the wider ERW precinct.</p> <p>The existing northern fence, excluding the two stone piers, consists of a modern addition, is currently in poor condition, and is not commensurate with the architectural style of the CME Building. The fence should be replaced with a more appropriate solution including utilising landscape treatment only instead of a fence. If required, the design and scale of the proposed fence should be sympathetic to the architectural style of the building and visually permeable to allow views of the CME building.</p> <p>The original stone piers at the front entrance should be retained and conserved. The existing gates, whilst not original, consist of a sympathetic security solution that frames the entry and, therefore, do not detract from the significance of the site.</p>
Policy 3.19	<p>Fireplaces</p> <p>Original fireplaces identified as having exceptional or high significance should be retained and, where possible, fully restored.</p> <p>Where original elements such as the mantles have been partially removed or damaged, they should be reconstructed based on available evidence.</p> <p>Where fireplaces have been fully removed or have been identified as having moderate, neutral or little significance, there is the option to either reinstate and/or remove as part of any future adaptive reuse works.</p>

3. Management of the CME Building

Policy	Policy Description
Policy 3.20	Original openings All original external windows and doors and associated hardware should be retained and/or restored to their original condition if necessary. Any openings that need to be modified to meet current BCA standards should retain their architraves and the removed door leaves should be reused or reinterpreted (e.g., doors could be fixed parallel to the wall in an open position), where possible.
	New openings New external openings to the CME Building should be avoided as they will impact the original rhythm and configuration of the building envelope. Existing internal openings should be prioritised over the creation of new openings as they are indicators of the original, historic layout. New openings should be limited to provide access to new rooms that are essential for the operation and future use of the building.
Policy 3.22	Skylights & Dormer Accretions The skylights and dormer accretions in the former Drawing Office (Room F6) should be retained and remain visible and unobstructed.
Policy 3.23	Room Configuration The original layout and configuration of the original rooms within the CME Building should be retained, in particular the former CME Office (G10) and Drawing Room (F6). Any changes to room configuration should be limited to the rooms identified as having lesser significance. New partitions subdividing the original rooms should be avoided where practical. If required, partitions should be fully glazed or low height in order to minimise impacts on the original openings, scale, layout and openness of the rooms.
Policy 3.24	External Additions External additions to the building are not permitted unless deemed to deliver long-term ongoing benefit to the adaptive reuse of the CME Building. If required, external additions should be detached from the building in order to preserve the original envelope shape, form and scale. In addition, the location of the additions should take into consideration the movement routes within the site and wider precinct to avoid any detrimental impact on their heritage values.
Policy 3.25	Fixing Methodologies & Reversibility of New Fabric New fabric to be installed within the site must utilise sympathetic and fully reversible methodologies to protect the physical integrity of the fabric and reinstate its original condition if required. Acceptable methodologies include bracing, and clamping, among others. A qualified heritage consultant must be commissioned to provide advice and input into the chosen fixing methodologies.
Policy 3.26	New Tenancy Fit-outs New fit-outs within the buildings should propose sympathetic and contemporary additions to the interiors, proposing neutral elements that do not detract from the building's significance or permanently impact the original fabric. These include new partitions, lighting, wayfinding signage, joinery, furniture, soft furnishing (e.g., blinds/curtains), fixtures, and finishes, among others.
Policy 3.27	Accessibility Where possible, the building should incorporate accessibility solutions to promote equitable access to all users and visitors in accordance with the latest BCA/DDA standards.

3. Management of the CME Building

Policy	Policy Description
	These solutions should be developed in consultation with a BCA/DDA specialist and the relevant heritage inputs to ensure suitable design and heritage outcomes.
Policy 3.28	<p>Cyclical Maintenance Plan</p> <p>After reconstruction and repair works are undertaken to restore the building's interior and exterior, a Cyclical Maintenance Plan should be prepared to ensure the physical integrity of the CME building is preserved and properly managed.</p>
Policy 3.29	<p>Scientific Services Building no. 1</p> <p>The connection between the CME Building and the Scientific Services Building no. 1 is of historical significance and therefore should be preserved and encouraged.</p> <p>Design initiatives to restore and intensify their connection should be implemented by future developments of both sites, including cohesive architectural, landscape, and interpretation solutions, among others.</p> <p>View lines between the two sites should remain unobstructed.</p>

4. Adaptive Reuse Opportunities

Policy	Policy Description
Policy 4.1	<p>Conserving Heritage Values</p> <p>Future use of the CME Building should continue to embrace the heritage values of the site and wider ERW through the adaptive reuse of its heritage fabric, including the moveable heritage items.</p> <p>Proposals for adaptive reuse should respond to the architectural character and historical evolution of the CME building without mimicking or replicating its original fabric. Where visible, new works should consist of contemporary yet minimal/recessive insertions to allow the original and new fabrics to be clearly distinguishable.</p>
Policy 4.2	<p>Potential Heritage Impact</p> <p>Proposals for adaptive reuse should be carefully developed to minimise potential heritage impacts on the subject site and wider ERW. The design, scale, form, bulk, and materiality of the new fabric should be recessive and sympathetic to the original fabric and significance of the subject site, also retaining/conserving significant view lines within and into the site.</p>
Policy 4.3	<p>Communication of Heritage Values</p> <p>Future use of the CME Building should promote active communication of the heritage values of the site and the wider ERW. Examples of communication initiatives include exhibition spaces, events and walking tours (e.g., Sydney Open), digital and online interpretation products, and feature lighting, among others.</p> <p>Uses that will collaborate to increase public access should also be considered and encouraged.</p>

5. Heritage Interpretation

Policy	Policy Description
Policy 5.1	<p>Heritage Interpretation Plan</p> <p>A Heritage Interpretation Plan should be prepared for the CME Building to assist with enhancing user and visitor appreciation and understanding of the history and heritage significance of the site and wider ERW precinct.</p>

5. Heritage Interpretation

Policy	Policy Description
	Interpretation on site and within the building should be compliant with the policies within this CMP and executed in accordance with the Heritage Interpretation Plan 2022.
	Consistency with RNE Heritage Interpretation Plan
Policy 5.2	Interpretation of the CME Building should be coordinated with the interpretation of the entire ERW precinct, especially with the <i>Redfern North Eveleigh—Precinct Renewal Paint Shop Sub-Precinct: Heritage Interpretation Strategy</i> . Consistency across the precinct will help communicate the historical links between the different places that comprised the former ERW.
	Tangible and Intangible Values
Policy 5.3	All interpretation initiatives should address both tangible and intangible values of the site, including Aboriginal and historical archaeology, buildings and structures, heritage moveable collection, function and use, natural and cultural landscape and the people associated with the site and wider ERW precinct.
	Innovation, Efficiency and Engagement
Policy 5.4	All interpretation initiatives should seek to communicate with a wide variety of people through a range of innovative, efficient, and engaging solutions and communication methods, responsive to the needs of potential audiences within the local and wider community.

6. Community Involvement & Consultation

Policy	Policy Description
	Community Involvement
Policy 6.1	Regular consultation with the local community and interested groups regarding changes, new works and/or new plans should become part of the future planning for the place.
	Community Access to the Site
Policy 6.2	Community interest should be engaged as a resource for the conservation and interpretation of the CME Building site and its significant components. Scheduled activities to allow access to visitors to the site, including the interiors of the building, should be encouraged.