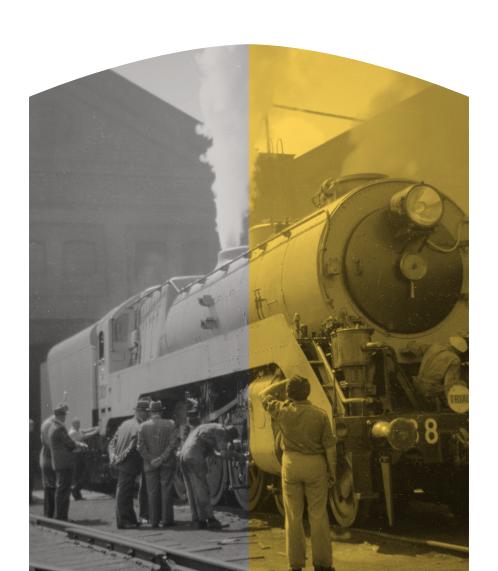


Large Erecting Shop South Eveleigh

Non-Aboriginal Heritage Study

Prepared for TAHE August 2022



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Terminology & Abbreviations

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

- 1. *Place* means a geographically defined area. It may include elements, objects, spaces, and views. Places may have tangible and intangible dimensions.
- 2. *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.
- 3. *Fabric* means all the physical material of the place including elements, fixtures, contents and objects.
- 4. *Conservation* means all the processes of looking after a *place* so as to retain its *cultural significance*.
- 5. *Maintenance* means the continuous protective care of a place, and its setting. Maintenance is to be distinguished from repair, which involves *restoration* or *reconstruction*.
- 6. *Preservation* means maintaining a *place* in its existing state and retarding deterioration.
- 7. *Restoration* means returning a *place* to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.
- 8. *Reconstruction* means returning a place to a known earlier state and is distinguished from *restoration* by the introduction of new material.
- 9. *Adaptation* means changing a *place* to suit the existing *use* or a proposed use.
- 10. *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.
- 11. *Compatible use* means a *use* that 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.
- 13. *Related place* means a *place* that contributes to the *cultural significance* of another place.
- 14. *Related object* means an object that contributes to the *cultural significance* of a *place* but is not at the place.
- 15. *Interpretation* means all the ways of presenting the *cultural significance* of a place.

Abbreviation	Explanation
ARD /	Archaeological Research Design
ARHS	Australian Railway Historical Society
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
ELW	Eveleigh Locomotive Workshop
ERW	Eveleigh Railway Workshops
Heritage Act	Heritage Act 1977
HCA	Heritage Conservation Area
HIP	Heritage Interpretation Plan
ICOMOS	International Council on Monuments and Sites
LEP !	Local Environmental Plan
LES	Large Erecting Shop
LGA	Local Government Area
NLA I	National Library of Australia
RL I	Reduced Level
RNE	Register of the National Estate
SCA S	Sydney City Archives
SHI	State Heritage Inventory
SLNSW	State Library of New South Wales
SHR S	State Heritage Register
SoHI	Statement of Heritage Impact
SSP	State Significant Precincts
SSP SEPP 2005	State Environmental Planning Policy (State Significant Precincts) 2005
Sydney LEP 2012	Sydney Local Environment Plan 2012
TAHE	Transport Asset Holding Entity
TEC	Telecommunications Equipment Centre
TfNSW	Transport for NSW
VIA	Visual Impact Assessment

Executive Summary

Curio Projects Pty Ltd (Curio) have been commissioned by Transport Asset Holding Entity (TAHE) to prepare a Non-Aboriginal Heritage Study for the Large Erecting Shop (LES) (the study area) Re-Zoning Proposal. The site sits within the Eveleigh Railway Workshops (EWR) curtilage.

This Non-Aboriginal heritage study provides the current heritage context of the subject site, with respect to its historical background, existing site conditions, current heritage legislative requirements and guidelines in NSW, and overarching recommendations with respect to the management of the heritage values within the study area.

State-Led Rezoning Study Requirements

A request was made to Department of Planning, Industry and Environment (DPIE) in February 2022 to request the NSW Minister of Planning and Public Spaces undertake a State-led rezoning to enable the adaptive reuse of the LES site. Specifically, a letter was sent to formally request that DPIE prepared Study Requirements to inform a future State Significant Precinct (SSP) Study for the LES site.

Table 1.1 provides a summary of the Study Requirements addressed by all heritage reports, including this Non-Aboriginal Heritage Study report, and where relevant requirements is addressed.

Table 1.1: Study Requirements - Heritage

Study Requirements		References
4.	Heritage	
4.1	Prepare an Integrated Aboriginal and Non-Aboriginal Cultural Heritage Study for the site that:	Refer to the present report.
		Refer to the following report: • Curio Projects, 2022. Aboriginal Cultural Heritage Study & Statement of Impact: Large Erecting Shop – Rezoning Proposal.
	a) Undertakes Aboriginal Cultural Heritage Assessment (ACHA) for the site and surrounds including Aboriginal archaeology, culture, country, and intangible and social heritage, which:	Refer to the following report: • Curio Projects, 2022. Aboriginal Cultural Heritage Study & Statement of Impact: Large Erecting Shop – Rezoning Proposal.
	 Includes the results of consultation with relevant Aboriginal stakeholders and knowledge holders for the site and surrounds; 	Refer to Chapter 3 (pages 29-31) of the report mentioned above.
	• Provides an overall Statement of Significance for Aboriginal values within and beyond the South Eveleigh precinct and recommendations to guide the protection, conservation and management of tangible and intangible Aboriginal values, in the context of the development	Refer to Chapter 7 (pages 72 -77) and Chapter 10 (pages 95-97) of the present report mentioned above
	Assesses the likely impact of the proposal on any identified Aboriginal cultural heritage;	Refer to Chapter 8 (pages 78-86) of the report mentioned above.

Study Requirements	References
 Provides recommendations to guide the management of Aboriginal heritage significance, any items of significance and the likely impact on Aboriginal heritage as a result of the proposal; 	Refer to Chapter 10 (pages 94-97) of the report mentioned above.
b) Undertakes an assessment identifying all heritage items (state, local and potential) and conservation areas within and near the site, including built heritage, landscapes and archaeology, with detailed mapping of items and an assessment of why the items and Site(s) are of heritage significance;	Refer to Chapter 2 (pages 31-35) and 6 (pages 106-179) of the present report. Refer to Chapter 2 (pages 31-35) and 6 (pages 106-117) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
c) Provides recommendations to guide future development with specific consideration to the bulk height and scale of existing significant items within the South Eveleigh precinct, including its setting, context, streetscape and visual and physical character of the locality, broader Eveleigh Railway Workshops, surrounding conservation areas and heritage items. This should be integrated with the Urban Design Framework;	Refer to Chapter 8 (pages 153-158) of the present report. Refer to Chapter 9 (pages 174-177) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
d) Includes a Statement of Heritage Impact (SoHI) to assess the likely impact of the proposal on any identified non-Aboriginal cultural heritage, including to the broader State Heritage Register listed Eveleigh Railway Workshops, with recommendations for the management of the cultural and industrial heritage of the site and measures to avoid, minimise and mitigate heritage impacts;	Refer to Chapter 8 & 9 (pages 137-177) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
e) Includes a comprehensive archaeological management plan and framework strategy to capture and collate all recent archaeological investigations and guide the management of potential archaeological resources.	Refer to Chapter 5 (pages 115-126) of the present report. Refer to Chapter 5 (pages 95-104) and Chapter 8 (pages 152-155) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
f) Informs and supports the preparation of the site planning framework.	Refer to Chapter 2 (pages 30-35) of the present report. Refer to Chapter 1 (pages 11-25) of the following report: Curio Projects, 2022. Aboriginal Cultural Heritage Study & Statement of Impact: Large Erecting Shop – Rezoning Proposal. Refer to Chapter 2 (pages 31-35) of the following report: Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.

Study Requirements		References	
4.2	Prepare a document that outlines an integrated approach to guide zoning and development proposals at North and South Eveleigh, including an updated Statement of Significance to inform the future opportunities and constraints for change that do not significantly diminish the heritage values of the SHR listed Eveleigh Railway Workshops.	 Refer to Chapter 8 (pages 156-168) of the following report: Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal. Also refer to the following reports for the constraints and opportunities regarding the Eveleigh Railway Workshops: Otto Cserhalmi + Partners, 2022 (Curio Projects update). ERW Overarching Conservation Management Plan, Prepared for UrbanGrowth NSW. Curio Projects, 2022. Overarching Opportunities & Constraints – ERW. Prepared for Transport for NSW. 	
4.3	Prepare a Heritage Interpretation Strategy for the site that:	Refer to the following report: • Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.	
	a) Recognises and celebrates Aboriginal connection to the site and addresses the full story of the place.	Refer to Chapter 2 (pages 15, 21 and 33) and 4 (pages 37-38) of the following report: • Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.	
	b) Identifies key themes, social values, interpretive opportunities, measures and locations as an integral component of creating a unique and exciting destination as part of the broader State Heritage Register listed Eveleigh Railway Workshops item.	Refer to Chapter 4 (pages 36- 37) of the following report: • Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.	
	c) Provides the strategic direction for heritage interpretation having regard to the site's heritage significance (in particular the sites social, intangible, industrial and engineering values) and regard to the place's relationship with nearby heritage items, as an integral component of the development of detailed design;	Refer to Chapter 2 (pages 15-33) and 4 (pages 36-37) of the following report: Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.	
	d) Accounts for existing and planned (where possible) interpretive approaches as part of other projects within and in the vicinity of the site.	Refer to Chapter 2 (pages 26-29) of the following report: • Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.	

Site Identification

The LES is an isolated building at the northwest of the South Eveleigh Precinct. The South Eveleigh Precinct is located approximately 200m to the southwest of Redfern Train Station and approximately 200m to the west of the future Sydney Metro Waterloo Metro Station. The South Eveleigh Precinct includes an overall area of approximately 13.2 hectares.

The LES site is currently legally described as being part of Lot 5, in Deposited Plan 1175706. This allotment also includes the North Eveleigh Precinct, the rail lines separating the North and South

Eveleigh Precincts, and Redfern Railway Station. The LES building subdivision will form part of a future application.

The LES is owned by TAHE NSW and managed by Transport Heritage NSW. The LES ceased formal operation in and has been largely unoccupied since approximately 2017. It is currently being used as a maintenance facility for heritage locomotives but it requires significant capital investment to bring it up to the required standards for continued use and avoid further deterioration.

Project Overview

The NSW Government is committed to working with the local community to develop the biggest innovation district of its kind in Australia, being Tech Central. The South Eveleigh Precinct is a key neighbourhood within Tech Central, delivering workplaces and collaboration spaces that support the vision for a new tech and innovation ecosystem. The inclusion of the LES within the broader South Eveleigh Precinct has the potential to support further innovation, collaboration and jobs for the future.

Transport for NSW (TfNSW) is therefore seeking to adaptively use the LES for a mix of uses, including commercial office and retail premises. Such land uses are currently not permitted within the planning controls that apply to the LES building, which still reflects its former infrastructure function. As such, a State-led rezoning application is being proposed to the Department of Planning and Environment (DPE) to amend the planning controls that currently apply to the site under State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021 (Precincts SEPP).

The proposed new planning controls are intended to facilitate the following:

- Alterations within the existing LES to convert the ground level into commercial office and retail premises,
- Creation of two new 'internal' storeys within the existing LES building envelope for use as commercial office premises,
- External upgrade and conservation work to the existing LES building to ensure it is fit for purpose and environmentally sustainable,
- Heritage interpretation and conservation work generally throughout the LES site,
- Services augmentation, and
- Publicly accessible space upgrades.

While external works are required, the proposal does not seek to significantly alter the existing building footprint of the LES. Further, it is proposed that the general form of the existing building and key architectural features of the existing building are retained in any future reuse of the building for commercial purposes, noting that the LES is part of the Eveleigh Railway Workshops complex included in the State Heritage Register.

Since 2015, Mirvac has successfully developed the South Eveleigh Precinct. With the completion of the Locomotive Workshop project, which also involved the adaptive use of industrial buildings listed on the State Heritage Register, it is now considered a logical time to adapt and integrate the LES into the broader technology precinct. TAHE is therefore preparing documentation to support the Stateled rezoning application.

Historical Archaeological Potential

The main historical activities within the study area that would have influenced and/or potentially impacted the survival of archaeological resources within the LES study area are summarised as follows:

- · Land clearing and farming
- Construction of the LES building in the 1890s, including installation of services, building foundations etc.
- Any upgraded services throughout the 20th century (especially sewer services along the northern and southern façade of the LES)
- Installation of a traverser along eastern boundary of study area between the Locomotive Workshop and the LES building
- Construction of Ablution buildings (one located abutting the northern façade and the other located along the southern façade of the LES)
- Installation of railway track along southern boundary

Although the topography of the landscape is relatively flat, the LES study area likely required minor land grading and levelling in preparation of construction of the LES.

Former railway related structures (now demolished) were previously located within and/or along the boundary of the study area. These included:

- Laundry pre 1899 to c1919 (previously located along southern boundary of study area)
- **Driver's Barracks** pre 1899 to 1906 (previously located within the western half of the LES before the 1906 extension of the LES building).
- Traverser pre 1899 to c1986 (located between the eastern façade of the LES building and the Locomotive Workshop)
- Southern Ablution building 1931 to c2002
- Urinals and Water closets 1906 to 1965 (located along northern and southern façade of the LES).

Potential archaeological deposits located across the study area may consist of artefacts, footings, and deposits associated with former structures such as post holes, brick piers, services, and former ground services. Sub-surface features associated with rail and LES functions and uses may include features such as inspection pits, machine bases and remains of machines and traversers. The LES building has high potential for sub-surface historical 'works' including sub-floor inspection pits, machinery, and rail tracks.

Overall, it is likely that the LES study area would have potential for archaeological deposits to be present in a sub-surface capacity, comparable to the features encountered within previous archaeological monitoring and excavation works at North and South Eveleigh. Examples of deposits likely to be present beneath the floor level of the LES are likely to include machine pits, foundations, rail lines etc. Archaeological deposits and resources of former buildings and associated features and deposits have potential to be present within in other areas of the precinct.

Based on the results from previous historical archaeological excavations around the wider Eveleigh Precinct, the LES study area is assessed as having a moderate to high potential for historical archaeological deposits to be present, as illustrated in Figure 5.6 below.

Summary Statement of Historical Archaeological Significance

The study area has moderate to high potential to include historical archaeological deposits, resources, features that are associated with the railway occupation phase of the study area, with the potential to contribute further to the understanding of the development and function of the LES building, and wider ERW, as a critical component of the overall running of the ERW complex. The potential historical archaeological resources within the LES study area is likely to have research potential to contribute to the understanding of the significance of the LES building and within the ERW site overall at a local level.

The potential archaeological resources, should they be discovered within the LES study area, provide the opportunity to document the former below-ground network of workings and elements of the area that may have been critical to the successful movement and servicing of trains across the site. There is the opportunity to digitally record any archaeological relics, deposits or 'works' encountered within the LES study area for interpretation purposes, for example for use in digital re-creations of the former LES/South Eveleigh layout, and to retain, exhibit and/or repurpose former industrial archaeological elements of lower significance as part of landscaping, furniture design on site (similar to what has been applied in other areas of South Eveleigh).

If intact archaeological resources associated with the former use of the LES study area- and its wider function and connection in South Eveleigh as a whole- be present, these have the potential to add existing knowledge and records of the former industrial workings of the LES study area and surrounds as part of the process of the renewal of the precinct and has potential to contribute to the archaeological research undertaken across North and South Eveleigh to date.

Recommendations

The following overarching recommendations have been provided to guide any future redevelopment within the subject site, with specific consideration given to bulk, height, and scale of the development against the existing significant elements of the LES site and the wider ERW.

Heritage Building & Fabric

Recommendations and preliminary principles regarding the concept design elements of the Rezoning Proposal that will require further development and careful consideration through the detailed design phase in order to reduce or avoid the impact to heritage fabric and significance include the following:

- The proposed redevelopment should be recessive, deferential, and respectful to the original fabric, form, and industrial character of the LES.
- Design of external additions/annexes, including final location and facade treatment, should be developed in consultation with heritage specialists to minimise impacts where possible and explore sympathetic materiality and interpretive solutions to re-purpose and include the modern fabric as part of the interpretation strategy for the precinct.
- Treatment of the remnant rail tracks, in ground pits, overhead gantry cranes, and other original elements within the site
- Details and design of future adaptive re-use of the LES, including the proposal for management, conservation, and treatment of associated moveable heritage collection

contained within—including additional surveys and structural assessment to inform future design constraints and opportunities with respect to form and condition.

Moveable Heritage

The scope of the Rezoning Proposal does not include specific details about the proposed treatment, management, and incorporation of the significant moveable heritage collection associated with the LES. It will be required to be addressed in future detailed design phases and is also addressed as part of the Heritage Interpretation Plan (Curio, 2022).

Recommendations regarding the future management of the moveable heritage collection include:

- Transference and placement of rolling stock and heritage moveable items require careful
 consideration prior to being undertaken. An experienced and qualified heritage consultant
 commissioned by TAHE should manage the process, taking into consideration the strategies
 and guidelines provided by the Stage 1 Heritage Interpretation Plan (Curio, 2022) prepared
 for the site.
- Undertake a comprehensive moveable heritage survey and establish a current Moveable
 Collections Catalogue that records and catalogues all moveable heritage items across the
 LES, and updates relevant heritage listings with the detailed of this updated inventory. The
 inventory should form a sub-section of the broader South Eveleigh Moveable Heritage
 Catalogue being prepared by Curio and ICS and should be included as a sub-section of the
 Moveable Collections Management Plan for South Eveleigh (currently in progress).
- Include moveable heritage conservation and long-term storage into any detailed development planning for the site so that the immediate, medium and long-term costs associated with keeping and conserving this significant and important resource can be built into the project costs and ongoing asset maintenance costs

Historical Archaeology

As the LES study area is part of South Eveleigh and are both elements of the same overarching site of the former ERW, a consistent of approach will be applied to the management of archaeological resources. Therefore, it is proposed that a similar differentiation between 'relics' and 'works' (where relevant) be applied to the LES study area (the context in which archaeological relics and works have been successfully managed at South Eveleigh previously), 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.

Future development works that will impact the ground surface within areas of moderate or high archaeological potential, as well as works that will impact the ground level within the LES subject site, will have potential to encounter and impact historical archaeological features, resources, and works but not as much relics.

The Rezoning proposal does not include substantial bulk excavation works and therefore targeted areas may include areas of excavation of lift pits and piling. Depending on the depth and location of excavation proposed, these works have potential to be a moderate to major archaeological impact, potentially removing a proportion of the historical archaeological resource remaining within the LES study area.

The archaeological impact of the project will require management as part of the future stages of the development, following the finalisation and approval of the proposed works, and commencement of detailed design phases that will determine the exact nature and extent of the potential archaeological impact in each area of the site.

The following overarching recommendations are made regarding the management and mitigation of the removal of historical archaeology within the LES study area:

- Historical archaeology within the LES study area should be managed in accordance with the
 archaeological potential and management framework outlined in Section 5 of this report,
 which should be further developed through a future Archaeological Research Design (ARD),
 specific to the impacts and final design of the precinct renewal development. It should also
 be managed in accordance with the archaeological provisions of the Draft South Eveleigh
 Precinct Conservation Management Plan.
- Archaeological works carried out within the study area should be undertaken under a
 Section 60 Excavation Application under the NSW Heritage Act 1977, depending on the
 assessed significance of the potential archaeological deposit and location in question. The
 appropriate approvals pathway (i.e., a s60 Application, or a s60 Fast Track Application) would
 depend on the nature and extent of works proposed, and the corresponding impact to
 potential historical archaeological resources. This would be determined and confirmed
 during preparation of the ARD.
- Archaeological mitigation program developed through the ARD should be specific to the location and nature of ground penetrating works at the site, but may include:
 - Targeted archaeological test excavation undertaken in the key areas identified as having moderate-high archaeological potential before construction works commence
 - o Unexpected finds protocol.
 - o Archaeological monitoring in areas with nil low archaeological potential.
 - Archival recording, surveying, photogrammetry, and 3D scanning should be performed to selected features for future heritage interpretation products if any archaeological features are uncovered during monitoring and testing.
 - o Significant archaeology uncovered will need to be incorporated into the heritage interpretation on site.
- Landscaping may also be redesigned to avoid physical impacts on the archaeological resource by 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. Where it is not possible to avoid archaeology through redesign or use of previously disturbed areas, further archaeological assessment and investigation will be necessary.
- Where possible, detailed design options and solutions should be investigated to reposition structural and built elements that have potential to impact archaeology, for example, minor relocation of support columns or options to span across areas identified as having high archaeological potential with two or more columns. A similar avoidance approach may also be employed with the 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.

Landscaping & Public Domain

The detailed design of the landscaping and public domain should:

- Ensure a seamless connection between the LES and the South Eveleigh Precinct, proposing cohesive elements throughout Locomotive Street and in-between the LES and Locomotive Workshop to extend the overall look and feel (e.g. materiality, furniture, interpretation, etc.) to the subject site.
- Avoid over-landscaping, especially along the southern and eastern facades, as it would risk a reduction of the legibility of the significant fabric of the LES.
- Develop appropriate lighting solutions to improve the visibility of the façade during daytime and nighttime, highlighting the original and interpretive elements, and activating the public domain.
- Include inclusive, durable, safe, and inviting elements to help active the precinct by attracting
 visitors to the site. This includes the development of innovative and engaging interpretation
 and public art products that will help to retell significant stories related to the subject site
 and are consistent with the interpretation strategy developed for the South Eveleigh
 precinct.
- Any proposed car parking areas should not overtake the public domain area along Locomotive Street or interrupt the pedestrian route towards the LES building or any interpretive/public art element.

Future & Detailed Design

Recommendations and preliminary principles regarding future detailed design for the LES include the following:

- Detailed design should be developed in close consultation with an appropriately
 experienced and qualified heritage consultant to provide heritage advice and input
 throughout the detailed design process, especially with respect to the key additions,
 changes, and modifications proposed to elements that have potential to have an adverse
 physical and/or visual impact to heritage items and significance, that will require
 minimisation and mitigation through careful, sensitive, and sympathetic design solutions.
- Adaptive reuse of the heritage building (specifics to be detailed through future detailed design phases) should be undertaken in a sympathetic, reversible, and sensitive manner that ensures the original use of the building continues to be understood and communicated to audiences through retention of as much of a building's original fabric and internal layout as possible, supported by complementary heritage interpretation initiatives where appropriate. Where modern additions must be incorporated into the significant heritage item, the design of these elements should adhere to the Burra charter principles of 'as much as necessary, as little as possible', and should complement the original structure and form while also using contrasting but sympathetic materials to ensure that modern additions can be readily distinguished from the original form and fabric.
- Detailed design of the Rezoning Proposal elements presumably to be undertaken through future stages of the planning and redevelopment process – will require the preparation of future heritage impact assessments (subsequent and additional to Curio's 2022 LES

Statement of Heritage Impact) to specifically respond to and assess the impacts of the detailed design, once developed.

- New additional volume to the southern facade should consider the visual connectivity between the LES and Locomotive Workshop, as well as the significant view lines of the LES along Locomotive Street and when approaching the building from the South East Village Square, to ensure that the key physical and visual attributes of the heritage items are respected, prominent, and not obstructed.
- New elements should adopt appropriate materiality and colour palettes commensurate with the surrounding heritage fabric and context of the South Eveleigh Precinct.
- Investigate opportunities for reuse and recycling of materiality and fabric of little significance (e.g., rolling stock parts, memorabilia, etc.).

Heritage Interpretation

Heritage interpretation strategies as identified within the Stage 1 HIP will support the development of innovative interpretation elements within the LES site that will convey an inclusive account of the site's rich history, its function within the Eveleigh Railway Workshop as well as accounts from the local community, both past and present.

Heritage interpretation initiatives throughout the LES site should be engaging, authentic, relevant, and appropriate to ensure that they not only continue to celebrate the significance of the subject site, but also the highly significant on-going Aboriginal cultural heritage connection to the place.

1. Introduction



1. Introduction

1.1. The Purpose of this Report

Curio Projects Pty Ltd (Curio) have been commissioned by Transport Asset Holding Entity (TAHE) to prepare a Non-Aboriginal Heritage Study for the Large Erecting Shop (LES) (the study area) Re-Zoning Proposal. The site sits within the Eveleigh Railway Workshops (EWR) curtilage.

This Non-Aboriginal heritage study provides the current heritage context of the subject site, with respect to its historical background, existing site conditions, current heritage legislative requirements and guidelines in NSW, and overarching recommendations with respect to the management of the heritage values within the study area.

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

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

- Mirvac, 2022. Project Brief (LES)- Summarised high-level brief for Re-zoning.
- FimtStudio, 2022. Large Erecting Shed, South Eveleigh/Rezoning Report. Prepared for TAHE.
- Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop. Prepared for TAHE.
- Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop Rezoning Proposal. Prepared for TAHE
- Curio Projects, 2022. Aboriginal Cultural Heritage Study & Statement of Impact: Large Erecting Shop Rezoning Proposal. Prepared for TAHE.
- Curio Projects, 2018. Heritage Risk Assessment- LES Redevelopment. Prepared for Mirvac.

Additional heritage documents that provide the management principles, conservation policies, opportunities and constraints to the overall ERW site has been used to guide the preparation of this report. This includes:

- Otto Cserhalmi + Partners, 2022 (Curio Project Update). *ERW Overarching Conservation Management Plan*, Prepared for UrbanGrowth NSW.
- Curio Projects, 2022. Overarching Opportunities and Constraints ERW. Prepared for Transport for NSW.

The following documents have also been utilised for research purposes; however, they are now superseded by the above-mentioned reports:

- Simpson Dawbin Associates Architects and Heritage Consultants, 2003. *Large Erecting Shop: Conservation Management Plan*. Prepared for Rail Estate.
- Otto Cserhalmi + Partners, 2002. *Eveleigh Locomotive Workshops CMP*. Prepared for Sydney Harbour Foreshore Authority.

Further, the following reports related to the adjacent South Eveleigh Precinct (former Australian Technology Parks) have also been consulted and utilised to guide the preparation of this report as the LES is proposed to be incorporated into the wider precinct and as agreed to with Heritage NSW in 2022:

- Curio Projects, 2022. *South Eveleigh Precinct Conservation Management Plan (Draft in progress)*. Prepared for Mirvac.
- Godden Mackay Logan, 2013. Australian Technology Park Conservation Management Plan. Volume 1.

1.2. State- Led Rezoning Study Requirements

A request was made to Department of Planning, Industry and Environment (DPIE) in February 2022 to request the NSW Minister of Planning and Public Spaces undertake a State-led rezoning to enable the adaptive reuse of the LES site. Specifically, a letter was sent to formally request that DPIE prepared Study Requirements to inform a future State Significant Precinct (SSP) Study for the LES site.

Table 1.1 provides a summary of the Study Requirements addressed by all heritage reports, including this Non-Aboriginal Heritage Study report, and where relevant requirements is addressed.

Table 1.1: Study Requirements - Heritage

Stu	dy Requirements	References
4.	Heritage	
4.1	Prepare an Integrated Aboriginal and Non-Aboriginal Cultural Heritage Study for the site that:	Refer to the present report. Refer to the following report: Curio Projects, 2022. Aboriginal Cultura Heritage Study & Statement of Impact: Large Erecting Shop – Rezoning Proposal
	a) Undertakes Aboriginal Cultural Heritage Assessment (ACHA) for the site and surrounds including Aboriginal archaeology, culture, country, and intangible and social heritage, which:	Refer to the following report: • Curio Projects, 2022. Aboriginal Cultura Heritage Study & Statement of Impact: Large Erecting Shop – Rezoning Proposal
	• Includes the results of consultation with relevant Aboriginal stakeholders and knowledge holders for the site and surrounds;	Refer to Chapter 3 (pages 29-31) of the report mentioned above.
	• Provides an overall Statement of Significance for Aboriginal values within and beyond the South Eveleigh precinct and recommendations to guide the protection, conservation and management of tangible and intangible Aboriginal values, in the context of the development	Refer to Chapter 7 (pages 72 -77) and Chapter 10 (pages 95-97) of the present report mentioned above
	Assesses the likely impact of the proposal on any identified Aboriginal cultural heritage;	Refer to Chapter 8 (pages 78-86) of the report mentioned above.
	 Provides recommendations to guide the management of Aboriginal heritage significance, any items of significance and the likely impact on Aboriginal heritage as a result of the proposal; 	Refer to Chapter 10 (pages 94-97) of the report mentioned above.
	b) Undertakes an assessment identifying all heritage items (state, local and potential) and conservation areas within and near the site, including built heritage, landscapes and archaeology, with detailed mapping of items and an assessment of why the items and Site(s) are of heritage significance;	Refer to Chapter 2 (pages 31-35) and 6 (pages 106-179) of the present report. Refer to Chapter 2 (pages 31-35) and 6 (pages 106-117) of the following report: Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
	c) Provides recommendations to guide future development with specific consideration to the bulk height and scale of existing significant items within the South Eveleigh precinct,	Refer to Chapter 8 (pages 153-158) of the present report.

Stu	dy Requirements	References
	including its setting, context, streetscape and visual and physical character of the locality, broader Eveleigh Railway Workshops, surrounding conservation areas and heritage items. This should be integrated with the Urban Design Framework;	Refer to Chapter 9 (pages 174-177) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
	d) Includes a Statement of Heritage Impact (SoHI) to assess the likely impact of the proposal on any identified non-Aboriginal cultural heritage, including to the broader State Heritage Register listed Eveleigh Railway Workshops, with recommendations for the management of the cultural and industrial heritage of the site and measures to avoid, minimise and mitigate heritage impacts;	Refer to Chapter 8 & 9 (pages 137-177) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
	e) Includes a comprehensive archaeological management plan and framework strategy to capture and collate all recent archaeological investigations and guide the management of potential archaeological resources.	Refer to Chapter 5 (pages 115-126) of the present report. Refer to Chapter 5 (pages 95-104) and Chapter 8 (pages 152-155) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
	f) Informs and supports the preparation of the site planning framework.	Refer to Chapter 2 (pages 30-35) of the present report. Refer to Chapter 1 (pages 11-25) of the following report: Curio Projects, 2022. Aboriginal Cultural Heritage Study & Statement of Impact: Large Erecting Shop – Rezoning Proposal. Refer to Chapter 2 (pages 31-35) of the following report: Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal.
4.2	Prepare a document that outlines an integrated approach to guide zoning and development proposals at North and South Eveleigh, including an updated Statement of Significance to inform the future opportunities and constraints for change that do not significantly diminish the heritage values of the SHR listed Eveleigh Railway Workshops.	Refer to Chapter 8 (pages 156-168) of the following report: • Curio Projects, 2022. Statement of Heritage Impact: Large Erecting Shop – Rezoning Proposal. Also refer to the following reports for the constraints and opportunities regarding the Eveleigh Railway Workshops: • Otto Cserhalmi + Partners, 2022 (Curio Projects update). ERW Overarching Conservation Management Plan, Prepared for UrbanGrowth NSW. • Curio Projects, 2022. Overarching Opportunities & Constraints – ERW. Prepared for Transport for NSW.

Stu	dy Requirements	References
4.3	Prepare a Heritage Interpretation Strategy for the site that:	Refer to the following report: • Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.
	a) Recognises and celebrates Aboriginal connection to the site and addresses the full story of the place.	Refer to Chapter 2 (pages 15, 21 and 33) and 4 (pages 37-38) of the following report: Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.
	b) Identifies key themes, social values, interpretive opportunities, measures and locations as an integral component of creating a unique and exciting destination as part of the broader State Heritage Register listed Eveleigh Railway Workshops item.	Refer to Chapter 4 (pages 36- 37) of the following report: Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.
	c) Provides the strategic direction for heritage interpretation having regard to the site's heritage significance (in particular the sites social, intangible, industrial and engineering values) and regard to the place's relationship with nearby heritage items, as an integral component of the development of detailed design;	Refer to Chapter 2 (pages 15-33) and 4 (pages 36-37) of the following report: Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.
	d) Accounts for existing and planned (where possible) interpretive approaches as part of other projects within and in the vicinity of the site.	Refer to Chapter 2 (pages 26-29) of the following report: Curio Projects, 2022. Stage 1 Heritage Interpretation Plan: Large Erecting Shop.

1.3. Project Overview

The Large Erecting Shop (LES) is a large industrial building with a footprint of approximately 6,000sqm located in the northwest of the South Eveleigh Precinct. The LES ceased formal operation as part of the Eveleigh Workshops phase of the site's history in 1985 and has been largely unoccupied since approximately 2017.

The NSW Government is committed to working with the local community to develop the biggest innovation district of its kind in Australia, being Tech Central. The South Eveleigh Precinct is a key neighbourhood within Tech Central, delivering workplaces and collaboration spaces that support the vision for a new tech and innovation ecosystem. The inclusion of the LES within the broader South Eveleigh Precinct has the potential to support further innovation, collaboration and jobs for the future.

Transport for NSW (TfNSW) is therefore seeking to adaptively use the LES for a mix of uses, including commercial office and retail premises. Such land uses are currently not permitted within the planning controls that apply to the LES building, which still reflect its former infrastructure function. As such, a State-led rezoning application is being proposed to the Department of Planning and Environment (DPE) to amend the planning controls that currently apply to the site under State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021 (Precincts SEPP).

The proposed new planning controls are intended to facilitate the following:

• Alterations within the existing LES to convert the ground level into commercial office and retail premises,

- Creation of two new 'internal' storeys within the existing LES building envelope for use as commercial office premises,
- External upgrade and conservation work to the existing LES building to ensure it is fit for purpose and environmentally sustainable,
- · Heritage interpretation and conservation work generally throughout the LES site,
- · Services augmentation, and
- Publicly accessible space upgrades.

While external works are required, the proposal does not seek to significantly alter the existing building footprint of the LES. Further it is proposed that the general form of the existing building and key architectural features of the existing building will be retained in any future reuse of the building for commercial purposes, noting that the LES is part of the Eveleigh Railway Workshops complex included on the State Heritage Register.

Since 2015 Mirvac has successfully redeveloped the South Eveleigh Precinct. With the Locomotive Workshop project nearing completion, it is now considered a logical time to adapt and integrate the LES into the broader technology precinct. TAHE is therefore preparing documentation to support the State-led rezoning application.

1.4. Site Identification

The LES is an isolated building at the northwest of the South Eveleigh Precinct. The precinct is located approximately 200m to the southwest of Redfern Train Station and approximately 200m to the west of the future Sydney Metro Waterloo Metro Station (Figure 1.1.). The South Eveleigh Precinct includes an overall area of approximately 13.2 hectares.

The LES site is currently legally described as being part of Lot 5, in Deposited Plan 1175706 (Figure 1.4). This allotment also includes the North Eveleigh Precinct, the rail lines separating the North and South Eveleigh Precincts, and Redfern Railway Station. The LES building subdivision will form part of a future application.

The LES is owned by TAHE NSW and managed by Transport Heritage NSW. It is currently being used as a maintenance facility for heritage locomotives, but it requires significant capital investment to bring it up to the required standards for continued use and to avoid further deterioration.

A map of the precinct and relevant boundaries are illustrated in Figure 1.1 and Figure 1.2.

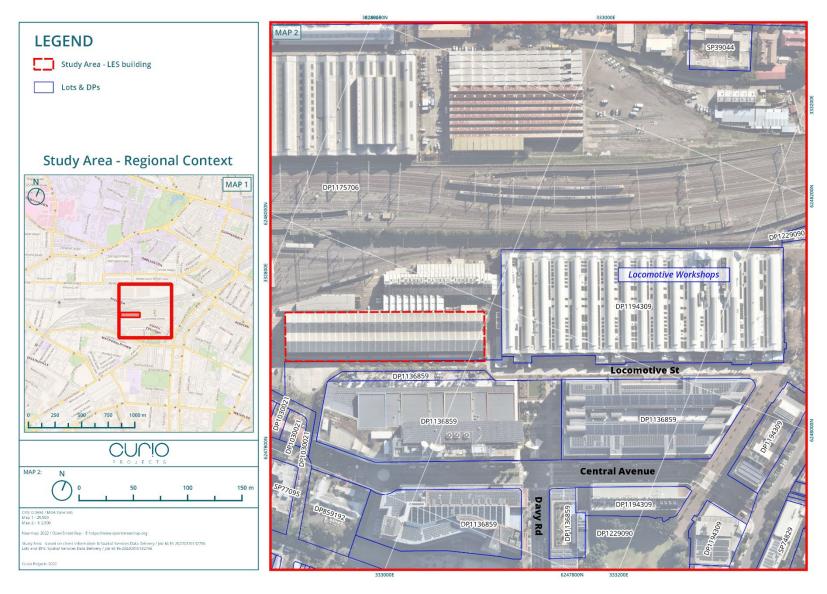


Figure 1.1: Regional Context (Source: Curio)

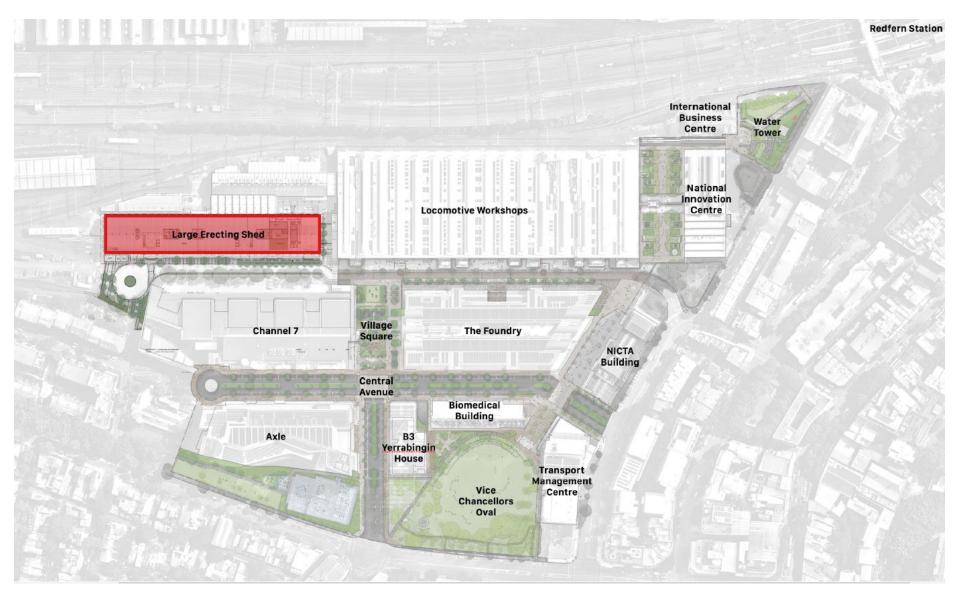


Figure 1.2: Site Location (Source: Mirvac 2022)

1.5. Proposed Controls

The proposed amendments to the Precincts SEPP involve the inclusion of the LES site within the 'Business Zone—Business Park' zone, which applies to the majority of the South Eveleigh Precinct and notably is the existing zoning for the adjacent Locomotive Workshop.

Further, the State-led rezoning application proposes new development standards including a maximum gross floor area (GFA) control on the LES site of up to 15,000sqm. Other minor changes as required may be proposed to the Precincts SEPP to facilitate the reuse of the LES building for commercial office and retail purposes.

1.6. Project Vision

The project vision for the LES was outlined in the 2022 Project Brief document, is listed below.

- Transform the existing heritage building into an adaptively re-purposed workplace, incorporating largely commercial use and retail amenity
- Provide a positive contribution to the South Eveleigh precinct
- Celebrate the heritage significance of the building
- Provide an interesting and appealing workspace to appeal to a diverse range of tenants

The proposed adaptive use of the LES to accommodate technology jobs is consistent with various Government policies to increase jobs and employment and strengthen NSW position and global recognition in the innovation and technology sector. The objective is to integrate LES into the broader South Eveleigh Precinct with the upgrade of the LES being the final building in the precinct to be adaptively reused to support the vision for a new tech ecosystem.

1.7. Eveleigh Overarching CMP - Heritage Management Principles

Otto Cserhalmi + Partners (OCP) have written a 2017 overarching draft Conservation Management Plan (CMP) for the entire Eveleigh heritage precinct. This CMP was recently updated by Curio Projects in 2021- 2022 (commissioned by TfNSW and in consultation with OCP) as part of the Redfern North Eveleigh Renewal project SSP documentation.

As part of the CMP, OCP considered the heritage values of the overall Eveleigh site and created seven overarching heritage management principles with 32 accompanying policies to ensure that the state heritage values of the overall precinct are maintained as part of any future development.

For information, the OCP Heritage Management Principles are reproduced below¹, noting that they and the relevant policies are discussed more fully in Curio's 2022 Statement of Heritage Impact for the LES building as part of the Assessment of Heritage Impact of the Rezoning Proposal for the LES building.

- HMP 1. All future decisions should be based on an understanding of the heritage values of the place and with a view to retain the identified significant values.
- HMP 2. A coordinated approach to management of the individual precincts and areas within the ERW site should be undertaken by future owners to ensure that future decisions are based on consideration for the heritage significance of the whole ERW and its overall presentation.

¹ Otto Cserhalmi + Partners, 2017a. *DRAFT ERW Overarching Conservation Management Plan*. Prepared for UrbanGrowth NSW: 121-132.

- HMP 3. The ERW site is assessed as being of state significance and therefore any future owners and managers of the site and its individual precincts should manage the place in accordance with best-practice heritage guidelines.
- HMP 4. Proposals for change should not unduly affect the significant heritage values of the ERW site and its individual precincts and should facilitate understanding of the place and its heritage values.
- HMP 5. The history and significant values of the ERW site and its individual precincts should be interpreted, including within any future redevelopment and reuse of the site where existing elements are to be removed or modified. The place should be interpreted as a major railway workshop facility.
- HMP 6. Skilled conservation professionals should be engaged to advise on, document and/or implement conservation and upgrading work and future development proposals for heritage assets of the ERW site and its individual precincts.
- HMP 7. Planning for new development, adaptive reuse of heritage assets and heritage interpretation should include opportunities for community consultation.

1.8. Limitations and Constraints

The following report has been prepared using all readily available historical data and documentation available for the subject site and surrounds, including relevant archaeological reports and assessments. The report has been prepared in accordance with the best practice management guidelines issued by NSW Heritage and in accordance with Australia ICOMOS, *The Australian Charter for Places of Cultural Significance*, The Burra Charter, 2013 guidelines.

The report considers heritage matters only, and no other non-heritage matters associated with the proposed redevelopment of the subject site.

This report provides a heritage study of non-Aboriginal history and heritage values of the subject site. A separate report regarding the Aboriginal Cultural Heritage values of the site has been prepared by Curio Projects in 2022.

This report should be read in conjunction with the reports prepared by Curio Projects 2022: Statement of Heritage Impact: Large Erecting Shop- Rezoning Proposal and Stage 1 Heritage Interpretation Plan: Large Erecting Shop.

1.9. Authorship

This report has been prepared by Mikhaila Chaplin, Archaeologist and Heritage Consultant, with senior review and specialist input undertaken by Natalie Vinton, CEO, of Curio Projects. GIS mapping has been undertaken by Andre Fleury, Historian and Archaeologist, Curio Projects.

Historical research has been undertaken by Mikhaila Chaplin and Sebastian Gerber-Hood, Interpretation & Archaeology Specialist of Curio Projects. Curio Projects are also grateful to the Australian Railway Historical Society who have undertaken additional historical research, as part of this rezoning project.

Physical Analysis has been undertaken by Tatiana Barreto, Architectural and Urban Design Specialist, Ian Bainsbridge, Director of Operations, Buildability, and Fabrication, Sebastian Gerber-Hood, Archaeologist & Museum Specialist of Curio Projects.

2. Statutory Context



2. Statutory Context

This section of the report discusses the local and State planning context for the LES building with respect to its non-Aboriginal heritage values.

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

- Environmental Planning and Assessment Act 1979 (NSW) (EPA Act); and
- Heritage Act 1977 (NSW) (Heritage Act).

The subject site is heritage-listed as part of the former ERW complex on the following statutory registers (Figure 2.2).

- State Heritage Register (SHR): ERW #01140;
- NSW State Agency Heritage Registers: Railcorp Heritage and Conservation Register (S170)
- Sydney Environmental Planning Policy (SEPP) (Major Development) 2005 Redfern Waterloo Authority Sites;
- Sydney Regional Environmental Plan (REP) No 26- City West Schedule 4.

The ERW and ERW Machinery are also listed on two non-statutory registers: the Register of National Estate and the National Trust of Australia Register.

2.1. Environmental Planning and Assessment Act (NSW) 1979

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

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

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

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

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

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

The proposed amendments to the Precincts SEPP 2021 involve the inclusion of the LES site within the 'Business Zone—Business Park' zone, which applies to the majority of the South Eveleigh Precinct and notably is the existing zoning for the adjacent Locomotive Workshop.

Further, the State-led rezoning application proposes new development standards including a maximum gross floor area (GFA) control on the LES site of up to 15,000sqm. Other minor changes as required are being proposed to the Precincts SEPP to facilitate the reuse of the LES building for commercial office and retail purposes.

2.1.2. Sydney Local Environment Plan (LEP) 2012

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

As ERW are subject to the overriding provisions of SEPP 2021, the land is excluded from the provisions of the Sydney LEP 2012.

2.2. Heritage Act (NSW) 1977

In NSW, heritage items are afforded statutory protection under the *NSW Heritage Act 1977* (the Heritage Act). Heritage places and items of 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 to items of State heritage significance, with 'State Heritage Significance' defined as being of 'significance to the state in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item'.

Heritage NSW is the approval authority under the Heritage Act for works to gazetted State Heritage listed sites, with approval for certain works required under Section 57(1). Application for approval in accordance with Section 57(1) is undertaken by submission of a Section 60 Application or a Section 60 fast-track application to Heritage NSW. Section 60 applications are also required for excavation which could impact all archaeological deposits located within the curtilage of an SHR listing.

The subject site forms part of, and is located within, the curtilage of the ERW SHR listing (#01140), the boundaries of which are outlined in Figure 2.1

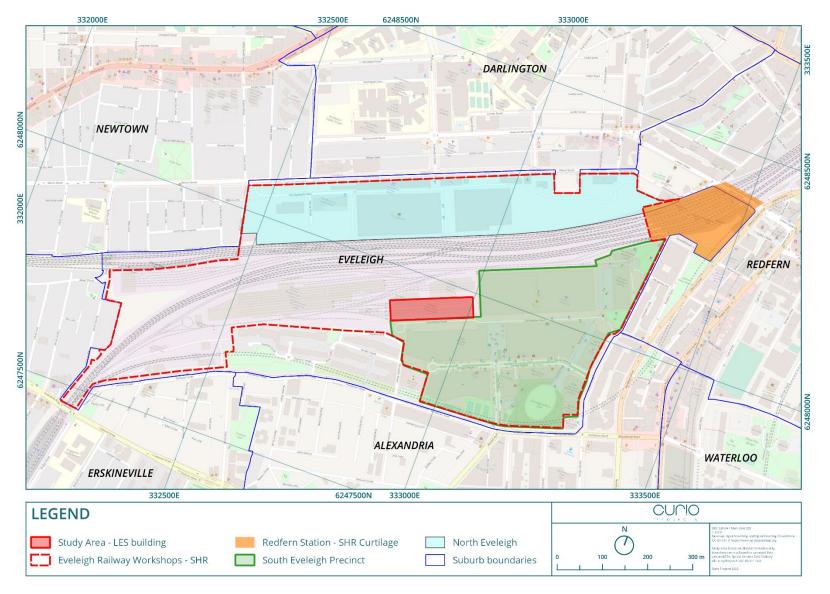


Figure 2.1: ERW SHR Curtilage. Subject site is highlighted in red. Source: Curio, 2022

2.2.1. Section 170 Heritage ad Conservation Register

Under Section 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 LES building is part of the whole ERW precinct, which is listed on the NSW Transport Asset Holding Entity (TAHE) (formerly known as the State Rail Authority) Section 170 Heritage & Conservation Register (2021) (managed by Sydney Trains/Transport for NSW on behalf of TAHE)²:

• Eveleigh Railway Workshops (SHI #4801102)

The RailCorp S170 Heritage & Conservation Register³ (2013) also includes a number of significant items of the rolling stock that have been noted to be located within the LES. They are as follows:

- FRN 2186 Second-class Sitting / Buffet Car (SHI #4807101)
- Locomotive Diesel 4401 (SHI #4807242)
- Locomotive, Diesel Shunting 7344 (SHI #4807250)
- MFS 2028 Second-class Sitting Car (SHI # 4807097)
- MFS 2096 Second-class Sitting Car (SHI # 4807089)
- MFS 2121 Second-class Sitting Car (SHI # 4807091)
- MFS 2145 Second-class Sitting Car (SHI # 4807095)
- TAM 1883 Main-line Sleeping Car (SHI # 4807079)

2.3. Heritage Items in the Vicinity

Table 2.1 provides a summary of the statutory heritage listings both included within as well as in the vicinity of the subject site as illustrated in Figure 2.2.

Table 2.1: Summary of heritage listings in the vicinity of the subject site

Item No.	Heritage Register	Item Name	Address
01140	SHR	ERW	Great Southern and Western Railway
01139	SHR	Eveleigh Chief Mechanical Engineer's Office and Moveable Relics	Great Southern and Western Railway
01234	SHR	Redfern Railway Station group	Great Southern and Western Railway
12223	SLEP 2012	Alexandria Hotel including interiors	35 Henderson Road
C1	SLEP 2012	Alexandria Park heritage Conservation Area	Alexandria
C3	SLEP 2012	Kingsclear Road Heritage Conservation Area	Alexandria/Erskineville

² TAHE s170 Register, 2021. https://www.transport.nsw.gov.au/projects/community-engagement/sydney-trains-community/heritage-and-conservation-register. Accessed May 2022

³ Transport RailCorp NSW, 2017. Section 170 Heritage & Conservation Register - Movable Heritage

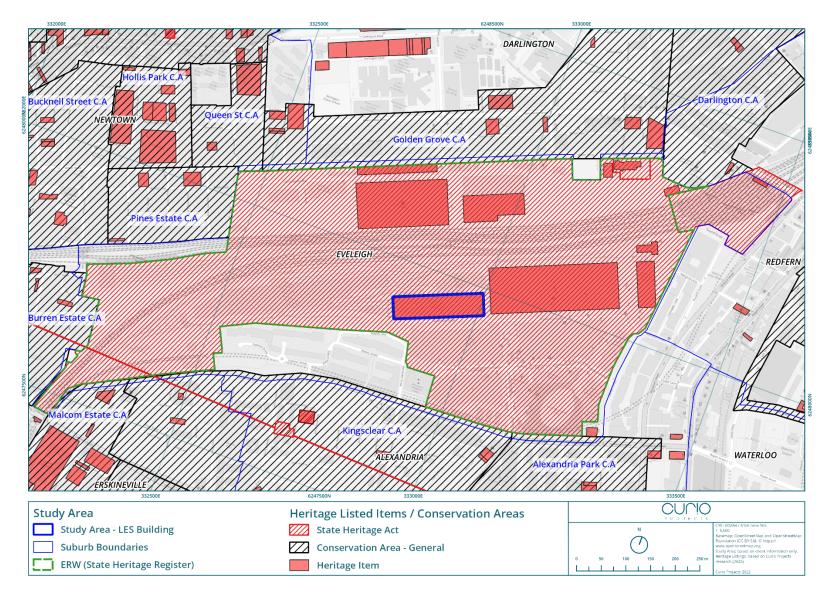


Figure 2.2: Heritage Items and Conservation Areas in the vicinity of the subject site. Source: Curio Projects, 2022.

3. Historical Summary



3. Historical Summary

This chapter provides a brief summary of the historical phases of use and development activity at the subject site to provide historical context.

The historical overview below covers the history of the subject site from 1794 onwards. For the pre-European environment and Aboriginal occupation of the subject site, reference should be made directly to the *LES Aboriginal Cultural Heritage Study & Statement of Impact* report (Curio Projects, 2022).

For ease of reference, this historical overview has been divided into four main sections, being:

Section 3.1—Early Land Grants

Section 3.2—ERW (Site Overview)

Sections 3.3 — South Eveleigh

Section 3.4—The LES

3.1. Early Land Grants

The land that makes up the Eveleigh Locomotive Workshops was originally part of a land grant given to John Davis in 1794. The grant was soon cancelled however, and the land itself ultimately became part of a 62-acre grant given to James Chisholm in 1835 (Figure 3.1). Chisholm, who had arrived in NSW in 1790 as a solider in the NSW Corps, would build himself a modest home in the northeast corner of the estate in 1820-1830. This house would be known as 'Calder House' and was occupied by Chisholm's widow and family for 18 years after his death in 1837. The group of stables were located in the area of South Eveleigh. In 1855 the Chisholm estate would be bisected into two parts by the construction of the western rail line running from Sydney to Parramatta and was eventually selected to be the site for the Rail Workshops in 1875 (Figure 3.2). Surrounding the Chisholm estate were two other land grants to the north and east. These included a 52-acre grant given to ex-convict William Hutchinson, and a 95-acre grant given to free settler William Chippendale, both in 1819. Both plots of land would later be subdivided into farmyards and estates, and then later into the familiar Redfern residential blocks in the 1850's 6.

Other significant early land grants surrounding Eveleigh included an 1819 grant of 52 acres to William Hutchinson- an ex-convict and successful businessman-, located directly north of Chisholm's estate (Figure 3.1), and 95 acres in 1819 to early free settler and land holder William Chippendale to the east of the Chisholm estate.

Other early land grants surrounding Chisholm's Estate included John King's 1794 land grant of 30 acres known as Kingsclear to the south, Nicholas Devine's 1794 land grant to the west, and Dr William Redfern's 100-acre Estate granted by Governor Macquarie in 1816 to the east. Redfern's Estate encompassed much of the area of the modern suburb of Redfern, of which ownership was retained by the Redfern family until the early 1840s.

⁴ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.8-9

⁵ Otto Cserhalmi + Partners 2002a, *Eveleigh Carriage Workshops: Conservation Management Plan- Volume 1*, Prepared for State Rail Authority of NSW

⁶ OCP Architects, 2022 (Curio Update). *ERW- Overarching Conservation Management Plan*, Prepared for UrbanGrowth NSW.

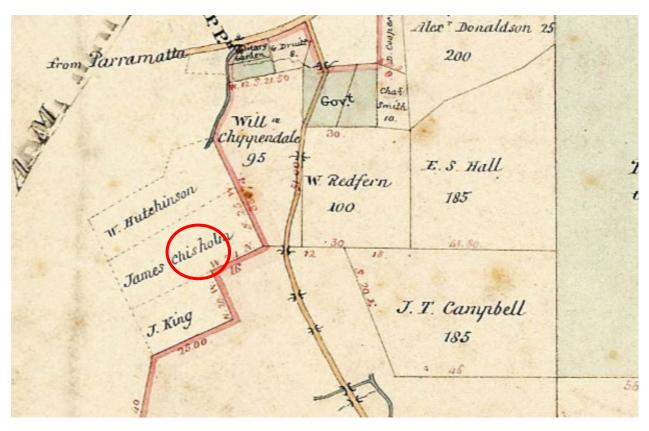


Figure 3.1: Undated map of Parish of Alexandria, early land grants. General area of the LES indicated in red ((Source: Historical Lands Record Viewer, County of Cumberland - Parish of Alexandria displaying Chisolm Estate)

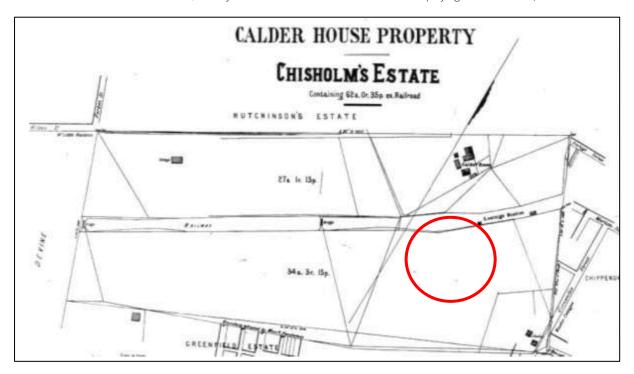


Figure 3.2: Chisholm Estate. General location of LES study area circled in red. ((Source: Australian Railway Historical Society, Eveleigh 1)

3.2. Eveleigh Railway Workshops (ERW)

The construction and opening of Sydney's first railway line in 1855 from Sydney to Parramatta was followed by rapid demand for, and growth of, rail infrastructure and transport in the second half of the nineteenth century. It soon became apparent that the small group of rail workshops at the original Sydney Terminal yards would no longer be sufficient to sustain the maintenance and operational needs of the NSW's burgeoning rail fleet, and that establishment of a new and expanded government-owned maintenance facility was required. Planning for the ERW commenced in 1875, followed by the resumption of the Chisholm Estate in 1878, excavation and land leveling in preparation for construction of the workshop facilities in the early 1880s, and construction of the main workshop buildings commencing in 1885. The ERW opened sequentially throughout 1887 as buildings were completed: first with the opening of the Locomotive Workshops on the southern side of the railway line, (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 northern side of the railway line (Figure 3.3 and Figure 3.5). 8

The operation of the ERW was divided into two main sections: the Locomotive Workshops (south) and the Carriage Workshops (north). The rationale behind the split of the complex to either side of the rail line was to allow both the Locomotive and Carriage Workshop facilities to interact independently with the central rail line avoiding any interference with rail traffic, while still allowing sufficient communication between the two workshops as part of an integrated whole.⁹

The opening of the ERW represents a fundamental phase of railway development in NSW. From the commencement of workshop activities in 1885, ERW was a major contributor to the establishment, operation, and growth of the NSW railway system, and in turn, was an essential part of the growth and development of the state of NSW from the late 19th century onwards. The ERW continued to steadily adapt and evolve through the late 1800s, eventually becoming the largest Railway Workshop complex in the southern hemisphere.

The character of the original buildings at the ERW have been described as:

The pinnacle of design and construction quality on the Eveleigh site was centred on the Locomotive Workshops, the Carriage and Wagon Workshops and Paint Shop. These buildings not only demonstrated the most up-to-date iron and steel technology but were given brick facades of a high quality, both in aesthetic and technical terms. The timber structures of the Stores Buildings (Stores 1 and 2) were comparably well detailed.

Perhaps the fact that the Government was able to justify the substantial expense for these carefully detailed and solidly constructed buildings reflected the fascination of the public with the still new and developing railway technology. In addition, the project was highly visible to commuters, and it seems likely that the Government wished to provide a showcase for its investment in this new technology. The quality of the buildings probably also reflects that they were designed and built during the boom period of the 1880s when obtaining funding for construction was presumably relatively easy. ¹⁰

The decline of the workshops from 1945 occurred due to a number of factors including the effects of World War II, the post-war boom and new Sydney suburbs opening up to satisfy housing needs. 11

⁷ Simpson Dawbin, 2003. Large Erecting Shop CMP, p. 9

⁸ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.10-12

⁹ OCP Architects (Curio Update), 2022

¹⁰ ibid: 28

¹¹ OCP 2002a

Other elements contributing to the decline of the workshops included the dramatic increase in motor vehicle sales that had a substantial impact on railway traffic, electric carriages were introduced to the system which were built with steel rather than timber and as Eveleigh was predominantly a timber workshop, workshops at Chullora had more suitable technology for steel carriage repair. As materials and technologies improved, so did their turn around time when repaired 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 down. Further, the Combined Unions Shop Committee at Eveleigh stated that the State Rail Authority deliberately ran down foundry work to make workers idle and to justify closure plans. ¹² By 1989, all work at the ERW had ceased, and the complex closed.

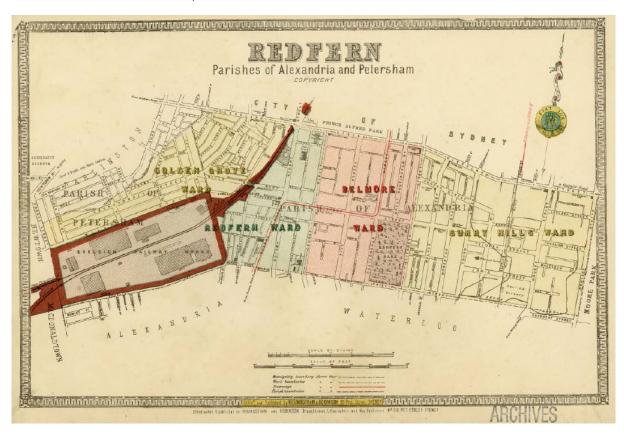


Figure 3.3: Parish of Alexandria and Petersham Map of Redfern (Source: City of Sydney Archives, 1-00530188, 1193-33)

¹² OCP Eveleigh Carriageworks CMP Vol.1, 2002.

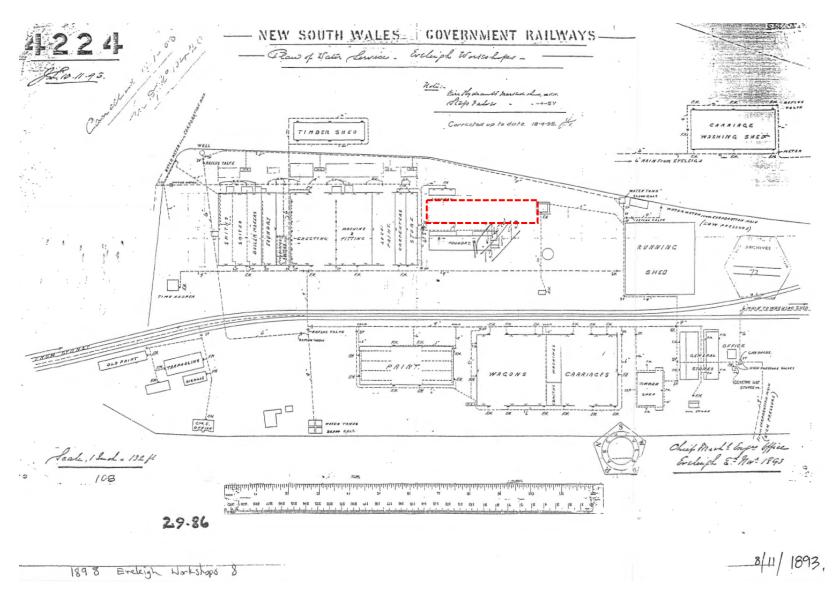


Figure 3.4: 1893 Site Plan of the Eveleigh Railway Workshops prior to the construction of the LES. Location of the subject site is marked in red. (Source: State Rail Authority Archives, NSW State Archives, 4224-72)

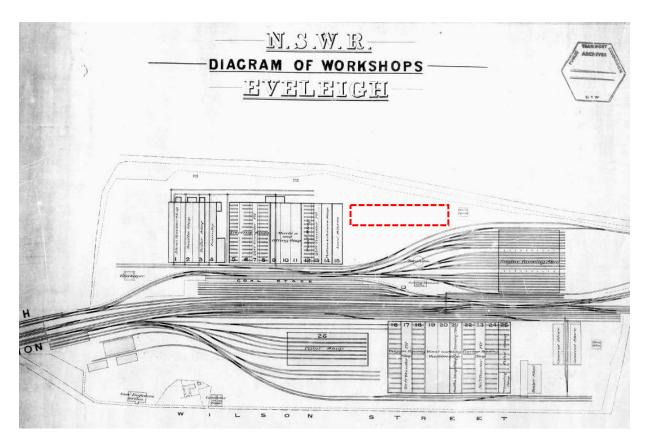


Figure 3.5: NSW Railways Diagram of Eveleigh Workshops, 1887, prior to the construction of the LES. Oriented to the South.

The study area location is marked in red. Source: NSW State Records (R560 1 11 7)

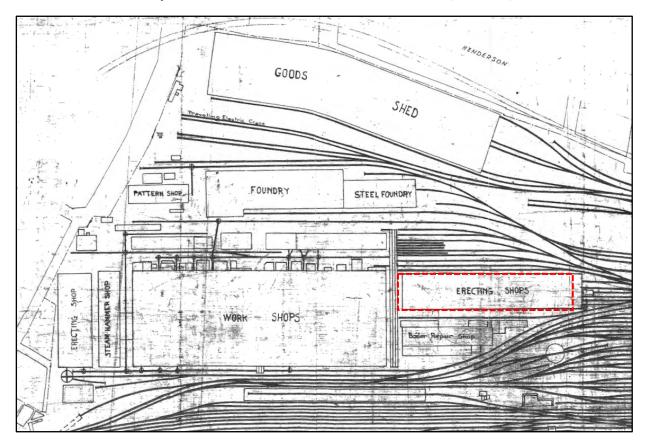


Figure 3.6: c1926 Extract from Site Plan from the Eveleigh Locomotive Workshops (ELW). The study area (red) is identified as "Erecting Shops". (Source: NSW State Library, FL8942147)

3.2.1. South Eveleigh

The Eveleigh Railway Workshops would become among the most important drivers in the expansion and development of the NSW Railway line, and therefore the growth of the entire state of NSW. Making use of then-state of the art iron and steel technology, the southern Locomotive workshops consisted of four main buildings, as well as several ancillary operations were also undertaken in other buildings around the site ¹³. These four major buildings were the Locomotive Workshops the Engine Running Sheds, the New Locomotive Shop, and the Large Erecting Shop ¹⁴. The largest and most prominent of these was the Locomotive Workshop, which consisted of 16 bays of equal size, with internal hollow-cast iron columns and wrought iron trusses, all topped with corrugated iron roofing. In the building's initial form Bays 1-4 and bays 5-15 were two separate structures, separated with by a laneway, but the two were united and the laneway renamed Bay 4a ¹⁵.

The Workshops at South Eveleigh operated in the following way:

- Locomotive Workshops: Manufacture and repair of parts were carried out in the Locomotive Workshops. Engines were put together in Bays 6-9 of the workshops
- Large Erecting Shop: After 1899, engines were also put together in the LES
- Engine Running Sheds: Locomotive servicing, cleaning and repairs were carried out and the sheds were capable of holding 126 engines at any one time.
- New Locomotive Shop: Locomotives were manufactured in the New Locomotive Shop form 1908

After the closure of the Eveleigh Workshops in 1988, a number of structures that were integral to the function of the workshops were demolished including the Pattern Shed, Foundry, Smith's Shops, the Wheelpress Shop and more.



Figure 3.7: View of the Locomotive Workshop before 1910, looking southwest (Source: State Rail Authority Archives, State Archives NSW, c53214-15923-NID601/1)

¹³ OCP Architects 2022 (Curio Update) p.28-29

¹⁴ Simpson Dawbin, 2003. Large Erecting Shop CMP, p. 52



Figure 3.8: Eveleigh Locomotive Workshop (undated image) (Source: State Rail Authority Archives, State Library of NSW, 15924-NID601/7)

3.2.2. North Eveleigh

The 1855 bisection of the Chisholm Estate by the Sydney to Parramatta railway line resulted in the North Eveleigh land remaining mostly undeveloped through the 1860s and 1870s. The Chisholm estate was resumed by the government for the ERW in 1878, with parliament voting to purchase the land for the compensation price of 100,000 pounds in 1879, and voting in agreement to construct and equip workshops in North Eveleigh at the cost of 250 000 pounds in 1880. ¹⁶ The 1881 Annual report of the general arrangement of the ERW confirmed the decision to construct the carriage and wagon shops and the general railway stores in Eveleigh on the northern side of the rail line (i.e., Eveleigh Carriage Workshops). ¹⁷ The Eveleigh Carriage Workshops comprised of a number of buildings each providing key roles in the function of work involved in the repairing and construction of carriages and wagons.

Excavations and levelling of land for the workshops began in 1882, with early excavation works across North Eveleigh resulting in two main different ground levels across the site, i.e., with the elevation of Wilson Street in the northwest being several metres higher than the level of the railway line in the southeast. In response to the resulting difference in elevations across the site at this time, a brick retaining wall was constructed along Wilson Street. A number of key structures and components contributing to the function of the Eveleigh Carriage Workshops site were constructed between 1884 and 1895 including:

Fan of Tracks (c.1882)

¹⁶ AHMS 2008.

¹⁷ OCP 2002a

- Carriage and Wagon Workshops (1887)
- Paint Shop (1887)
- Chief Mechanical Engineers Office (1887)
- Brick Retaining Wall (pre-1887)
- Stores No.1 and 2 (1883) (located in North Eveleigh West)

3.2.3. Redfern Station

The first 'Eveleigh Station' was constructed by NSW Railways in 1876, named after the nearby Eveleigh House, and was located 200 metres to the west of the current Redfern Station (i.e., approximately consistent with the location of Platform 1 of Redfern Station today). The second Eveleigh Station (the current Redfern Station) was built in 1886-87 and officially re-named Redfern Station in 1906.

The station was extended multiple times from 1891 until 1925 with the addition of new platforms and the construction of a footbridge at the southern end of the platform allowing access to the Eveleigh workshops from the station for workers. The footbridge was key in connecting both North and South Eveleigh and created a pedestrian thoroughfare for Eveleigh workers walking between the workshops and the Station as part of their daily commute to work (Figure 3.10).

The functional connection between ERW and Redfern Station significantly influenced the development and growth of Redfern Station throughout the years of function of the ERW. These influences remain most visible today at the southern end of Platform 1 (overlapping function between the Platform 1 Office, Elston's Sidings, and the Carriage Workshops), and in the general growth of the station that was required to manage and adapt to its primary use throughout the late 19th and 20th centuries by the ERW workforce (Figure 3.9).



Figure 3.9: View from Cornwallis Street across rail line to the south eastern end of Carriage Works. South Eveleigh Work Managers Office and Water Tower in foreground, undated (Source: State Rail Authority Archives, State Archives NSW, H58710-NID 591/1)



Figure 3.10: Southern footbridge across railway at Redfern Station, connecting North and South Eveleigh (Source: State Rail Authority Archives, State Archives NSW, NRS21573_2_PR000642_c)

3.3. Large Erecting Shop

The construction of the Eveleigh Locomotive Workshop involved the creation of the original erecting shop, taking up bays 5-8 of the Locomotive Workshop ¹⁸. Originating in English railway traditions of the mid-19th century, the term of 'erecting' refers in this context to both the construction of a steam locomotive from its various component parts, as well as the overhaul of a locomotive via dismantling, repair or reconstruction, and then subsequent reassembly ¹⁹. The word's English origins are reflected in the workshop's method of transporting and handling the engines with overhead cranes over access pits, which originated in the Crewe Works in London and North-West England. As part of the British Empire, Australian rail technology was heavily dependent on the designs and methods of England, and indeed the NSWR Chief Mechanical Engineer at this period, William Thow, was trained in the London and Northwestern Railways.

While this original erecting shop could hold 24 engines and 12 tenders for construction and repair, it soon became apparent that even this was not enough. By 1898, eleven years since the opening of the Locomotive Workshop, passenger numbers had increased by over 50%, and the amount of goods hauled by over 35% ²⁰. This rapid growth of the NSW Railway system naturally brought with it demand for new engines and vehicles for construction and repair. To answer this demand, a new erecting shop was built in 1899 (now known as the LES) to supplement and eventually replace the

¹⁸ NSW Railways, F Fewtrell, internally written 'History of Eveleigh Workshops' for Chief Mechanical Engineer, 1955, NSWR Mechanical Branch File No. 55/1 0322-39, p 1

¹⁹ Simpson Dawbin, 2003. Large Erecting Shop CMP, p. 10

²⁰ NSW Government Railways, Annual Reports, 1888 -1898.

increasingly inadequate working space of the original building's shop. Initial plans for this building name it simply as the 'Erecting Shop', and documents from the 1900 give it the name 'New Erecting Shop' to differentiate it from the old shop within the main building ²¹. When the New Locomotive Workshop was built to the west of the main workshop, to avoid confusion, the erecting shop was subsequently referred to as the 'Large Erecting Shop' (LES) or 'The Large' colloquially ²².

Built on an enormous concrete foundation, this new erecting shop consisted of brick walls with sandstone windowsills and was divided into two huge parallel galleries each separated by a row of iron pillars, separating it into 20 bays. With an effective floor space of 45,900 sq. ft., this new Erecting Shop had capacity for 32 engines simultaneously. Each of these galleries had three rail lines built into the floor for the locomotives to travel on, with pits for accessing the underside of the engines built into the ground between the outer two lines of each trio of rails.

Built into the supports of the roofing were four overhead travelling cranes, two for each gallery, which could pick up an entire locomotive and carry it over another ²³. These cranes were originally driven by a series of ropes and pulleys, but all but two of these were converted to electric power by 1910. Rectangular timber office structures were built throughout the centre of the building, which were used for supervision and administration by the Foremen and sub-foremen ²⁴. Soon after its construction, a traverser used to move the locomotives from inside bay 13 of the Locomotive Workshop to a more useful location in the space between the main workshop and the Large Erecting Shop ²⁵. The LES was subsequently expanded in 1906, consisting of a western extension of ten bays from the original 20, and increasingly the building's floor area by 50%. Two additional overhead travelling cranes were also added to the building, resulting in there being three cranes on either gallery ²⁶ (Figure 3.21 and Figure 3.22).

Figure 3.11 to Figure 3.20 show the detailed drawings of the built features and elements of the LES.

²¹ NSW Railways, Plan Nos. 38 -1/10 inclusive; NSW Railways, Railway Budget, July 21, 1900, p 240.

²² Fewtrell, op cit, p 2; NSW Railways, data-card formerly held by Archives section, copy held by Godden, Mackay, Logan, Redfern; NSW Railways, Mechanical Branch Shop Order, 28/6/1899; NSW Railways, Mechanical Branch, Locomotive Accountants data -card for Large Erecting Shop, No. 2/1 of 1899

²³ Simpson Dawbin, 2003. Large Erecting Shop CMP, p. 11

²⁴ NSW Railways, Railway Budget, July 21, 1900, p 240; NSW Railways, Plan No. 38 -11.

²⁵ Godden, Mackay, Eveleigh Workshops Heritage Study, 1986,

²⁶ NSW Railways, data -card formerly held by Archives section (but original since destroyed), copy held by Godden, Mackay; Fewtrell, op cit, p 2; NSW Railways, Mechanical Branch, Locomotive Accountants data -card for Eveleigh ('W&W) 1/1 of 1904.

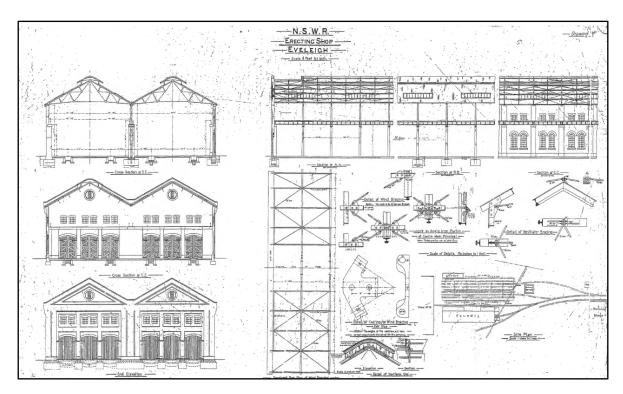


Figure 3.11: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-1)

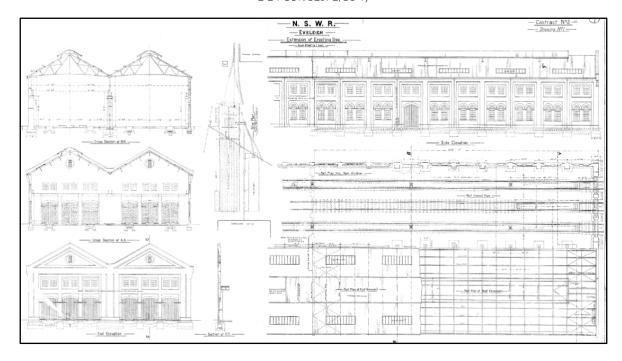


Figure 3.12: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-12

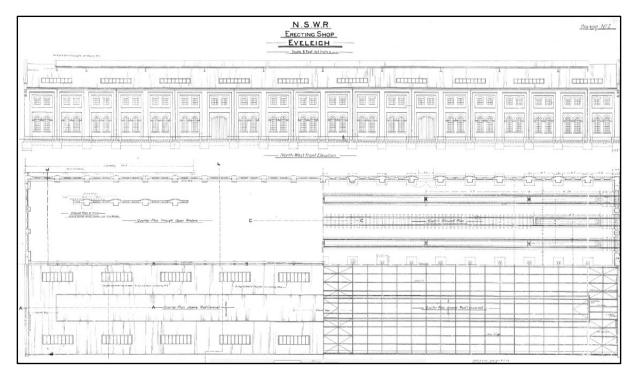


Figure 3.13: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-2

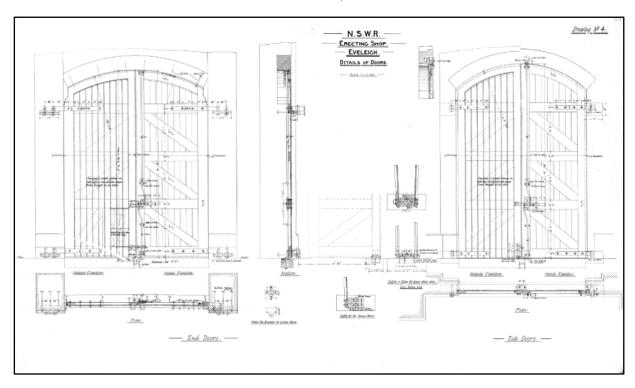


Figure 3.14: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-4

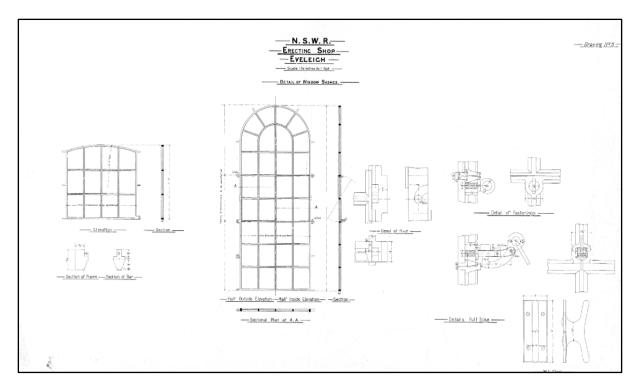


Figure 3.15: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-4

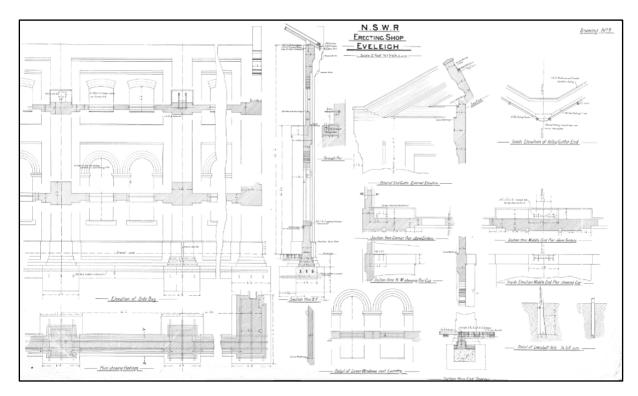


Figure 3.16: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-5

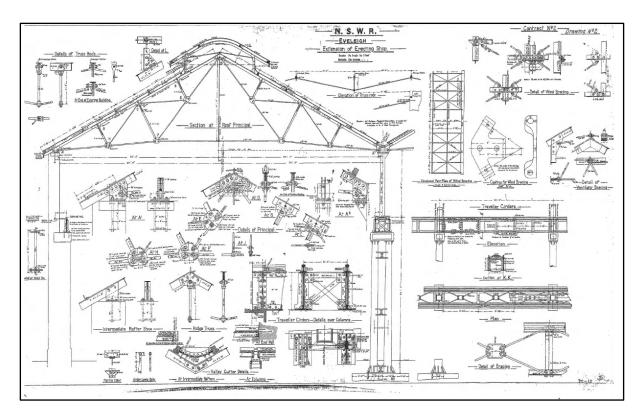


Figure 3.17: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-13

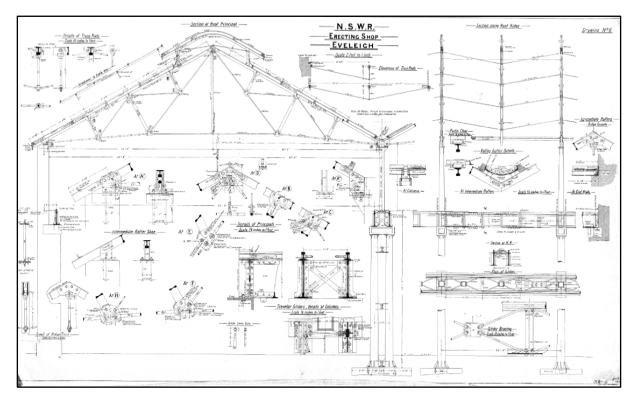


Figure 3.18: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-5

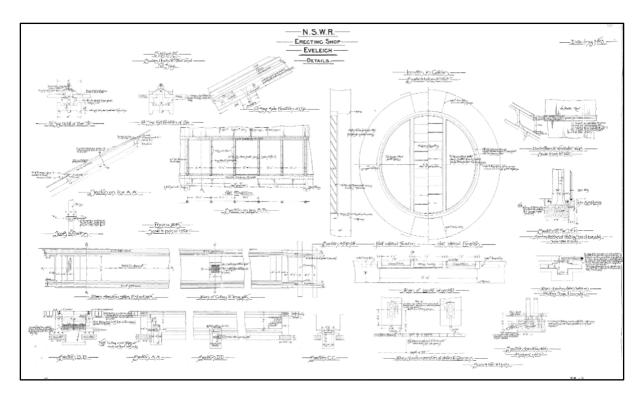


Figure 3.19: N.S.W.R Erecting Shop, Eveleigh. Drawings, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-3

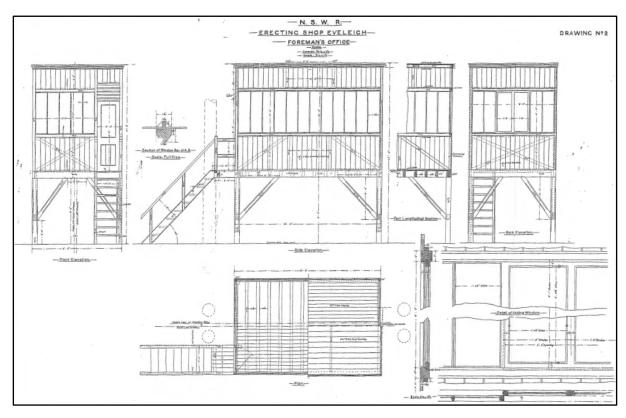


Figure 3.20: N.S.W.R Erecting Shop, Eveleigh. Drawings of the Foreman's Office, undated (Source: State Rail Authority, NSW State Archives, NRS-20550-2-24-COR/529P2, 38-7)

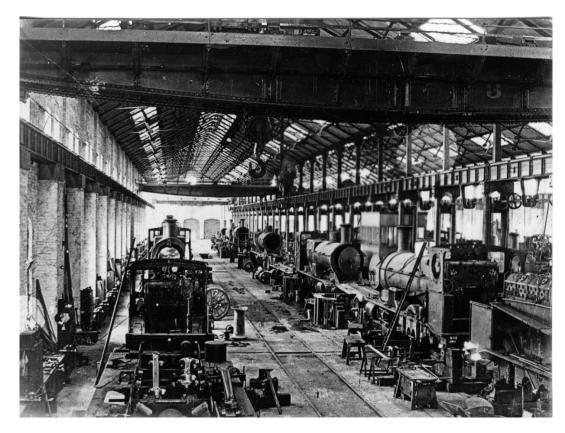


Figure 3.21: The Large Erecting Shop filled with steam engines. Note the benches covered in tools to the left and the foreman's sheds visible alongside the central columns (Source: State Rail Authority Archives, State Archives NSW, 30568, NID 601/23A))



Figure 3.22: One of the Large Erecting Shop's massive overhead cranes carries an engine's bogie, consisting of its wheelset and axles (Source: State Rail Authority Archives, State Archives NSW, 15941, NID 601/24)

3.3.1. Work Life in the Large Erecting Shop

The Large Erecting Shop soon became one of the most important parts of the overall Locomotive Workshop, acting as both the birthplace of the finished steam engines and as a reoccurring location in their lives. Work in the LES was known to be extremely dirty, noisy, and dangerous, but necessary, with fitters and turners in particular speaking of 'their time in the 'large' as one of the key parts of their basic training ²⁷. The Illustrated Sydney News puts it eloquently, describing the LES as one of the most important places in the lifespan of a locomotive:

"This is the hospital of the steam engine, which makes its start in life from here, returns from time to time for repairs during its career, and comes back finally, when worn out, for dismantlement-the locomotive's death." (Illustrated Sydney News 18 June 1891)²⁸

The process of overhauling or repairing steam engines was among the most consistent purposes for the LES, and the building was the only facility capable of these major overhauls at the time of its construction in 1899. This process was adopted from English traditions and could take a period of up to three months, usually involving the following steps

- "- Steam locomotives were listed for overhaul based on time and distance travelled and were regularly scheduled into workshops.
- Locomotives were brought to Eveleigh workshops and separated from their tenders, which were sent to other workshops. Accumulated dirt, coal and grease was removed either in the then adjacent Running Shed, or by steam cleaning teams working on open-air tracks on the south side of the LES.
- The engine was allocated to a fitter's pit and moved to its position inside the building on its wheels along the centre track in either section of the building (roads 2 and 5). Overhead cranes would then lift the engine from the centre track to its intended side pit track.
- The fitter and his team would progressively dismantle the engine down to its frame. All components were removed and sent elsewhere in the workshops.
- Heavy components were lifted by the overhead cranes, operated by a driver, although tasks such as lifting a whole engine, boiler, or a frame to release wheels, were handled by a 'heavy-lifting-gang' who were based outside the building nearby and specially brought in.
- All components and parts of an engine were sent away to adjacent workshops for cleaning, renewal and repair.
 - The engine was then reassembled to fully overhauled condition and repainted.
 - The overhauled engine was craned over to the centre track, prepared for running in steam on an open-air site nearby.

²⁷ Simpson Dawbin, 2003. Large Erecting Shop CMP, p. 16-17

- All working parts were progressively tested. It would be reunited with its tender and trialled for regular working. " (Simpson Dawbin 2003, p.12) ²⁹:

Beside the outer tracks of each of the two galleries there were areas left free for benches, which were built in rows back-to-back. These benches were allocated to the fitters for use as storage for equipment and tools, as well as for personal belongings. More senior fitters had an accumulated set of their own person tools, which were fiercely guarded against theft or relocation due to the time-consuming and strictly controlled way ordinary workers had to obtain tools from management. Seniority was also visible in the manner of dress, with a dust coat and bowler hat generally signifying a senior fitter or foreman, as well as work location, with workstations close to doors or extra lighting generally given to senior fitters ³⁰.

Sanitary facilities for the LES changed considerably over the years and were often inadequate for the extremely dirty and taxing work required of the fitters. As with the main Locomotive Workshop, open-air urinals located on six spots on the outer southern and northern walls of the building were present from the building's opening, which were considerably more primitive and lacking in privacy than facilities provided in Carriageworks to the north. Actual toilets and water-basins were not present in the LES until the 1930's, which came along with improved facilities built into the northern site of the building and several built into the building's interior.



Figure 3.23: The boiler of a locomotive is lifted above its bogie (Source: State Rail Authority Archives, NSW State Archives, 21822, B45594, NID 449/5)

²⁹ Simpson Dawbin, 2003. Large Erecting Shop CMP, p.12

³⁰ Simpson Dawbin, 2003. Large Erecting Shop CMP, p.17



Figure 3.24: A steam engine is lifted off its bogie by an overhead crane (Source: State Rail Authority Archives, NSW State Archives, B4553, NID 449/3)

3.3.2. Changes from 1906 Onwards

In 1919 a new foundry building was constructed to the south-east of the LES, replacing a similar building to the north. The older, northern building was converted to a repair station for boilers, smokeboxes, and ashpans coming from the main Locomotive Workshop, but soon move to predominantly repair boilers coming from the adjacent LES³¹.

A Roll of Honour was unveiled in 1917 along the eastern façade of the LES to commemorate the servicemen who died during or as a result of service with Australian military during the First World War (Figure 3.25). 32

In 1937 the 'Old' Erecting Shop located in the main Locomotive Workshop building was finally closed for good and was officially replaced by a new erecting shop located in the Chullora Locomotive Works. The Chullora Workshops would gradually take over the more modern aspects of locomotive construction and repair, namely the newer and more complicated C36's and 057 steam engines ³³. Despite this, the LES would continue to be responsible for the repair of Class 1 steam engines. These steam engines gradually became less and less common on NSW railways, and by the late 1960's the

³¹ Simpson Dawbin, 2003. Large Erecting Shop HIP, p. 14

³² State Archives & Records, NRS-15309 Photograph album of Eveleigh Workshops during the 1917 railway strike

³³ Locomotive Accountants card; for Loco erecting Shop, No. 1/1; Fewtrell, op cit, p 2.

Large Erecting Shop was changing to the repair and overhaul of diesel engines instead. By 1970, work on steam engines was no longer undertaken at all at the LES, which now exclusively provided maintenance facilities for the more modern diesel engines and their locomotive components³⁴.

By 1981 a final decision was made to relocate all state locomotive work to the workshop at Chullora, and the LES was leased to the heritage steam train operator company 3801 Limited, in 1985 ³⁵. 3801 Limited would retain the LES as a location for the storage and maintenance of heritage diesel engines and eventually heritage electric trains. In 2017, 3801 Limited terminated its use of the Large Erecting Shop ³⁶, and the site was put under the jurisdiction of Sydney Trains as the 'Eveleigh Precinct: Fleet Maintenance Division', being used for storage of a variety of heritage and modern locomotives.

The changes to the LES study area since its construction has been highlighted across Figure 3.28 to Figure 3.33.



Figure 3.25: Unveiling Roll Of Honour – Large Erecting shop" 1917 (Source: State Archives and Records, NRS-15309-1-1-[35])

³⁴ Simpson Dawbin, Large Erecting Shop CMP, 2003, p. 15

³⁵ Ihic

³⁶ Ben Graham, '3801 Limited cancels heritage train service after group locked out of Eveleigh rail workshops', *The Daily Telegraph*, March 9, 2017.

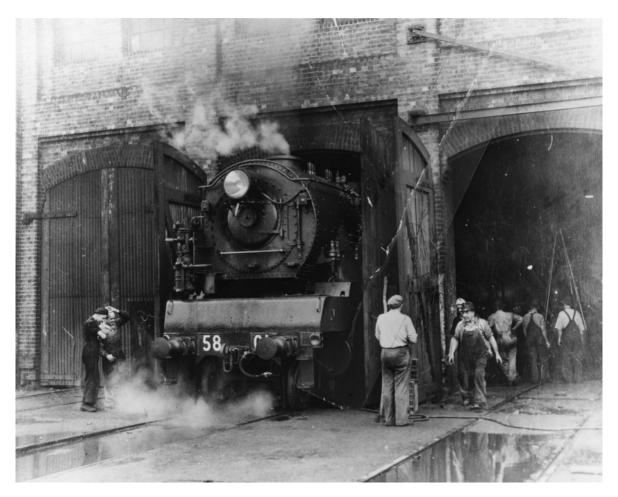


Figure 3.26: A steam locomotive engine leaves the Large Erecting Shop after maintenance (Source: State Rail Authority Archives, NSW State Archives, a014-a014000920))



Figure 3.27: The Locomotive Workshop in 1986, showing the traverser between the Locomotive Workshop and the Large Erecting Shop (Source: Godden Mackay Logan 2013, Australian Technology Park CMP Vol.)

3.4. Historical Summary Timeline (South Eveleigh)

Year	Event
Pre-1788	Land that would become the LES is occupied and maintained by the Aboriginal people of the Gadigal Clan
1835	Land is given via land grand to James Chisholm
1855	NSW first rail line constructed, bisecting Chisholm land at Eveleigh
1887	Eveleigh Railway Workshops constructed, consisting of the Locomotive Workshop and the Carriage Workshops
1899	Large Erecting Shop completed
c1901	Traverser No. 1 installed between Locomotive Workshop and Large Erecting Shop, following removal of earlier steam Ground Traversers from Bay 17 and 23 of Carriage Workshops Building.
1906	Large Erecting Shop is extended, adding an additional 10 bays, and increasing floorspace by 50%
1907	New Locomotive Shop is constructed at the northern end of the Locomotive Workshop. The 'New' Erecting Shop is renamed the 'Large Erecting Shop' to deter any confusion
1910	By this date all but two of the overhead cranes are converted from ropes and pulleys to electric power
1919	New foundry building constructed to the South-East of the LES
1924	Two additional overhead travelling cranes are installed into the LES
1937	'Old' Erecting Shop in main Eveleigh building is closed and facilities transferred to new Workshops in Chullora
1952	Two offices for sub-foremen with power points and lighting were installed and some pits were deepened 'after a trial'.
1957	In the 1950's, lighting was significantly improved and installed into the LES, as well as five additional power points for equipment and machines.
1965+	LES is altered for the repair and overhaul of diesel engines in addition to steam engines
1970	LES now exclusively repairs diesel engine locomotives
1981	All state-owned locomotive work is moved to the Chullora workshops
1985	Eveleigh Locomotive Workshop are closed, and LES is leased to the heritage steam train operator company, 3801 Limited
2009	Eveleigh Locomotive Workshop are redeveloped into Australian Technology Park

Year	Event
2017	Limited 3801 terminates its use of the LES
2017+	LES is owned by TAHE and managed by Transport Heritage NSW. The building sits within the precinct known as the 'Eveleigh Precinct: Fleet Maintenance Division' controlled by Sydney Trains.
2018- present	Heritage assets across NSW, including a number of items associated with the LES, started to be moved to a new undercover facility at Chullora

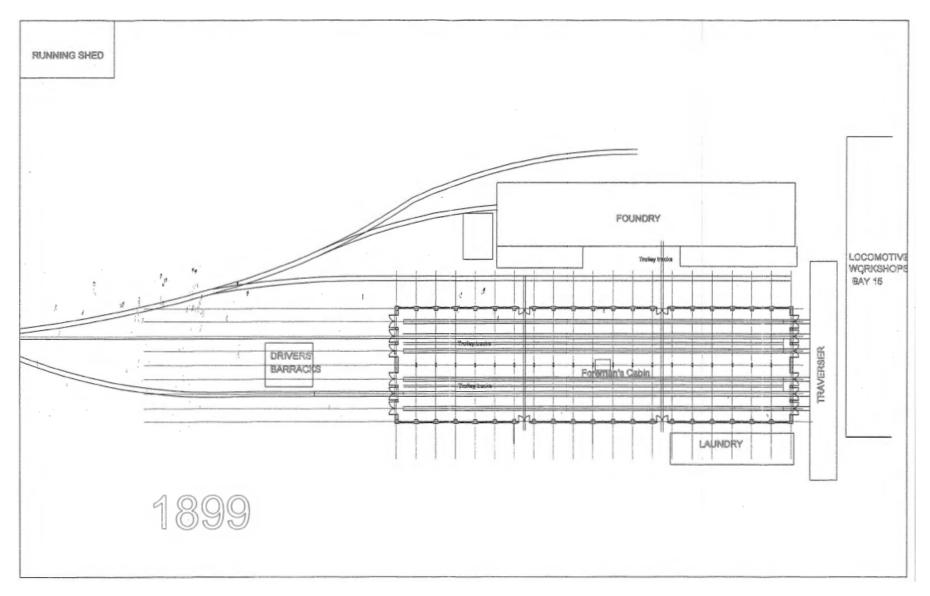


Figure 3.28: Site Development Plan for original construction of LES in 1899 (Simpson Dawbin Architects 2003, CMP, p.31)

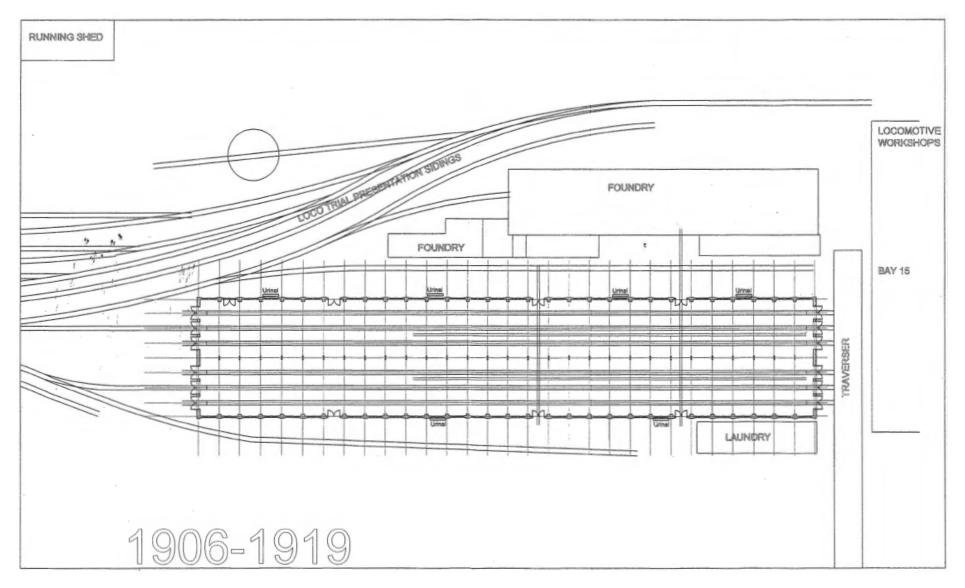


Figure 3.29: Site Development Plan for LES in 1906-1919 (Simpson Dawbin Architects 2003, CMP, p.32)

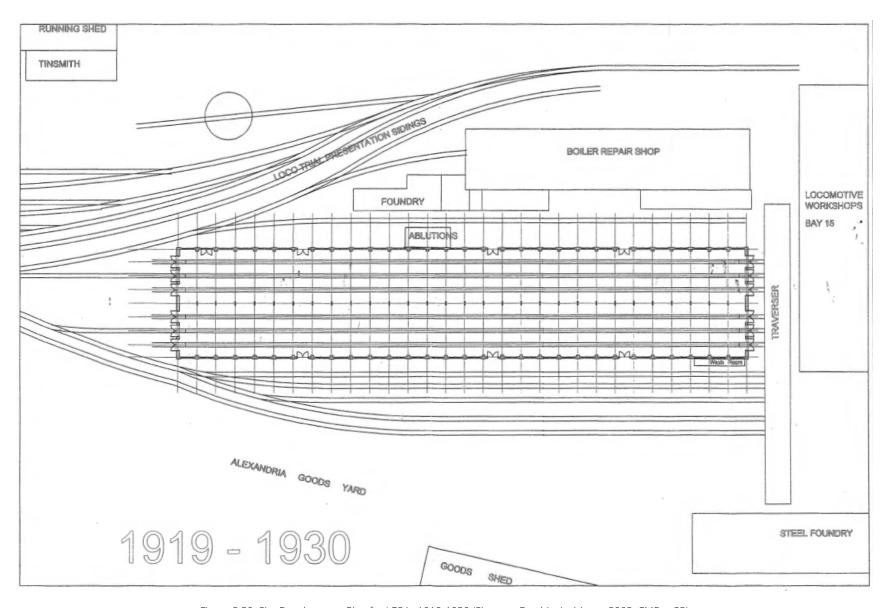


Figure 3.30: Site Development Plan for LES in 1919-1930 (Simpson Dawbin Architects 2003, CMP, p.33)

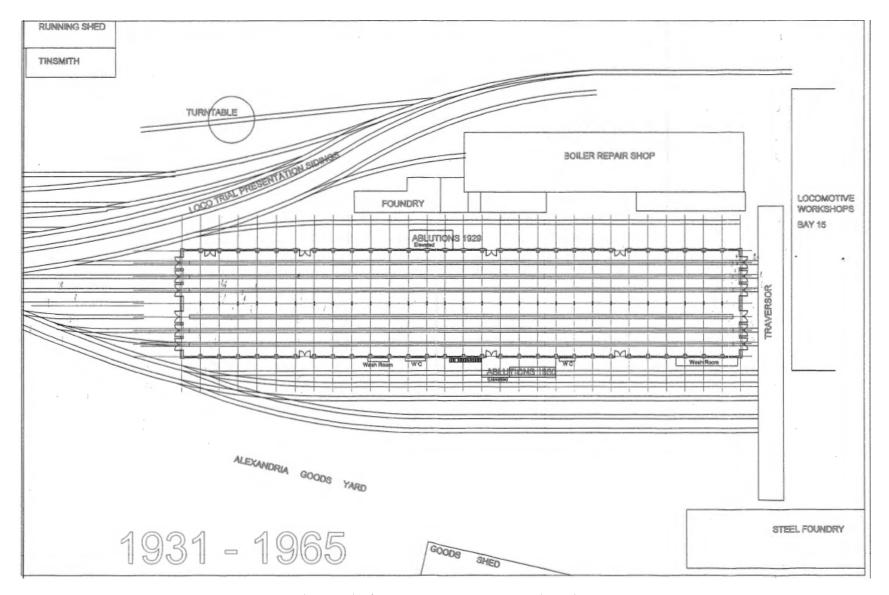


Figure 3.31: Site Development Plan for LES in 1931-1965 (Simpson Dawbin Architects 2003, CMP, p.34)

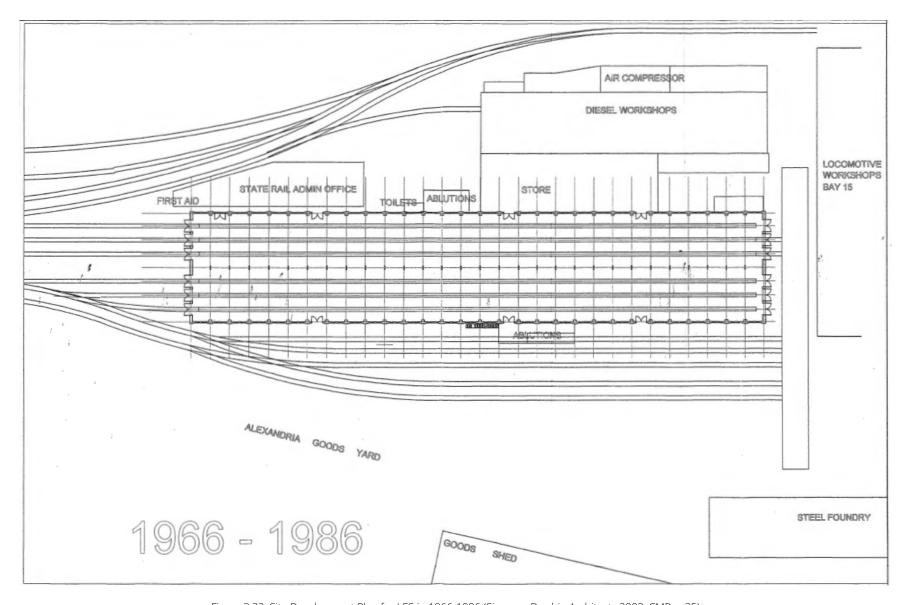


Figure 3.32: Site Development Plan for LES in 1966-1986 (Simpson Dawbin Architects 2003, CMP, p.35)

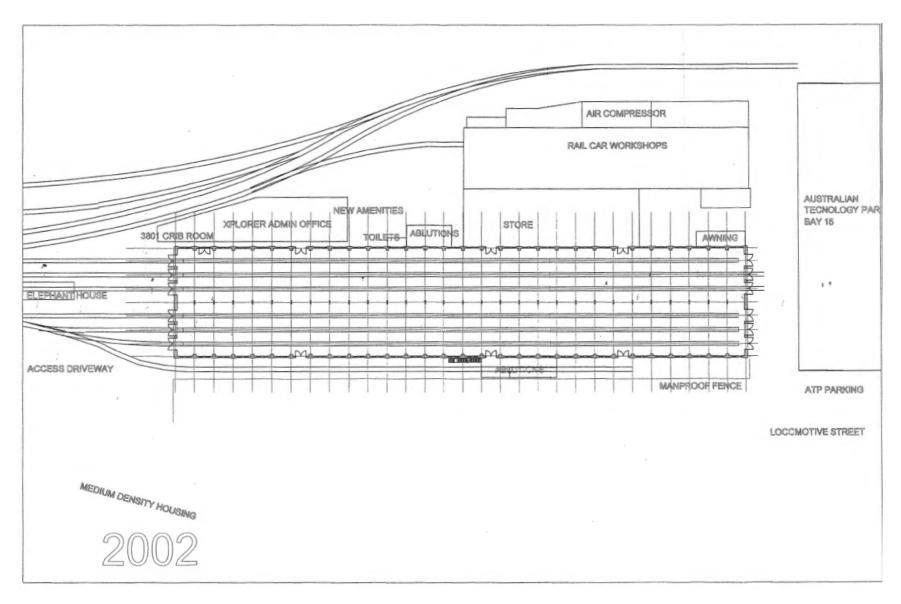


Figure 3.33: Site Development Plan for LES in 2002 onwards (Simpson Dawbin Architects 2003, CMP, p.36)

4. Physical Analysis



4. Physical Analysis

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

4.1. Eveleigh Precinct (TfNSW)

The LES building is owned by TAHE and managed by Transport Heritage NSW. The building is adjacent to several buildings associated with a variety of activities related to the Sydney Trains operations, and the area is identified as the Eveleigh Precinct. The adjacent buildings to the LES are as follows (Figure 4.1):

- LES Building (subject site)
- Oscar Maintenance Centre (OMC)
- Eveleigh Maintenance Centre (EMC)
- Downer Maintenance Centre (DMC) or Intercity Maintenance Centre (IMC) / RailConnect NSW
- United Group Limited Unipart (UGLU) (Stores)

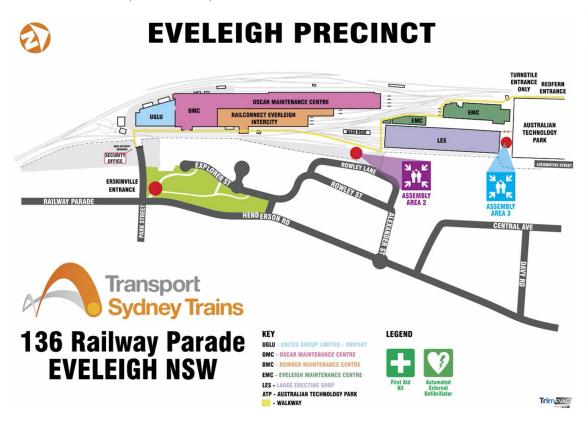


Figure 4.1: Eveleigh Precinct map. The subject site is indicated in lilac. Source: Sydney Trains, 2022.

The Eveleigh Precinct is delineated by the following sites:

- · North: Railway corridor and the North Eveleigh Precinct
- West: Railway corridor
- South: Locomotive Street, Channel 7 Global Television and Pacific Magazines Building (South Eveleigh Precinct), residences along Explorer Street and Rowley Lane
- East: Locomotive Workshop Building (South Eveleigh Precinct)

4.1.1. LES Building

The LES building (Figure 4.2 and Figure 4.3) is located at the eastern portion of the Eveleigh Precinct and has a total area of approximately 8300m² with a perimeter of roughly 474m. The building is bounded by Locomotive Street (Figure 4.4) and the Channel 7 Global Television and Pacific Magazines Building to the south; the Eveleigh Maintenance Centre (Figure 4.5), including the Administration Office (Figure 4.6), and an active rail corridor to the north; the Oscar Maintenance Centre (OMC) (Figure 4.7) and the Intercity Maintenance Centre (IMC) / RailConnect NSW building (Figure 4.8) to the west; and the Locomotive Workshop building immediately to the east (Figure 4.9).

The surrounding context of the subject site is characterised by a mix of residential, commercial, educational, and retail uses, located within the suburbs of Alexandria to the south and southeast, Erskineville to the west and Redfern to the northeast.



Figure 4.2: View of the LES western and southern facades. Source: Curio Projects, 2022



Figure 4.3: View of the LES western facade. Source: Curio Projects, 2022.



Figure 4.4: Southern façade of the LES along Locomotive Street and Road 7 Siding. Source: Curio Projects, 2022.



Figure 4.5: Eveleigh Maintenance Centre (EMC). Source: Curio Projects, 2022



Figure 4.6: Eveleigh Maintenance Centre Administration Building. Source: Curio Projects, 2022



Figure 4.7: Oscar Maintenance Centre. Source: Curio Projects, 2022.



Figure 4.8: Intercity Maintenance Centre (IMC). Source: Curio Projects, 2022



Figure 4.9: Locomotive Workshop Building. Source: Curio Projects, 2022

(a) Broader Setting

The LES is located on the southwestern side of the former ERW, adjacent to the South Eveleigh Precinct. The LES building is separated from Bay 15, the western extremity of the Locomotive Workshop, by an open carriageway providing access to the current EMC yard. This area was formerly occupied by a traverser used for transporting locomotives between the Locomotive Workshop and the LES³⁷. The building was designed to accommodate the fabrication, repair, and maintenance of the steam engines of the period in which it was built. The LES remains a prominent single purpose structure surviving on the ERW site. It is the most intact in terms of original fabric and functional layout, despite detracting extensions and redundant services attached to the building ³⁸.

The areas to the north and west of the building remain operational for Sydney Trains. Modern workshops and store buildings share the northern wall of the LES for part of its length (Figure 4.5). The LES windows in this section have been bricked over (Figure 4.18). The EMC Administration building for the rail car workshops is adjacent to the north side of the building towards the west end (Figure 4.6). A tall open-ended shed known as the Elephant House spans Road 3 near the western side of the LES³⁹ (Figure 4.10). This shed consists of a structural steel portal frame that is clad with a clip lock style metal external sheeting to the walls and a low pitch gable roof. Built in the 1980s, this

³⁷ SDA 2003 CMP p. 30

³⁸ Ibid p. 35

³⁹ Ibid p. 30

is used as an inspection facility for rail cars by Sydney Trains and has high level catwalks and accessways to facilitate access to the upper reaches of the trains.



Figure 4.10: View of the Elephant House to the west of the LES Building. Source: Curio Projects, 2022.

(b) Exteriors

The structure of the LES remains substantially as when finally completed in 1905 and, consequently, its original fabric and interior configuration are largely intact. The building measuring 184 metres long and 35 metres wide 40, externally consists of bare sandstock load bearing brickwork laid in an English bond pattern with the lowest 9 courses expressed.

The building is divided into 30 bays which are recessed in between engaged and expressed brick piers that run along its length. Corbelled brickwork mid-height transom and top head brickwork span between the piers. Each bay between the piers has four windows. A lower pair of taller semicircular head windows with weathered dressed sandstone sills contain mostly obscure wired glass in a 6×4 grid pattern cast iron frame. Six panes at the top of the cast iron frame are separated by cast iron radial muntins that follow the curved head around a muntin split semicircular pane. An openable cast iron sash with two rows of panes high midway pivots horizontally to provide airflow. Above the mid-height brick transom, a pair of smaller flat top arched head windows contain mostly obscure wired glass in a 3×4 grid pattern cast iron frame. The three courses of brickwork around the head of the windows are laid radially and are highlighted by their contrasting red colour against the dirty blackened patina of the cream-coloured bricks that make up the majority of the building. A decorative expressed brickwork detail defines the transition point at the base of the semicircular red brick curve on the larger lower windows (Figure 4.11).

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⁴⁰ SDA 2003 CMP p. 31-35

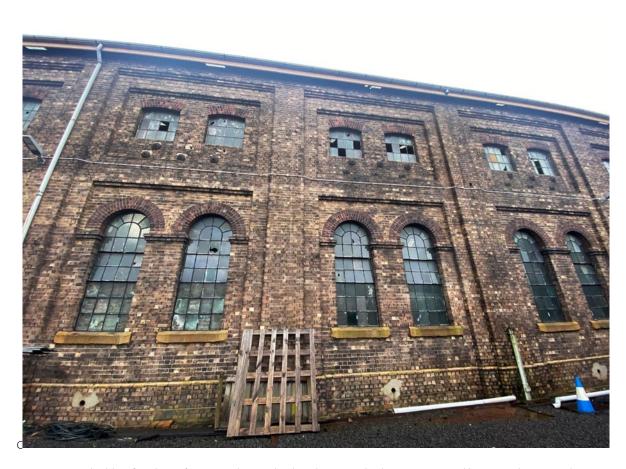


Figure 4.11: LES building facade configuration showing brickwork, engaged columns, upper and lower window example. Source: Curio Projects, 2022

The eastern (Figure 4.12) and western ends (Figure 4.3) of the LES are double gabled with detailed pedimented brickwork and a stone top capping. Each tympanum contains a central ocular window with a 3-course red brick perimeter. These central windows have a vertical band of openable horizontal glass louvres with a fixed pane either side. There are 12 flat top arch head windows matching the style and height of the upper bays on the sides of the building. A centrally located straight ladder supported by cross bracing back to the façade provides maintenance access to the valley of the roof. Entry to the western end is via six large pairs of arched head heavily braced timber doors that outwardly open on external heavy steel strap hinges. These doors were installed to replace the original doors that were heavily damaged and deteriorated. Six tracks (Roads 1-6) enter the building with a seventh track (Road 7) forming a siding that extends almost the full length of the southern side of the LES and is used to store rolling stock. This siding is bounded by a security fence running parallel between the LES and Locomotive Street.



Figure 4.12: Eastern façade of the LES showing the corrugated iron clad doors and infills. Source: Curio Projects, 2022

The eastern end of the LES has had all of the doors deteriorate to the extent that they have been sheeted with corrugated iron and held together with temporary repairs ⁴¹ or removed and infilled with a timber frame clad in corrugated iron, however, their physical integrity remains highly compromised. A war memorial Roll of Honour that was 'Erected by the Large Erecting Shop' is centrally placed on the eastern facade.

In 1939, corrugated iron sheeted ablution facilities were built on a concrete suspended slab on outrigger brackets about five metres above ground and attached to the outside of the northern wall (Figure 4.13). They were accessed by a set of stairs below which have since been removed. As a result, the facilities are now inaccessible. There are 13 northerly facing windows assumed to be one for each stall and one westerly facing window at a high level. The underside of the ablution block has been partially filled in with brickwork and corrugated iron to form another storeroom below with three lower-level northerly facing windows. The room is currently inaccessible.

The LES has been subject to intermittent ad-hoc modification, with the facade bearing evidence of past minor alterations and extensions (Figure 4.14). Original fabric has been generally left in place or built over⁴², however, minor changes to brickwork, windows and openings, evidence of roof flashings, sectionally painted walls and remnant fixings, bracketry and redundant services remain scattered across the facades. Three pairs of arched timber side doors are located within the southern wall (Figure 4.15) along with a series of single escape and access doors that appear to have been added to the building over time (Figure 4.16 and Figure 4.17).

⁴¹ SDA 2003 CMP p. 35

⁴² Ibid

Corresponding doors are located in the northern wall; however, several have been bricked over to close off the store behind. This is also the case for a few of the northern windows that have been modified into doors or bricked over to close them off (Figure 4.18).



Figure 4.13: Northern Ablutions Facility and Store. Source: Curio Projects, 2022.



Figure 4.14: Evidence of past ad hoc modification. Source: Curio Projects, 2022.



Figure 4.15: South wall double entry doors. Source: Curio Projects, 2022.



Figure 4.16: South wall single entry doors and modified window. Several glass panels of the existing windows are damaged and require replacement. Source: Curio Projects, 2022



Figure 4.17: South wall single entry doors. Source: Curio Projects, 2022.



Figure 4.18: South wall double entry doors. Source: Curio Projects, 2022.

Roof and Roof Structure

The LES was reroofed in 1997 with metal gutters and downpipes also replaced ⁴³. The contemporary detail for the reroofing departed from the original and distinctive design of a longitudinal (east-west) raised and curved roof monitor along the two ridges. The new metal roof now has transversely placed Perspex skylights spaced along its length (north- south) and a row of extraction fans with raised circular cowlings spaced evenly along the inner most side of the two ridges providing ventilation. The structure of the double gable roof consists of fabricated steel trusses comprising rail track sections for roof beams and top chords ⁴⁴ and bolted junction plate bracketry joining round steel cross braced framing members and bottom chords.

The roof is supported midspan by a paired row of cast iron columns (Figure 4.19) that also serve for roof water drainage ⁴⁵ and were the support for the central transmission shaft, the overhead crane inner rails and a variety of compressed airlines, steampipes and cabling runs. Electric high bay lights are hung from the roof structure to provide minimal supplementary light when the main natural light source from the skylights is not effective.

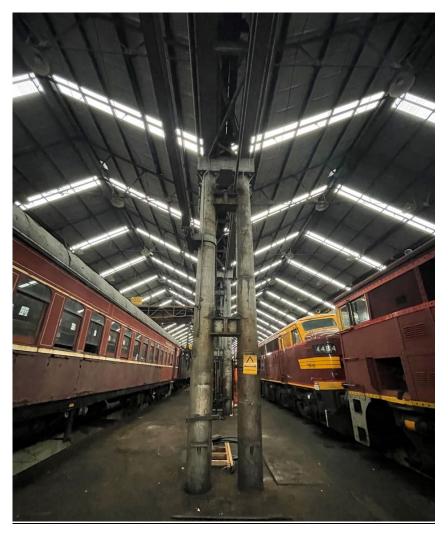


Figure 4.19: Cast Iron Columns Supporting the Roof Structure. Source: Curio Projects, 2022

⁴³ SDA 2003 CMP p. 32

⁴⁴ Ibid

⁴⁵ Ibid

(c) Interiors

Internally, the LES is divided into two parallel galleries longitudinally along its central axis by a row of cast-iron pillars which support the roof and the innermost rails for the seven travelling overhead cranes. Each gallery has three parallel rail lines (Roads 1-6) laid along the floor in concrete. The outer two lines in each gallery (i.e., on roads 1, 3, 4 and 6) have concrete access stairs leading to undercarriage Inspection pits between the rails to facilitate repair work beneath trains on the respective tracks (Figure 4.20). The full-length pits to the four pit roads and short pits to the clear centre road at the western end remain as originally constructed beside the replacement of original timber slab floors with concrete paving. Several smaller 610mm (2ft) gauge 'tramway' tracks run parallel to the 'pit' tracks ⁴⁶. Men used these tramways to push trolleys loaded with equipment and parts to and from the 'pit areas' to the various other workshops where they were manufactured or repaired.





Figure 4.20: North Eastern View of the Road 1 Pit. Source: Curio Projects, 2022

Figure 4.21: Eastern end of the Southern Gallery. Source: Curio Projects, 2022

Overhead Cranes

Overhead cranes on high level rails with glass windowed underslung operator cabins are spread throughout (Figure 17). The operational status of these cranes is unknown however previous studies indicate that some of them are no longer operational.

The southern gallery contains two cranes:

- No. L 28, installed 1904, DC electric operation, Craven, truss/girder type, located at the western end.
- No. L 25, no date, DC electric operation, two truss type also located at the western end.

The northern gallery Contains five cranes:

- No. L 20, installed 1899, DC electric operation, Craven, cannibalised for DC spares, truss/girder type, located at the west end.
- No. L 23, installed 1904, upgraded to AC electric operation, Craven, girder type 40/12 tonnes lifts, located at the west end.
- No. L 27, installed 1899, upgraded to AC electric operation, girder type 40/12 tonnes lifts, located 1/3 midway.⁴⁷
- No. LC 829, no date, DC, electric operation, truss type, located 2/3 midway.

⁴⁶ SDA 2003 CMP p. 14; 34

⁴⁷ SDA 2003 CMP p. 13

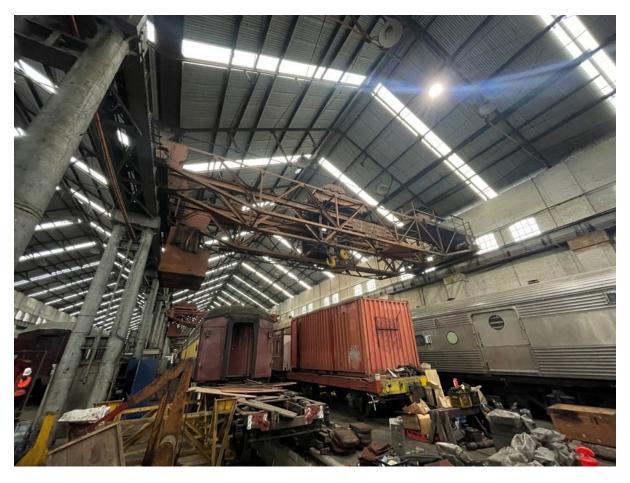


Figure 4.22: North eastern view of the Road 1 Pit. Source: Curio Projects, 2022

Internal Fixtures, Fittings and Finishes

The original main switchboards serving the building are located in several places around the perimeter walls. Conduits extend throughout the building in an ad-hoc fashion with cast iron switch boxes and power outlets in various locations throughout. Redundant electrical insulators on metal brackets under the bottom truss chord evidence early primitive power running throughout the building. Compressed airlines and water pipes are run throughout mostly at a high level with dropper outlets abundantly located on the perimeter walls and central columns throughout providing access for the workers.

A series of small moveable timber cabins are scattered around the building most likely placed to suit the operational needs of the time (Figure 4.23). Some have been utilised as offices and others are used as amenities, for storage of archives and records and storage of small parts 48.

Various metal locker style storage cupboards, timber and metal workbenches, drums, train parts and tools are scattered throughout the building, mostly around the perimeter walls and against the central columns (Figure 4.24 and Figure 4.25). A Large cast iron radial arm drill press and a plate roll former are all that remains of the heavy machinery that would have once littered the workshop.

The patina, age, and aesthetics of remnant and/or redundant fixtures, fittings and finishes, including the elements described above add to the overall character of a place and are evidence of the site's

⁴⁸ SDA 2003 CMP p. 33

former uses. They often add to the interpretative experience of a site and can be utilised to demonstrate the evolution of the site, both in terms of technological advances and change of use.



Figure 4.23: Workshop cabin between Road 3-4 East. Source: Curio Projects, 2022.



Figure 4.24: Metal tool storage cupboard example. Source: Curio Projects, 2022.



Figure 4.25: Workbench located between Road 3-4 West. Source: Curio Projects, 2022.



Figure 4.26: Plate rolling machine located on Road 4 East. Source: Curio Projects, 2022

4.1.2. Other Buildings within the Eveleigh Precinct

Building **Location & Description**

Images

Oscar Maintenance

The OMC is located to the north west of both the LES and South Eveleigh Precincts and within the rail corridor that creates the north **Centre (OMC)** and western borders of the site, the OMC is of structural steel portal frame construction with precast concrete decorative façade panelling bays separated by expressed precast columns that are contrasting in colour to the bays. The majority of the bays have a corrugated fibreglass light panel in the upper half. The OMC has metal clip lock style roof with transversely located Skylight panels and metal gutters and downpipes.



Eveleigh Maintenance Centre (EMC)

The EMC is located to the north of the LES at the eastern end and outside the north western corner of the South Eveleigh Precinct. The EMC consists of a large main shed which is of metal construction with metal clip lock style sheeting, integrating a store that is attached to and shares a common wall with the north eastern side of the LES. The main shed has a gable roof with three large openings on both the eastern and western ends with tracks running through. The store has flat roof and two smaller vehicular entries on each end. The eastern end of the store has an open yard which contains a small awning against the Northern wall of the LES. The EMC is accessed from Locomotive Street via a vehicular carriageway between the eastern end of the LES and Bay 15 of the Locomotive Workshop or via the rail corridor to the west.

A second building used as the EMC administration building is fabricated from brick with a flat metal roof and is located to the north of the LES at the eastern end. The building has a singular story at its western end and is double story at its eastern end.





Building

Location & Description

Images

Downer Maintenance Centre (DMC) or Intercity Maintenance RailConnect NSW

Located to the west of both the LES and South Eveleigh Precincts and within the rail corridor that creates the north and western borders of the site, the IMC adjoins the Southern wall of the OMC Facility at the most western end. The IMC is of structural steel portal frame construction with precast concrete decorative façade panelling Centre (IMC) / bays separated by expressed precast columns that are contrasting in colour to the bays. The majority of the bays have a corrugated fibreglass light panel in the upper half. The OMC has metal clip lock style roof with transversely located Skylight panels and metal gutters and downpipes.







Limited Unipart (UGLU) (Stores)

United Group The UGLU is located at the western end of the Eveleigh Precinct. This building, signposted as the Administration and Production HUB, is attached to the OMC at the western end. The building is fabricated from brick with a flat metal roof and is located to the north of the LES at the Eastern end. The building is double story with a single-storey attachment to the north adjoining an awning.

> A curved roof shed fabricated of clip lock style metal sheeting with two large roller doors on its eastern end is the most western building of the Eveleigh Precinct. It is located across a vehicular carriageway to the west of the UGLU.





4.2. South Eveleigh Precinct

The South Eveleigh Precinct is adjacent to the Large Erecting Shop to the northwest and takes up what was once the southern side of the wider ERW. Three key heritage items remain within the Southern Eveleigh Precinct curtilage. These include:

- Locomotive Workshop
- Former Works Managers Office (currently The Bell Tower)
- Water Tower
- Former New Locomotive Workshop (currently National Innovation Centre)

Modern Buildings on Site include the

- The Axel Building
- The Foundry Building
- Channel 7 Global Television and Pacific Magazines (Media City) Building
- South Eveleigh Community Building
- National Information and Communication Technology Australia Ltd (NICTA)
- Biomedical Building
- NSW Transport Management Centre / Sydney Ambulance Centre

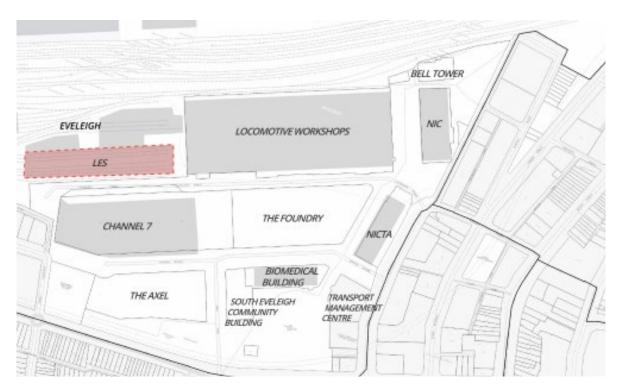


Figure 4.27: The subject site and the existing buildings within the South Eveleigh Precinct. Source: Curio, 2022.

The following physical descriptions draw primarily upon the research undertaken and synthesised in Section 3.1of the *Australian Technology Park – Conservation Management Plan* prepared by Godden Mackay Logan (2013)

4.2.1. Locomotive Workshop

The Locomotive Workshop (Figure 4.28), the most prominent building at South Eveleigh, next to the LES, comprises a two-story sandstock brick structure, of Neo-Classical form with sixteen work bays of equal size (Bays 1-15), and consists of a repeated series of cast iron columns, wrought iron trusses and corrugated iron roofing. Built in 1887, the Locomotive Workshop was responsible for the

manufacture of the iron and steel components of steam locomotives and contained work bays for construction, repair, and dismantling. ⁴⁹

Since it's decommissioning as part of the Eveleigh Workshops, the building has been modified over time to reposition it as a centre for technology and innovation (ATP). This includes a major redevelopment in 1993 as part of the Australian Technology Park, and its subsequent transferal to Mirvac in 2016. As part of its recent redevelopment and renewal of the site, Mirvac removed the 1990s fitout and replaced it with a contemporary multi-use space that hosts a variety of commercial and retail tenancies, as well as an interpretive heritage exhibition that showcases a substantial portion of the site's workers stories, photographs and heritage moveable collection, including equipment, machinery, tools and other significant artefacts discovered during the removal of the 1990s fitout and construction of the new base build.

Importantly, the Blacksmith's Workshop has been retained and upgraded, as part of the renewal of the Locomotive Workshops to meet current user and safety requirements, for the tenant, Blacksmith, Eveleigh Works. Designed to be both utilised by the Blacksmith and for the observer, Bays 1 and 2 provide an exciting space in which to learn, observe and enjoy the significant work of former and current blacksmiths on site.



Figure 4.28: The Locomotive Workshop building. (Source: Mirvac 2022, accessed on 17 March 2022 from https://www.mirvac.com/office-and-industrial/office/nsw/locomotive-workshop)

4.2.2. The Bell Tower - Former Works Manager's Office

The former Works Managers' Office (Figure 4.29) is in the northeast corner of South Eveleigh Precinct and is part of the heritage-listed curtilage of the ERW, being located to the northeast of the Locomotive Workshop and opposite the National Innovation Centre. The building was renamed The Bell Tower in 2021 and consists of a two-storey rendered masonry building, painted light grey with

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⁴⁹ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.46-47

maroon trimmings and details. It was also subject to relatively minor changes in 2021 to allow the building to be adaptively reused for small-scale offices and meetings room has recently been subject to sensitive internal upgrade ⁵⁰

The Works Managers' Office served as the main office for the managerial and administrative staff of the ELW, including timekeepers, paymasters, and a variety of clerks. Completed in 1887, the original building was expanded in 1922 and again in 1944⁵¹. The latter addition gave the building its signature T shape and is retained in the building's current external form. The building operated as commercial and management offices from 1994-5, known as the International Business Centre, receiving several interior renovations and reconfigurations, before being refurbished and renamed The Bell Tower in 2022 for its continued use as office space. The name for the 'Bell Tower' came from the roof-mounted bell which was used to alert the workers to start of day, breaks and end of day. The bell was so accurate, residents from Redfern all the way to Bondi set their watches by the ring of the daily bell.⁵²



Figure 4.29: Western and southern façades of Work Managers Office and Bell Tower (Source: Curio Projects 2022).

⁵⁰ Weir Phillips, 2020. *Heritage Impact Statement – The Former Work Manager's Office, The International Business Centre.*

⁵¹ Gazzard Sheldon Architects 1992, Conservation Plan for the Work Managers Office Eveleigh Railway Workshops, p.5-6

⁵² R.G Preston, The Eveleigh Locomotive Workshops Story, Australian Railway Historical Society, Sydney, 1997, p.4



Figure 4.30: Eastern façade of the former Works Managers' Office, now The Bell Tower. (Source: Curio Projects 2022)

4.2.3. The Water Tower

The Water Tower, located opposite The Bell Tower, is a square, wrought iron and steel structure that served as a water reservoir for the Eveleigh area, and now serves as a landmark and wayfinding aid. ⁵³. It was recently subject to major conservation and safety upgrade works to ensure it's preservation for the future ⁵⁴.

⁵³ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.48-49

⁵⁴ Ibid p.49

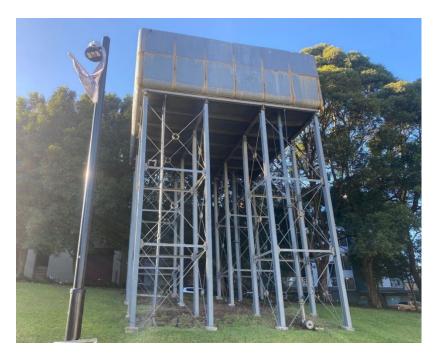


Figure 4.31: Water Tower, South Eveleigh (Source: Curio Projects, 2022)

4.2.4. National Innovation Centre - Former New Locomotive Workshop

The New Locomotive Workshop building, currently the National Innovation Centre (NIC), served as one of the later buildings in which the new locomotives were constructed on site and is located to the east of the Locomotive Workshop building ⁵⁵ (Figure 4.32 and Figure 4.33). Constructed as a masonry building with steel columns and a corrugated iron roof, the building once consisted of two bays fitted out as a workshop for locomotive construction. It also served as, as one of the workshops' only proper washing facilities. The building has since been retrofitted into a multi-purpose office space for Cicada Innovations, consisting of three levels and a central atrium ⁵⁶.

⁵⁵ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.48

⁵⁶ Ibid

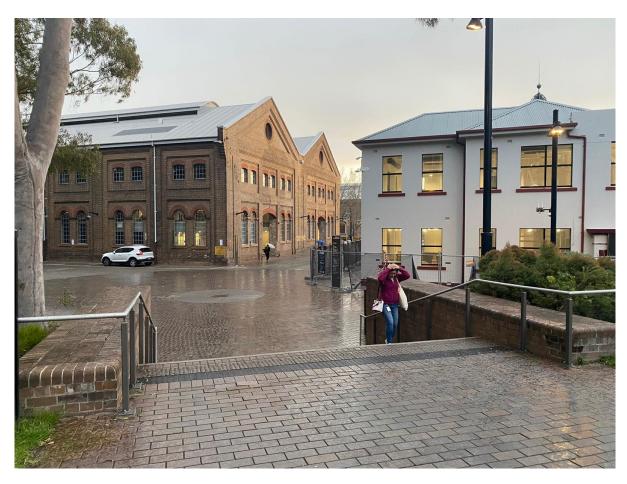


Figure 4.32: View of the eastern and northern facades of the NIC to the left and the Works Managers' Office to the right. (Source: Curio Projects 2022)



Figure 4.33: Former New Locomotive Workshop, now National Innovation Centre. (Source: Cicada Innovations, 2022, accessed 20 May 2022 from https://www.cicadainnovations.com/about-2)

4.2.5. South Eveleigh Redevelopment

The Foundry is an eight-storey building located directly to the south of the Locomotive Workshop across Locomotive Street (Figure 4.34). Constructed in 2020, the building stands on what was once the Foundry for the Locomotive Workshop and was responsible for the casting of tools and locomotive parts from a variety of moulds. The building now serves as major office space for the Commonwealth Bank of Australia, as well as housing a variety of commercial and retail tenancies ⁵⁷.

The Axel Building is nine storeys high and located directly to the south of the Channel 7 building and west of the SEBC making use of glass and orange coloured panelling (Figure 4.35). Similar to The Foundry building, the majority of the Axel building houses commercial offices connected with the Commonwealth Bank of Australia with retail tenancies located on the ground floor ⁵⁸.

The Channel 7 Global Television and Pacific Magazines (Media City) Building is located directly to the south of the Large Erecting Shop and west of The Foundry and consists of an eleven-storey media complex, which houses the head offices for the Seven Network, Pacific Magazines, and Global Television (Figure 4.36). Built in 2010, the building is made predominantly of reinforced concrete with external steel shading which alludes to the wider precinct's industrial nature. The southwestern wing of the building is much lower, with only 4 stories, to mirror the height of the adjacent LES and Locomotive Workshop, softening the transition between the heritage and the contemporary buildings ⁵⁹.

In the centre of the South Eveleigh Precinct, to the southwest of The Foundry Building and east of The Axel building is the precinct's community centre, the South Eveleigh Community Building (Figure 4.37). Completed in 2019, the four-storey building contains a variety of community spaces, including a leisure space and a childcare centre, as well as a number of retail tenancies. The rooftop of the SEBC also comprises a public accessible native rooftop garden, using principles of traditional indigenous plant knowledge to cultivate and manage over 2,000 edible and medicinal native plants ⁶⁰ (Figure 4.38).

⁵⁷ Ibid p.12, 45

⁵⁸ Ibid p.12

⁵⁹ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.49

⁶⁰ Yerrabingin 2020, South Eveleigh Native Rooftop Farm, accessed 20 May 2022 from https://www.yerrabingin.com.au/projects/rooftop-farm



Figure 4.34: The Foundry Building. Source: Mirvac, 2020, accessed 19 May 2022 from https://www.sustainablebuildingawards.com.au/commercial-architecture-large-2020/the-foundry/.



Figure 4.35: The Axel Building. (Source: FJMT Studio, 2020, accessed 19 May 2022 from https://fjmtstudio.com/projects/axle-south-eveleigh/)



Figure 4.36: Channel 7 Building. (Source: Google Images 2022)



Figure 4.37: The South Eveleigh Community Building. (Source: Mirvac, 2019. Accessed 19 May 2022 from https://www.architectureanddesign.com.au/projects/landscape-urban-design/yerrabingin-indigenous-rooftop-farm#)



Figure 4.38: The South Eveleigh Community Building. Source: Mirvac, 2019. Accessed 19 May 2022 from https://www.architectureanddesign.com.au/projects/landscape-urban-design/yerrabingin-indigenous-rooftop-farm#

4.2.6. Other Modern Buildings within South Eveleigh Precinct

The National Information and Communication Technology Australia Ltd (NICTA) research facility is located directly south of the National Innovation Centre and was completed in 2008 (Figure 4.39). Constructed of weather steel cladding to connect to the industrial context of the precinct, the research facility currently houses the offices and research space for CSIRO Data61as well as the Defence Science and Technology Group ⁶¹.

The Biomedical Building is among the oldest of the precinct's non-heritage buildings and was completed in 2000 (Figure 4.40). The four-storey purpose-built research facility is located directly east of the SECB House and abuts the northern side of the Eveleigh Green and was also designed with materials that reflected the industrial feeling of the wider South Eveleigh Precinct ⁶². Current tenants include the Australian National Institute of Management and Commerce, the ACRF Image X Institute, and Charlotte's Little Sister café.

Finally, abutting the western end of the Eveleigh Green, the Sydney Ambulance Centre is also among the oldest buildings within the South Eveleigh Precinct (Figure 4.41). The three-storey red brick building now houses the NSW Ambulance Service as well as the Transport Management Centre ⁶³.

⁶¹ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.49

⁶² Ibid p 48-.49

⁶³ Ibid, p.49



Figure 4.39: NICTA building. (Source: Google Maps 2022)



Figure 4.40: Biomedical Building.(Source: Google Maps 2022)



Figure 4.41: The Sydney Ambulance Centre. (Source: Google Maps 2022)

4.3. North Eveleigh Precinct

The North Eveleigh Precinct is delineated to the north by Wilson Street and to the south by the railway corridor. North Eveleigh includes a number of extant significant heritage buildings and structures, as well as a number of later and modern structures that exist throughout the precinct.

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

- 1. Carriage Workshops (known as Carriageworks)
- 2. Blacksmith's Shop
- 3. Paint Shop
- 4. Scientific Services Building No. 1
- 5. Chief Mechanical Engineer's Office Building
- 6. Telecommunications Equipment Centre and
- 7. Clothing Store



Figure 4.42: Northern façade of Carriageworks, North Eveleigh (Source: Curio 2021)



Figure 4.43: Internal view of the Blacksmith Workshop looking towards the west North Eveleigh (Source: Curio 2021)



Figure 4.44: Eastern façade of the Paint Shop and Suburban Car Workshops, from the Fan of Tracks (Source: Curio 2021)



Figure 4.45: Northwestern façade of the Scientific Services Building No.1 (Source: Curio 2021)



Figure 4.46: Northern Façade of the Chief Mechanical Engineers Building (CME Building) from Wilson Street (Source: Curio 2021)



Figure 4.47: Western façade of the TEC building (Source: Curio 2021)



Figure 4.48: Northern Facade of the Clothing Store building (Source: Curio 2021)

4.4. Neighbourhood Context

The Large Erecting Shop is located to the southwest of the South Eveleigh Precinct's Locomotive Workshop, along the western end of Locomotive Street. To the north sits the Sydney train line, along which nearly every major line passes before or after it reaches Redfern Station.⁶⁴

The corridor between the LES and the Locomotive Workshop once held a traverser to transport locomotives between the two buildings. ⁶⁵ It is now an access lane (protected an easement) for Sydney Trains, who occupy the buildings adjacent to the northern façade of the LES known as the 'Eveleigh Precinct: Fleet Maintenance Division". The access lane, once the location of the traverser, is frequented by trucks and cars coming in and out of the Fleet Maintenance Division. The access lane also houses a large-scale plant room for the Locomotive Workshop (to the east of the LES) and provides a main entry point into the LES The introduction of the c.1990s plant room to facilitate the upgrades to the Locomotive Workshop and the loss of the traverser from this location has impacted on the relationship between the LES and the Locomotive Workshop, and on the grandeur and character of the entrance into the LES.

To the southeast of the LES, sits the South Eveleigh Village Square and The Foundry building (Commonwealth Bank). The square contains a large community and park area with a variety of art installations and seating areas, along with direct access to Central Avenue. This provides the LES with direct access to a community area as well as access to the rest of the South Eveleigh Precinct. ⁶⁶

Opposite the LES, to the south along Locomotive Street, is the headquarters for Seven Western Media (SWM) (Channel 7), which continues west until Rowley. This eleven-storey building is generally accessible through Locomotive Street itself or via the South Eveleigh Village Square, which links the

⁶⁴ Simpson Dawbin, Large Erecting Shop CMP, 2003, p.10

⁶⁵ Ibid p.22

⁶⁶ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.12, 45

LES to Central Avenue to the south and contains a variety of sculptural and community-minded structures and trees. ⁶⁷

The publicly accessible areas in-between the LES and SWM building along Locomotive Street is a trafficable zone which consists of a concrete roadway, lined with gum trees and security fencing on either side which ends in a cul-de-sac with a turning circle. The southern facade of the LES is visible along the entire road, although it is somewhat obstructed by the security fencing as is the northern facade of the Channel Seven Building. ⁶⁸

Beyond this turning circle sits a small park-lined footpath leading to Rowley Lane, which contains a row of five to six storey terraced apartment buildings. These apartments have a clear line of site towards the western façade of the LES, including the tracks leading out from the LES into the main train line.



Figure 4.49: The view of the wider Sydney rail line and Maintenance site from the western end of the LES. (Source: Google Maps 2022)

⁶⁷ Godden Mackay Logan 2013, Australian Technology Park CMP Vol.1, p.49

⁶⁸ Ibid



Figure 4.50: View of the laneway in between the eastern face of the LES and the western end of the Locomotive Workshop. (Source: Curio, 2022)



Figure 4.51: View of the Commonwealth Bank Building and the Channel 7 Building from the southern face of the LES. (Source: Google Maps 2022)



Figure 4.52: View of the Channel 7 Building to the left and the eastern facades of the LES and Locomotive Workshop from the South Eveleigh Village Square.

(Source: Curio, 2022)

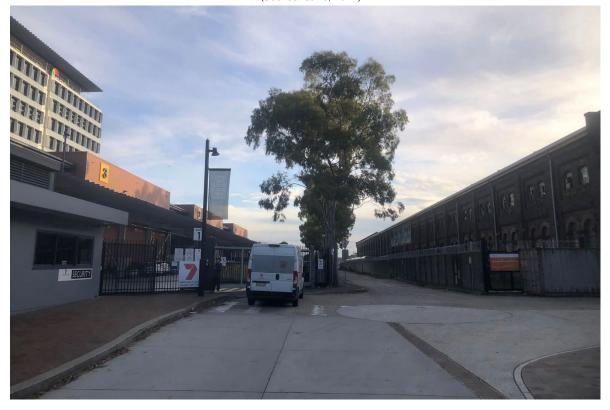


Figure 4.53: View of the Locomotive Street continuing in between the LES and the Channel 7 Building. (Source: Curio, 2022)



Figure 4.54: End of Locomotive Street, which consists of a cul-de-sac. (Source: Curio, 2022)



Figure 4.55: View of the Locomotive Street cul-de-sac with a view towards Rowley Lane and apartments. (Source: Curio, 2022)



Figure 4.56: View of Rowley Lane apartments. (Source: Google Maps, 2022)



Figure 4.57: View of Rowley Lane facing the LES. (Source: Google Maps, 2022)

4.5. Views and Vistas

There are four major views lines of significance to and from the subject site relating its historical and relational context. The three primary views of heritage significance with respect to the LES building include:

- 1. Views to the LES building along Locomotive Street (from both the western and eastern approaches);
- 2. Views between North and South Eveleigh, which include the LES building (Chief Mechanical Engineers Building, Paint Shop, Carriage Works);
- 3. Visual connectivity between the LES and other areas of South Eveleigh, in particular the Locomotive Workshop building.
- 4. Views to the LES building when approaching the LES from the South East Village Square.

Figure 4.48 illustrates these views, which are further illustrated individually in the subsequent sections of this chapter

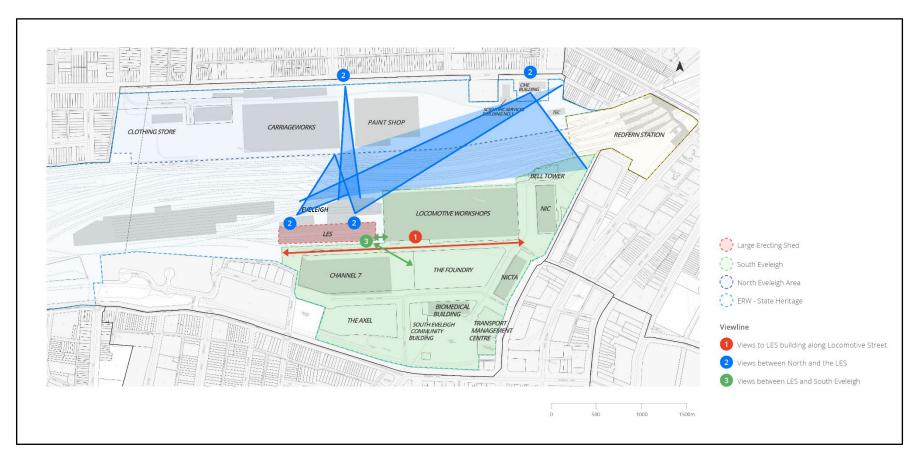


Figure 4.58: Three primary views of heritage significance related to the LES study area, South Eveleigh (Source: Curio 2022)

4.5.1. View 1—Views east to west along Locomotive Street

The view line that runs parallel to the Southern Façade of the LES building along Locomotive Street continues with the Locomotive Workshop's Southern Façade is highly significant as it reinforces the dominant, industrial aesthetic of the highly significant LES and the Locomotive Workshop Buildings within the South Eveleigh Precinct. It is along this stretch of Locomotive Street that workers and visitors alike, can appreciate the vast expanse of the Former South Eveleigh Workshops and the dominance of their austere presence within the streetscape.

The LES would have been visible from many locations within South Eveleigh. Its position within Locomotive Street adjacent to the Locomotive Workshop, northwest of the Foundry, and directly south of the railway line was essential within the day-to-day operations of the ERW and allowed for ease of access between workers across the main workshops and stores in the precinct.

The Locomotive Street viewscape which runs from the western-most boundary of the LES right through to the Locomotive Workshop and New Locomotive Workshop to the east remains the most intact, uninterrupted remnant historic streetscape viewshed within in the South Eveleigh Precinct.



Figure 4.59: Continuing view down Locomotive Street towards Rowley Lane. (Source: Google Maps 2022)

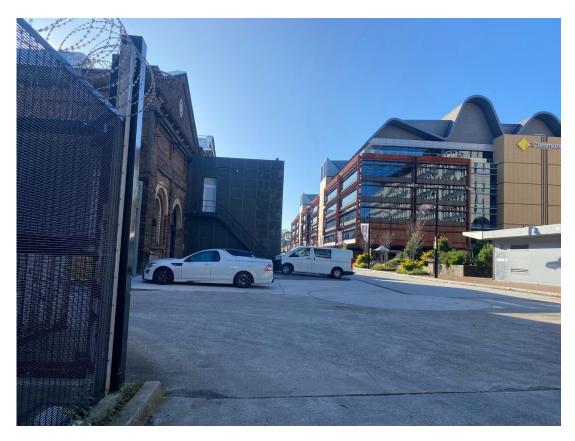


Figure 4.60: View from southern façade of the LES Building down Locomotive Street (Source: Curio 2022)



Figure 4.61: View from the eastern end of Locomotive Street towards the LES building (Source: Curio 2022)

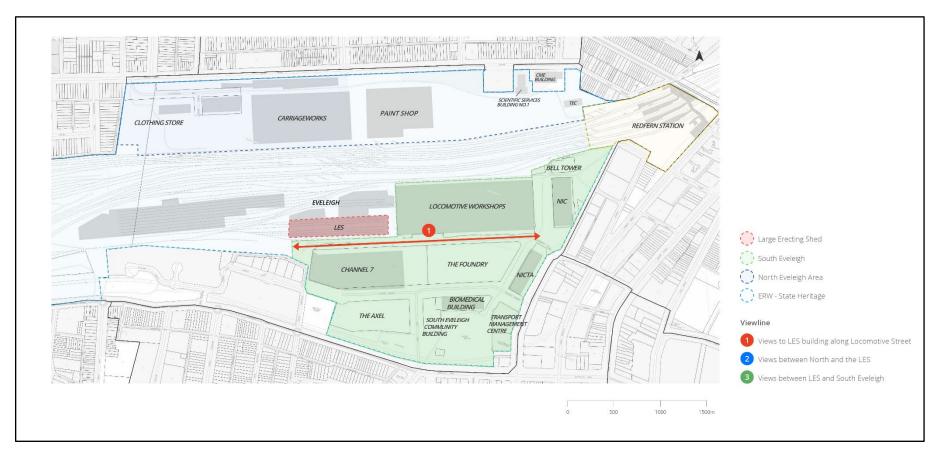


Figure 4.62: Heritage View 1 – Views to and from the LES building from Locomotive Street

4.5.2. View 2 —Views between North Eveleigh and the LES

The views and vistas from the LES building to North Eveleigh continue to share a strong and significant visual connection across both precincts established early in ERW's history.

The LES is readily visible from Carriageworks and maintains a strong visual connection with the Paint Shop Precinct and Traverser No.1 when viewed from North Eveleigh precinct.

The LES is able to be readily appreciated from the train as it travels through Redfern. The relationship between North and South Eveleigh is strengthened by the views to and from Traverser No. 1, the Paint Shop Precinct, Carriageworks to the north and the LES, Locomotive Workshops to the south.

The LES is visible from the accessway associated with the Chief Mechanical Engineer's Building and can be viewed from Wilson Street which runs parallel to North Eveleigh, as shown in Figure 4.64.

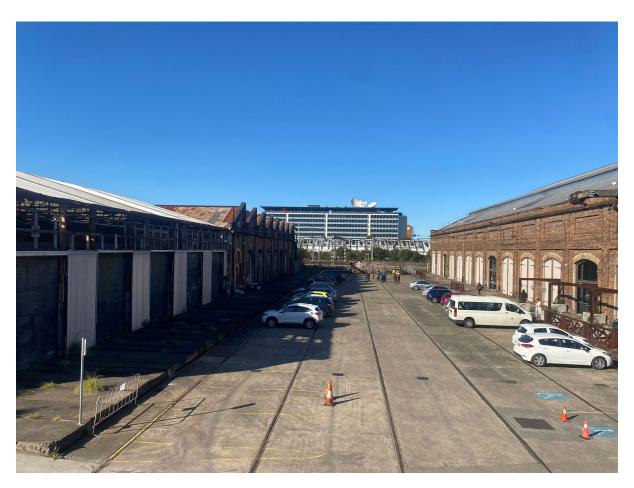


Figure 4.63: Southern view of the LES building from Traverser No.1 (Source: Curio 2021)



Figure 4.6: Southern view from the driveway of the Chief Mechanical Engineer's Building showing the Locomotive Workshop and the LES (Source: Curio 2021)



Figure 4.64: View line from Wilson Street towards South Eveleigh and the LES (Source: Curio 2022)

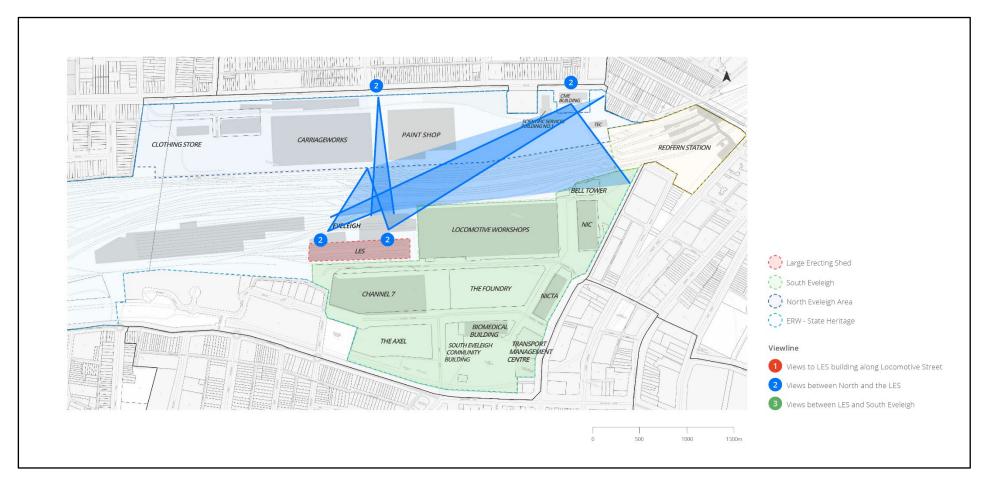


Figure 4.65: Heritage View 2 – Views between North Eveleigh and the LES

4.5.3. View 3 — Views within South Eveleigh Precinct

The visual connection to the LES building from the redevelopment within the South Eveleigh Precinct provides a tangible link to the past. Whilst key views from Central Avenue towards the LES have been obstructed by the Chris Fox artwork, once site visitors traverse the stairs to Locomotive Street, the LES and the Locomotive Workshop Southern Facades emerge within as iconic landmark-built heritage assets. No new installations that would further erode, rather than enhance, should be installed within the view lines of this viewscape.





Figure 4.66: View line between remainder of South Eveleigh (Source: Curio 2022)

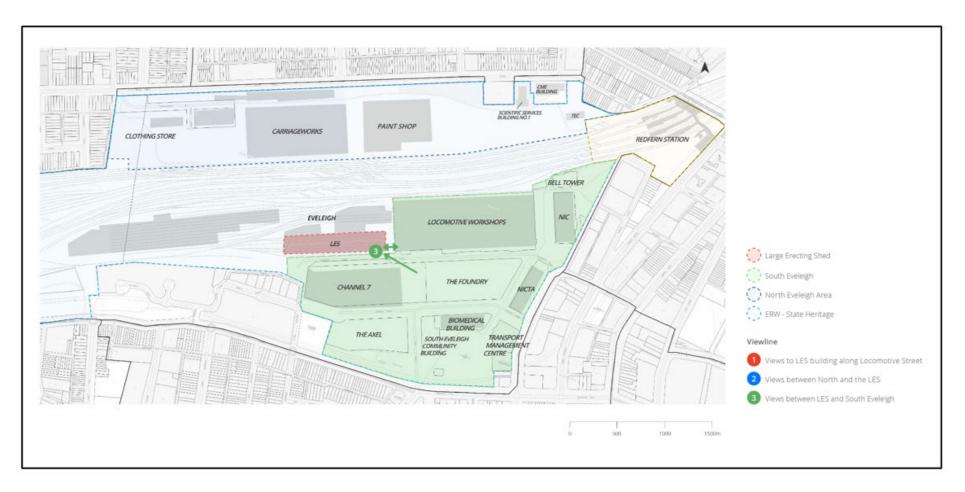


Figure 4.67: Heritage View 3 – Views within South Eveleigh Precinct

4.6. Moveable Heritage

Table 4.1 provides a preliminary list of moveable heritage items that have been listed on the Section 170 Heritage Conservation Register (2013) and have been identified as being located within the LES. During Curio's site visit on 13 May 2022, the majority of these items were not located within the building, however, a number of heritage-listed items noted to be located in different precincts were situated within the subject site.

A drilling machine produced by William Asquith Ltd of Halifax, England, was also noted during the site visit. The machine was likely to be fabricated in the 1920s and could be part of the original machinery related to the ERW activities. Although not listed on the ATP or the TAHE S170 Registers, further investigation is recommended to assess the machine's use, significance, and detailed historical background.

Further, it is recommended that an overall revised and updated survey of all the moveable heritage items and associated collections within the subject site be undertaken as part of the next phase of works for the project.



Figure 4.68: Drilling machine produced by William Asquith Ltd of Halifax, England, likely fabricated in the 1920s. The item is not listed as part of the ATP or Railcorp S170 Registers. (Source: Curio Projects, 2022)

Table 4.1: Moveable Heritage Items within the LES Building noted from Curio's site visit

Item Name SHI #	Current Location	Images
TAM 1883 – Main-line Sleeping Car SHI #4807079	Within the LES.	J883
FRN 2186 – Second-class Sitting / Buffet Car SHI #4807101	No longer within the LES.	N/A
Locomotive, Diesel 4401 SHI #4807242	No longer within the LES.	N/A
Locomotive, Diesel Shunting 7344 SHI # 4807250	No longer within the LES.	N/A
MFS 2028 – Second-class Sitting Car SHI #4807097	No longer within the LES.	N/A
MFS 2096 – Second-class Sitting Car SHI #4807089	No longer within the LES.	N/A
MFS 2121 – Second-class Sitting Car SHI #4807091	No longer within the LES.	N/A

Item Name SHI #	Current Location	Images
MFS 2145 – Second-class Sitting Car SHI #4807095	No longer within the LES.	N/A
AAH 8 – Officer's Inspection Carriage SHI # 4807010	Within the LES. According to the s170 Register, the item was supposed to be located in the Broadmeadow Locomotive Depot.	A A H

SHI #4807004

HX 1006 – Pullman Sitting Car Within the LES. According to the s170 Register, the item was supposed to be located in the Thirlmere Railway Precinct.





Item Name Current Location Images SHI# CBC 1089 – Pullman Sitting Within the LES. According to the s170 Register, the item was supposed to Car SHI # 4807005 be located in the Thirlmere Railway Precinct. CBC 1090 – Pullman Sitting Within the LES. According to the s170 Register, the item was supposed to Car SHI # 4807006 be located in the Thirlmere Railway Precinct.

5. Non-Aboriginal Archaeology



5. Non-Aboriginal Archaeology

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

5.1. NSW Heritage Act 1977

While the *Heritage Act 1977* protects items listed on the State Heritage Register across NSW, historical (Non-Aboriginal) archaeological remains in NSW are additionally protected from being moved or excavated through the operation of the 'relics' provisions of the Act. An archaeological site is an area of land which is the location of one or more archaeological 'relics'. A 'relic' is defined as:

any deposit, artefact, object or material evidence that:

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

As the subject site, the LES, is listed on the SHR as part of the overall ERW complex, all archaeological deposits are further protected from harm as part of that gazetted listing. Impact to any archaeological deposits within the curtilage of the ERW SHR listing, generally requires an approval under the s.57 provisions of the Heritage Act to be in place ⁶⁹.

5.1.1. 'Relics' vs 'Works'

In the management of historical archaeology at the subject site, it is appropriate to consider and acknowledge the archaeological management process and approach that has recently been applied with success to the South Eveleigh Precinct, during Mirvac's redevelopment of the precinct (former ATP) in 2015-present.

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

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

⁶⁹ With the exception of developments approved as SSD or SSI provisions of the EP& A Act, in which case the process that would normally be undertaken to seek archaeological approvals under the Heritage Act remains generally the same, however the requirement for a final approval under s57 or s60 of the Heritage Act is not required for an SSD or SSI development <u>after SSD approval</u>.

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

As the LES and South Eveleigh are both elements of the same overarching site of the former ERW, it is therefore considered appropriate that a consistent approach be applied to the management of archaeological resources between the two precincts. Therefore, it is proposed that a similar differentiation between 'relics' and 'works' (where relevant) be applied to the LES study area, as while both relics and works may have the potential to be present, the way in which they are required to be managed may differ. This topic is further discussed and detailed in Section 5.4 below.

5.2. Previous Archaeological Investigations

Context and information for this section regarding historical archaeological context and potential for the LES building have been primarily drawn from Curio's 2022 Redfern North Eveleigh Non-Aboriginal Heritage Study as a comparative analysis of studies was required

5.2.1. South Eveleigh Archaeological Monitoring (Curio Projects 2017-2020)⁷⁰

When the South Eveleigh Precinct (former Eveleigh Locomotive Workshop), underwent redevelopment, Mirvac asked Curio Projects to prepare a number of reports to support the Stage 1 Concept Plan SSDA for the redevelopment of the precinct. A Historical Archaeological Research Design and Excavation Methodology (ARD +EM) ⁷¹ report was developed and outlined a site-specific program of archival recording and controlled archaeological excavation to be undertaken and included in the proposed remediation, demolition and ground preparation works for the South Eveleigh precinct.

From 2017-2020, Curio Projects undertook a series of archaeological monitoring activities within the South Eveleigh Precinct. Activities included archaeological monitoring and controlled excavation of works and relics across to primary locations at South Eveleigh, these were:

- "Building 2" (location of the former Eveleigh Foundry); and
- · Within the Eveleigh Locomotive Workshop building.

Below provides a summary of the results and findings that were uncovered during these archaeological monitoring works to offer context for similar archaeological resources and historic works that are likely to be encountered within the LES study area.

Building 2—Foundry Remains

Between February and June 2017, a site-specific program of archaeological monitoring and archival recording took place as part of pre-construction works for South Eveleigh "Building 2" (now completed CBA building, referred to as "The Foundry").

⁷⁰ Curio Projects 2016, *Historical Archaeological Research Design and Methodology for Australian Technology Park*, Prepared for Mirvac.

⁷¹ Ibid.

Before excavations took place, the Building 2 impact area was made up of terraced carparking of asphalt and concrete with grassed islands between terraces. Significant portions of the old foundry were kept in situ between the levels of the carpark and were backfilled in to create the terracing. The southern foundry wall and the retaining wall which was connected to the foundry dressing shop was identified within the carpark before excavation commenced. As part of the development of Building 2, archival photographic recording of the Foundry Wall was undertaken. ⁷²

During the excavation works for Building 2 footprint, archaeological monitoring and recording focused on recording the former foundry features that were uncovered by excavation works (Figure 5.1), including remains of the wheel press and tinsmith workshops located in the north of the building footprint, and in the south, parts of the main steel, brass and iron foundry, as well as remains of the Blower House (Figure 5.3), iron foundry core oven, cupolas, furnaces and other associated foundry features and associated artefact deposits (Figure 5.2). ⁷³

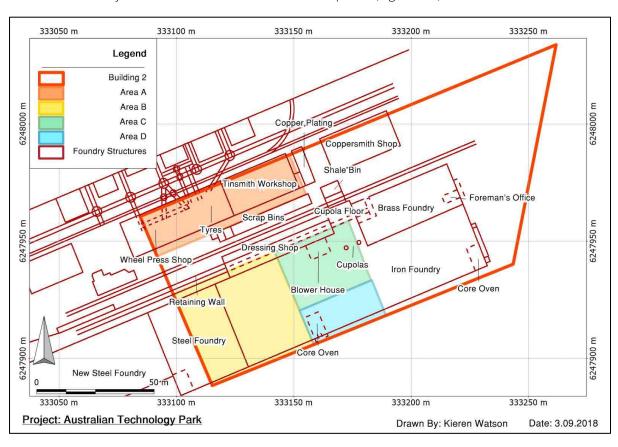


Figure 5.1: Building 2 Excavation and Monitoring zone with former Foundry plan overlaid (Source: Curio 2018)

⁷² Curio Projects 2019, *Former Foundry, South Eveleigh- Archaeological Monitoring and Monitoring Works*, Prepared for Mirvac.

⁷³ Ibid



Figure 5.2: Example of structural remains of the former Foundry uncovered within the Building 2 footprint, archaeologically recorded during construction works (Source: Curio 2017)



Figure 5.3: Overview of remains of the foundry blower house showing extent of the structure. (Source: Curio Projects 2018)

Locomotive Workshop Building

Curio Projects undertook archaeological monitoring and recording of sub-floor features uncovered during development and construction works within the Locomotive Workshop building, detailed in several reports as part of the Conditions of Consent under the SSDA for the works.⁷⁴

During archaeological works carried out within the Locomotive Workshop building, archaeological monitoring, removal and recording of below ground impacts and features was undertaken.

The majority of impacts across the ground floor of the Locomotive Workshop building were for services, piles, elevator pits, a new floor level in Bay 1 South Annex and the bulk excavation for the construction of a travelator in Bay 4 South to link underground to the new basement carpark below Building 2 ("The Foundry"). The ground works undertaken within the Locomotive Workshop building for the 1990s internal fit out and upgrade of the Workshops, was generally concentrated in Bays 3 to 15, which involved the installation of new services, electrical substations, service pits, and water mains that then extended out to and along Locomotive Street, and lastly general levelling and pouring of a concrete slab across Bays 3-15. Bays 1 and 2 of the Locomotive Workshop were left as the most intact within the Workshop building, as the works during the 1990s to the ground floor remained relatively minor. ⁷⁵

In 2020, installation of new service trenches was undertaken across the Locomotive Workshop as part of Mirvac's South Eveleigh redevelopment which encountered industrial works and archaeological relics from a range of stages of use at the Workshops, some dating back to the construction and establishment of the Workshops in 1887. As part of the 2020 works, the subsurface features and works encountered and recorded include large pipes, machine footings, brick arch footings, machine pits, remnant railway tracks, flue systems, underground brick structures, wooden support beams supporting traversers, and the brick support arches of the main building façade. ⁷⁶

Besides the brick arch footings, the sub-surface historical features uncovered within the Locomotive Workshop during 2019 and 2020 as part of the construction works were not considered to be rare, as they were associated with the daily working activities performed on site during its industrial period. ⁷⁷ After appropriate recording and documentation of the sub-surface features had been completed by archaeologists, development works were able to carry on in each location. On site, many elements are being reinterpreted, including some foundry mouldings and several of the pipes. Digital recordings from excavations, as well as archaeological recording work undertaken will be used to inform the final school education kits, cultural education tours and digital overlays for the South Eveleigh Site.

⁷⁴ Curio Projects 2019b, *Potential Sub-Surface Features, Locomotive Workshops, Australian Technology Park,* Prepared for Mirvac; Curio Projects 2020a, *Archival Recording Report for the Condition of Consent C.21 of the redevelopment of the Locomotive Workshops Building (Bays 1-4A),* prepared for Mirvac; Curio Projects 2020b, *Archival Recording Report for the Condition of Consent C.21 of the redevelopment of the Locomotive Workshops Building (Bays 5-15),* Prepared for Mirvac.

⁷⁵ Ibid

⁷⁶ Ibid

⁷⁷ Ibid



Figure 5.4: Photogrammetry model of Brick footings and arch of Locomotive Workshop uncovered and recorded during archaeological monitoring of construction works (Source: Curio 2019)

5.2.2. Carriage Works Test Excavation and Monitoring (Casey & Lowe and OCP 2005)

In 2004, archaeological testing within the Carriage Workshop building was undertaken under a Section 60 Excavation Permit to inform the design of what is now known as the Carriageworks Theatre and Performance space. Archaeological testing took place within the building in an area that overlapped with the former traverser pit in order to establish the location and nature of the traverser wall and extent of the footings to understand if the traverser would be impacted by the proposed excavation works to lay a new floor. Archaeological excavation exposed the sides and base of the traverser pit. ⁷⁸ Archaeological monitoring was undertaken in conjunction with the development works of the Carriageworks Theatre space and discovered addition features including machinery pits, rail alignments, as well as discarded equipment and rubbish dumped in brick pits. Integrity of the material encountered during development works was such that sub-surface wooden sleepers remained visible within the debris during excavation works. ⁷⁹



Figure 5.5: Example of brick pits and machinery (a line or counter shaft) uncovered beneath the floor of the Carriage Workshop building during archaeological monitoring and investigation works in 2004 (Source: AHMS 2008: 17)

⁷⁸ Casey & Lowe & Otto Cserhalmi + Partners 2005a, Carriageworks at Eveleigh excavations for construction: Excavation permit application.

⁷⁹ Ibid

5.2.3. Redfern North Eveleigh- Paint Shop Precinct Non-Aboriginal Heritage Study (Curio 2021)

In 2021, Curio undertook a Non-Aboriginal Heritage Study at the Redfern North Eveleigh Precinct for Transport for NSW. This study provided the current heritage context within the Paint Shop Sub-Precinct, with respect to its historical background, existing site conditions, current heritage legislative requirements/ guidelines in NSW and overarching recommendations with respect to the management of the heritage values within the Paint Shop Sub-Precinct.

An historical archaeological assessment was included as part of this assessment and stated the key historical activities within the study area that would have influenced and/or impacted the survival of archaeological resources include the following: 80

- The cut down of the original landscape level to the railway level in 1882 for the construction of the main workshop buildings and Fan of Tracks. Generally, a four to five metres difference in level between Wilson Street (north) and the main rail line (south).
- Ongoing evolution and expansion of the Eveleigh Carriage Workshops throughout its lifespan, including continuous demolition and construction of built structures and features
- Mid to late twentieth century use of the site including the construction of modern buildings and adaptive reuse of historically significance buildings on site (Carriageworks theatre).

Potential archaeological deposits across the study area at the railway level stated to likely consist of artefacts, footings, and deposits associated with former sheds, brick piers, and former ground services. Sub-surface features related to rail and carriage workshop function would potentially include inspection pits, machine bases and remains of machines, plant, trails, traversers and turntables.

Underfloor historical archaeological deposits were noted to potentially be retained at the Wilson Street level of the study area associated with the CME Building and Scientific Services Building.

Overall assessing the Paint Shop Sub- Precinct study area in North Eveleigh to contain moderate to high potential for historical archaeological deposits to be present.

The study also assessed the potential historical archaeological resource of the Paint Shop Sub-Precinct to likely have research potential that would contribute to the understanding of the significance of the ERW site at a local level.⁸¹

5.3. Historical Archaeological Potential — LES

The main historical activities within the study area that would have influenced and/or potentially impacted the survival of archaeological resources within the LES study area are summarised as follows:

- Land clearing and farming
- Construction of the LES building in the 1890s, including installation of services, building foundations etc.
- Any upgraded services throughout the 20th century (especially sewer services along the northern and southern façade of the LES)

⁸⁰ Curio 2021, Redfern North Eveleigh Precinct *Non-Aboriginal Heritage Study*, prepared for TfNSW

- Installation of a traverser along eastern boundary of study area between the Locomotive Workshop and the LES building
- Construction of Ablution buildings (one located abutting the northern façade and the other located along the southern façade of the LES)
- Installation of railway track along southern boundary

Although the topography of the landscape is relatively flat, the LES study area likely required minor land grading and levelling in preparation of construction of the LES.

Former railway related structures (now demolished) were previously located within and/or along the boundary of the study area. These included:

- Laundry pre 1899 to c1919 (previously located along southern boundary of study area)
- **Driver's Barracks** pre 1899 to 1906 (previously located within the western half of the LES before the 1906 extension of the LES building).
- Traverser pre 1899 to c1986 (located between the eastern façade of the LES building and the Locomotive Workshop)
- Southern Ablution building 1931 to c2002
- Urinals and Water closets 1906 to 1965 (located along northern and southern façade of the LES).

Potential archaeological deposits located across the study area may consist of artefacts, footings, and deposits associated with former structures such as post holes, brick piers, services, and former ground services. Sub-surface features associated with rail and LES functions and uses may include features such as inspection pits, machine bases and remains of machines and traversers. The LES building has high potential for sub-surface historical 'works' including sub-floor inspection pits, machinery, and rail tracks.

Overall, it is likely that the LES study area would have potential for archaeological deposits to be present in a sub-surface capacity, comparable to the features encountered within previous archaeological monitoring and excavation works at North and South Eveleigh. Examples of deposits likely to be present beneath the floor level of the LES are likely to include machine pits, foundations, rail lines etc. Archaeological deposits and resources of former buildings and associated features and deposits have potential to be present within in other areas of the precinct.

Based on the results from previous historical archaeological excavations around the wider Eveleigh Precinct, the LES study area is assessed as having a **moderate to high potential for historical archaeological deposits** to be present, as illustrated in Figure 5.6 below.

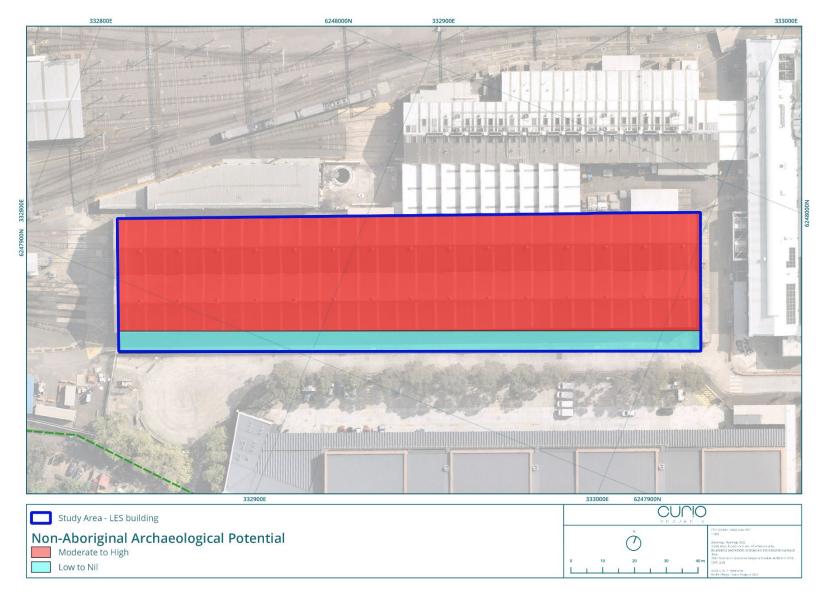


Figure 5.6: Historical Archaeological Potential across the LES (Source: Curio Projects).

5.4. Archaeological Management Strategy and Framework Strategy

The following historical archaeological management framework has been developed in light of the assessment of historical archaeological potential and significance for the LES study area (as presented in the sub-sections above). This will include overarching recommendations, potential mitigation measures, and process recommendations developed for the study area.

As noted in Section 5.1.1 above, in situ industrial archaeological resources (such as roadways, railway tracks, tram tracks, kerbstones, culverts, milestones, remnant flues, and other related below-ground infrastructure) were managed and defined for the South Eveleigh development in consultation between Curio Projects and Heritage NSW archaeologists as 'works', as opposed to as archaeological 'relics'. It is considered appropriate that a comparable management approach be applied to the LES study area as a component of the same wider ERW complex.

Therefore, the archaeological management of the LES study area proposes to maintain this differentiation between 'relics' and 'works' where relevant, as while both relics and works may have the potential to be present, the way in which they are assessed and managed may differ.

In situ features associated with the function of the site, such as railway tracks, turntables, kerbstones, and other related rail infrastructure that exists below-ground in association with the former railway uses of the site, have the potential to be present within the LES study area and would be considered historical 'works'.

Standing footings and walls structures etc., that are associated with remnant standing structures and buildings, are not technically considered archaeological 'relics', as they are remnant, standing footings and infrastructure associated with the existing heritage buildings.

Features that have potential to be located within the LES study area, such as former footings and deposits associated with former railyard structures (e.g., post holes, brick piers, services, former ground services, and artefact deposits) would be considered archaeological relics.

Methodologies for management and recording of non-Aboriginal historical objects ('work's) and/or archaeological deposits ('relics') should be relatively consistent with those applied to management of similar deposits at South Eveleigh.

Section 7.7 of this report includes details on the constraints, opportunities, and proposed management framework for historical (Non-Aboriginal) archaeological deposits and resources within the LES study area.

5.5. Aboriginal Archaeology & Cultural Heritage

An Aboriginal Cultural Heritage Study and Statement of Impact has been undertaken by Curio Projects in 2022. The report provides background research and assessment of evidence and information about material traces of Aboriginal land use in the study area and surrounds, significance assessment of potential Aboriginal sites, places, landscapes, and/or other values, as well as an impact assessment and management recommendations to assist TAHE with their future responsibilities for Aboriginal cultural heritage within the study area.

The report states that the study area has low to moderate potential for intact Aboriginal archaeological deposits to be present, mostly likely in the form of low density or isolated stone artefact sites representative of general Aboriginal movement across and use of the Redfern landscape. The report also notes that the Re-zoning Proposal and future development at the LES, Eveleigh site represents a significant opportunity to have an overall positive impact to Aboriginal cultural heritage values through the proposed introduction of meaningful heritage interpretation

initiatives, as well as the integration of Aboriginal cultural heritage values and outcomes into the project design.

6. Assessment of Heritage Significance



6. Assessment of Heritage Significance

6.1. 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).

The assessment of significance is based on the principles of the Burra Charter (Australia ICOMOS, 2013); the Interpretation and Intangible Cultural Heritage and Place Practice Notes (Australia ICOMOS, 2017); guidelines contained within the NSW Heritage Manual (Heritage Office and DUAP 1996); and the 2001 Assessing Heritage Significance: A NSW Heritage Manual Update – prepared by the former Heritage Branch, NSW Office of Environment and Heritage (government department now known as Heritage NSW).

The Assessing Heritage Significance: a NSW Heritage Manual Update is used to compare the significance of a place with the NSW Heritage assessment criteria, in which a place can meet more than one criterion. Such processes determine the level of significance of a place – either for the local government area, for the State of NSW or the broader Australian community. It results in a succinct statement of heritage significance.

For the assessment of local or State significance of an item, the NSW Heritage Guidelines indicate that the item must meet one or more of the following criteria:

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

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

6.1.1. LES - Assessment of Significance

The 2003 CMP provides an assessment of significance for the LES building against the NSW heritage criteria. Since the CMP was prepared in 2003, the precinct (formerly identified as ATP) has been redeveloped (2015-present) and is now known as the South Eveleigh Precinct. CMPs are generally required to be updated every 5-10 years, yet the 2003 CMP has not been revisited in almost 20 years. Therefore, in order to comply with current Heritage NSW recommendations and the requirements of the SEARs, the new draft CMP that provides guidance on the management of the LES building within the overall management of the redeveloped South Eveleigh Precinct is being currently developed by Curio.

Therefore, Table 6.1 presents the 2003 CMP assessment of significance against an updated assessment extracted from the draft South Eveleigh Precinct CMP, in accordance with the NSW Heritage criteria.

Table 6.1: 2003 CMP Assessment of Significance & Updated Curio Assessment against the NSW Heritage NSW Criteria

Criterion	2003 CMP Assessment	Updated Curio Assessment
Criterion (a) Historical Evaluation	The Large Erecting Shop has the distinction as the only remaining facility of the original Eveleigh complex performing much the same functions for which it was constructed, and in continuous use for a similar function since original construction.	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.
	The building remains an intact example of the longitudinal pit erecting shop, the layout and structure of the building fundamentally unchanged since original construction. It is physical evidence of a past era of steam traction and the important process of locomotive construction and overhaul is	The Large Erecting Shop (LES) within the wider context of the former Eveleigh Railway Workshops (ERW) reflects a key, expansion of the ERW for locomotive construction, technology, overhaul, and maintenance in NSW during the 19 th and 20 th centuries and in the instance of the LES, continuing maintenance into the 21 st century.
	embodied in the fabric and design of the building. The Department of Railways in parallel with private contractors and overseas suppliers undertook the construction of locomotives of many classes which became the mainstay of motive power on the railways until the end of the	The growing operation of the ERW site directly contributed to the workforce of NSW planning, design and expansion of the surrounding suburbs (e.g., Alexandria, Eveleigh, Redfern, etc), which were developed in response to precinct activities and workers' demands.
	steam era.	Further, the ERW site, the LES inclusive, was a key location in the development of the union movement in NSW which, through many strikes and protests, including the Great Strike of 1917, resulted in the improvement of working conditions during the early twentieth century ⁸² .
Criterion (b) Historical Association	No assessment under the 2003 CMP.	The LES and the wider ERW are associated with the early careers of prominent Australian and NSW historical figures, including the former Prime Minister Ben Chifley, former NSW Premiers James McGowen, JJ Cahill, and the former Federal Member for Sydney, Eddie Ward.
		The site and the wider precinct are also associated with the establishment and development of the trade unions in NSW and the broader union movement Australia-wide.

⁸² GML 2013 p.89

Criterion	2003 CMP Assessment	Updated Curio Assessment
		The LES forms part of an area that is culturally significant to the Aboriginal community and any Aboriginal archaeological deposits discovered within the LES site would have the potential to hold a strong association with their community.
Criterion (c) Aesthetic	The Large Erecting Shop is a prominent visual element on the Eveleigh Workshops site. The full impact of the massive 180 metre length of the building can be appreciated from the southern area of the site, the ATP carpark and Henderson Road. Architecturally the building represents the highest standards of building	The LES is a large-scale, prominent building within the former EWR site. The building is an important element within significant view lines from Locomotive Street and the overall South Eveleigh precinct and remains prominent in the landscape in views from North Eveleigh and the railway line that separates North and South Eveleigh.
	design and detailing typical of the most important industrial facilities of the late Victorian period. Elements of the facade treatment repeat the design of the workshops complex constructed 13 years earlier, contributing a cohesion and integrity to the overall site, a quality not sustained with later development on the site.	Architecturally, the building represents the highest standards of building design and detailing typical of the most important industrial facilities of the late Victorian period. Elements of the facade treatment repeat the design of the [adjacent Locomotive] Workshops complex constructed 13 years earlier, contributing to the cohesion and integrity of the overall site.
	The exterior featured gabled and parapeted end elevations with stone copings, load bearing brick facades with recessed window bays, cast iron arched windows, and sandstone sills. It was one of the last of the buildings in the Eveleigh complex of masonry construction aspiring to quality architectural design and finish, reflecting a change to a more utilitarian and ad hoc provision of railway facilities characteristic of later development on the site.	The exterior features gabled and parapeted end elevations with stone copings, load-bearing brick facades with recessed window bays, cast iron arched windows, and sandstone sills. It was one of the last of the buildings in the Eveleigh complex of masonry construction aspiring to quality architectural design and finish, reflecting a change to a more utilitarian and ad hoc provision of railway facilities characteristic of later development on the site.
	The building also represents an accomplished Australian interpretation of the design and layout of several of the great locomotive workshops in Britain at the time, including Crewe, Derby and Bow.	Internally, the building remains an intact example of the longitudinal pit erecting shop, the layout and structure of the building fundamentally unchanged since original construction. Remnant internal fabric, including the gantry cranes, cast iron columns, and the patina of age which is represented in the fabric, adds to the authenticity and aesthetics of the space.
		Further, the building also represents an accomplished Australian interpretation of the design and layout of several of the great locomotive workshops in Britain at the time, including Crewe, Derby and Bow.

Criterion

Social

2003 CMP Assessment

Criterion (d)

3,300 staff. The social and industrial significance was immense as one of the largest single work places in Australia. Up to 1,100 employees worked in the centuries. Erecting Shop alone, and as a single workspace, this building highlighted the work practices of railway workshops and gradual improvement in conditions. The LES and the wider precinct are greatly significant to the former and current Lighting within the work areas depended on natural light from skylights and windows, ventilation with minimal task lighting or effective artificial lighting. Ventilation depended on the ridge monitors, totally inadequate in this smoky and dusty environment. Three generations of improving sanitary facilities are reflected in the early slate urinals fixed around the external walls supplemented by earth closets in outbuildings; the 1930 elevated WCs with occupants monitored and supervised by trusted attendants; the 1950 elevated WCs and showers.

Until the 1970s most employees used buckets for washing, and hot and cold running water in amenities was not widely available on the site until the mid-1970s.

Criterion (e)

Potential

The building contains a number of intact features of technological Technical/ Research significance which enable clear interpretation of industrial processes which took place during the working life of the building.

> The overhead cranes are highly significant. All 7 cranes represent the technology of travelling cranes dating from various period of installation and adaptation. The three original Craven cranes of 1899 are relics of the rope driven system initially installed in the building. Although now heavily modified, it is significant that two of these cranes remain operational 103 years after installation. Several non-operational cranes dating from 1885 remain within the adjacent building, the former Locomotive Workshops complex preserved as static relics as part of the ATP adaptive reuse. The manufacture of these relics predates construction of the building in which they are housed.

Remnants of the 2'-gauge trolley tracks are relics of the extensive transportation system for heavy components and tools within the building

Updated Curio Assessment

At its peak of operation in 1917, Eveleigh workshops employed a total of over Due to the magnitude of the precinct, which includes the LES, the ERW were one of the largest employers in NSW during the late nineteenth and twentieth

> railway workers and the local community, in particular to the groups involved in the NSW railways, as the site is home to a multitude of important and meaningful stories associated with the industrial working environment, a multicultural workplace and social clubs and activities. Although no longer in operation, the precinct is also a source of pride to these groups as it represented the capacity of Australian industry at the time and is demonstrative of the high level of trade and technical skills of the workers.

> Further, the organisation and development of the union movements within the precinct managed to improve work conditions through multiple strikes and protests and was highly contributory to shaping the future of Australia's working rights.

The building contains a number of intact features of technological significance which enable clear interpretation of industrial processes which took place during the working life of the building.

The overhead cranes are highly significant. All 7 cranes represent the technology of travelling cranes dating from various periods of installation and adaptation. The three original Craven cranes of 1899 are relics of the rope-driven system initially installed in the building. Although now heavily modified, it is significant that two of these cranes remained operational 103 years after installation.

Remnants of the 2'-gauge trolley tracks are relics of the extensive transportation system for heavy components and tools within the building providing the essential *link between the* [LES, the former] *foundry and workshops.*

Evidence remains in the structure of the central transmission drive shaft, supplying power to all equipment within the work areas. Traces of switch boxes, compressed

Criterion	2003 CMP Assessment	Updated Curio Assessment
	providing the essential link between the Erecting Shop and the foundry and workshops.	air outlets, brackets for steam pipes and electrical insulators all express the layering of technological change throughout the life of the building.
	Evidence remains in the structure of the central transmission drive shaft, supplying power to all equipment within the work areas. Traces of switch boxes, compressed air outlets, brackets for steam pipes and electrical insulators all express the layering of technological change throughout the life of the building.	
Criterion (f) Rarity	The Large Erecting Shop is unique in Australia, not only as a complete example of this type of facility, but also continuing to perform the function of its original design.	The LES no longer meets the Rarity Criterion in terms of continuity of use as the building no longer fulfils its original railway functionality.
	It is the only element of the original Eveleigh Workshops remaining within its original railway context and continuing connection to the rail network.	The ERW as a whole provides a rare composition of large-scale railway workshop buildings remaining in NSW. The former precinct still retains several intact buildings, including the LES, the Locomotive Workshop, the former Works Managers' Office and the New Locomotive Workshop in its southern portion,
	It is a rare example in the world of an erecting shop of this scale to remain in public ownership continuing to fulfill a railway function.	and the Paint Shop, Carriage Workshops, the Chief Mechanical Engineer's building, the Clothing Building, the Scientific Services Building, and the Telecommunications Building in its northern portion.
Criterion (g) Representativeness	No assessment under the 2003 CMP.	The wider ERW, including the LES, is representative of the large-scale industrial and technical working environment and railway workshop operations in the nineteenth and twentieth centuries.

6.2. Statement of Significance

6.2.1. ERW

The following Statement of Significance for the overall ERW SHR site has been extracted from the OCP 2022 Overarching CMP updated by Curio:

The ERW 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 ERW 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 ERW 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 ERW 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 ERW 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 ERW 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 ERW 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 development⁸³.

6.2.2. LES Building

The Statement of Significance prepared by Simpson Dawbin Architects for the 2003 CMP has been revised and updated by Curio in order to reflect the changes to the building's use and any impacts this has had on the statement of significance. The following statement has been extracted from the draft South Eveleigh Precinct CMP currently being prepared by Curio:

The natural landscape and pre-colonial environment of the Eveleigh site; the sandy and rich Blackwattle Swamp and O'Shea's Creek were significant resources for the Gadigal people of the Eora Nation.

⁸³ OCP, 2022 (Curio Update): 95-96

The Large Erecting Shop was one of the largest and most imposing single structures on the Eveleigh site, and its role within the workshops complex was pivotal in the process of locomotive overhaul and the construction of new locomotives. It was of equal importance as any other facility within the Eveleigh Workshops complex but is unique in retaining its railway context68F. The building contributed to the expansion of the railway system in NSW until the end of the steam era and the conversion to diesel maintenance until it ceased operation in 1985.

The site forms part of the former Eveleigh Railway Workshops precinct, which directly contributed to the expansion of the surrounding suburbs. The precinct is strongly associated with the development of union movements in NSW and subsequent strikes and protests that allowed the workers to improve working conditions during the early twentieth century. The precinct is associated with the early careers of prominent Australian and NSW historical figures including a former Prime Minister and State Premiers.

The area is culturally significant to the Aboriginal community and further archaeological investigations would potentially reveal additional associations with the community as well as the existing social, historical, and scientific values.

The Large Erecting Shop represents the ambitious and important industrial facilities of the late Victorian period and remains a prominent building within the former EWR precinct and a highly significant element within site view lines and the industrial landscape of the precinct. The exterior of the building retains most of its original elements, including the gabled and parapeted end elevations with stone copings, load bearing brick facades with recessed window bays, cast iron arched windows, and sandstone sills. Internally, the building remains an intact example of the longitudinal pit erecting shop. The layout and structure of the building remains fundamentally unchanged since its construction. Remnant internal fabric, including the gantry cranes, cast iron columns, and the patina of age which is represented in the fabric, adds to the authenticity and aesthetics of the space.

The changing technology and work practices associated with the functions of the facility remain visible in the fabric and are an intact resource for interpretation of the process of a locomotive erection and overhaul from 1899 to the present day. It is the only example in Australia of the longitudinal pit erecting shop design, closely modelled on contemporary British practice as demonstrated at Crewe and Derby Railway Workshops⁸⁴.

6.3. Grading of Significance

The grading of significance provides a further context of the heritage significance of each element of the site and provides guidance for appropriate heritage management and retention/tolerance for cha

The draft South Eveleigh Precinct CMP, currently being prepared by Curio, provides the following updated grading of significance of the key elements of the subject site, which are consistent with the gradings of significance in the GML 2003 *Conservation Management Plan for Australian Technology Park.* An additional criterion, *Neutral Significance*, which is defined as *'modern elements that are*

⁸⁴ Ibid

required as part of the ongoing use of the site that neither add or detract from the overall significance of the site' has been included as part of the grading of significance.

EXCEPTIONAL SIGNIFICANCE

Rare or outstanding element directly contributing to an items local or states significance

HIGH SIGNIFICANCE

A High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.

MODERATE SIGNIFICANCE

Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.

LITTLE SIGNIFICANCE

Alterations detract from significance. Difficult to interpret.

NEUTRAL SIGNIFICANCE

Modern elements that are required as part of the ongoing use of the site that neither add or detract from the overall significance of the site.

INTRUSIVE

Damaging to the item's heritage significance.

Table 6.2: Grading of Significant Elements

Element Description	Grading of Significance
East Elevation	
Traverser pit	EXCEPTIONAL
Shipping containers in yard	INTRUSIVE
Locomotive doors, Roads 1-5	HIGH
Doors, Road 6	EXCEPTIONAL
Round Windows	EXCEPTIONAL
South Elevation	
Road 7, siding	EXCEPTIONAL
Chainwire enclosure	INTRUSIVE
Stone corbel brackets, east end	EXCEPTIONAL
Paint remnants to walls to demolished washrooms	NEUTRAL
Bracket enamel light fittings	EXCEPTIONAL
Elevated amenities block and stair	INTRUSIVE
RSJ brackets, to the west of amenities	HIGH
PVC downpipes	INTRUSIVE
Double entry doors, foot of stairs	EXCEPTIONAL
Remnant wall urinal	MODERATE
Windows above urinal	EXCEPTIONAL
West Elevation	
Elephant House	LITTLE

Element Description	Grading of Significance
Six sidings	EXCEPTIONAL
Locomotive doors, roads 1-6	HIGH
Surface mounted conduits	INTRUSIVE
Rail bollards	MODERATE
Steel ladder	HIGH
Modem bracket lamps	NEUTRAL
Fire hose reel cabinets	INTRUSIVE
Bank of electrical switches, centre pier	INTRUSIVE
Crib Room, (First aid room)	MODERATE
North Elevation	
Engraved stone sill and datum in brickwork	EXCEPTIONAL
Tank platform	EXCEPTIONAL
Toilet block	INTRUSIVE
Elevated amenities block	INTRUSIVE
Attached stores building	INTRUSIVE
Lean-to awning, east end	INTRUSIVE
Painted wall section	INTRUSIVE
Interior (commencing at the northwest corner, road no 1)	
Cabin, safe working	EXCEPTIONAL
Weighbridge	EXCEPTIONAL
Double doors	EXCEPTIONAL
Trolley bridges to pits	EXCEPTIONAL
Bricked up double doors	NEUTRAL
Switchboard	INTRUSIVE
Remnant trolley tracks	HIGH
Inspection pit	HIGH
Short Inspection pit	HIGH
Assembly point	HIGH
3801 office cabin	MODERATE
Office, store	MODERATE
Office	MODERATE
Office, Machine shop	MODERATE
Powerhouse Museum, office	NEUTRAL
Road 1 to 3	EXCEPTIONAL
Road 4, track bed and pit	MODERATE
Roads 5 & 6	EXCEPTIONAL
Transmission shaft bearings	EXCEPTIONAL
Machinery support beam	HIGH
Overhead Cranes	
L20	MODERATE

Element Description	Grading of Significance
L23	EXCEPTIONAL
L25	EXCEPTIONAL
L27	EXCEPTIONAL
L28	EXCEPTIONAL
L829	HIGH
L830	HIGH
Structure	
Cast iron centre columns	EXCEPTIONAL
Roof trusses	EXCEPTIONAL
Rail section purlins	EXCEPTIONAL
Curved gutter	EXCEPTIONAL
Ridge and monitor	LITTLE
Ventilation cowls	NEUTRAL
Roof sheeting	NEUTRAL
Clear roof lights	NEUTRAL
Services	
Suspended light fittings	MODERATE
Selected switch boxes	EXCEPTIONAL
Compressed air outlets	EXCEPTIONAL
Switchboards	INTRUSIVE
Power outlets	INTRUSIVE
Surface mounted conduits	INTRUSIVE
Bracket lights on cranes	MODERATE

6.4. Significant Views

The three major view lines of significance (as outlined and described in Section XX) relate to the historical and relational context of the LES study area and particularly the wider North Eveleigh Railyards, and overall ERW complex. The significance of these three key views is noted below.

- Views from Locomotive Street to the study area- High significance
- · View lines between North Eveleigh and the LES Building- High significance
- Views between the LES building and other heritage buildings within South Eveleigh- High Significance

6.5. Historical Archaeological Significance

Archaeological significance refers to the heritage significance of known or potential archaeological remains. Archaeological remains are an integral component of the overall significance of a place, and it is therefore necessary to assess the archaeological resources of a site independently from aboveground and other heritage elements. Assessment of archaeological significance is more challenging because the extent and nature of the archaeological features are often unknown, and judgment is usually formulated based on expected or potential attributes. The Burra Charter

principles and values criteria are important to the assessment, conservation and management of sites and relics, and are necessary for assessing the heritage significance of an archaeological site.

In 2009, following the introduction of the 'relics' provision to the Heritage Act, the NSW Heritage Council endorsed archaeological assessment criteria developed specifically to assist archaeologists to determine the significance of archaeological sites and relics (NSW Heritage Division 2009, Assessing Significance for Archaeological Sites and 'Relics'). The 2009 guidelines define two levels of heritage significance with respect to archaeology as:

"State heritage significance", in relation to a place, building, work, relic, moveable object or precinct, means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

"local heritage significance", in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item. ⁸⁵

In addition to the above, there are three key questions posed by Bickford and Sullivan in their influential paper on archaeological potential, ⁸⁶ that help to shape whether an archaeological resource meets the threshold for having archaeological significance. They suggest that all archaeologists ask the following key questions of an archaeological resource:

- · Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge which no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

This section of the report has been prepared in accordance with these current criteria and guidelines.

6.5.1. Assessment of Historical Archaeological Significance — LES

The archaeological significance for the study area has been assessed by taking into consideration the historical overview of the study area and surrounds, especially in relation to the comparative analysis of other relevant historical archaeological sites and deposits, particularly within the wider ERW complex (both North and South Eveleigh).

Association with Individuals, Events or Groups of Historical Importance (Criteria A, B, & D)

Although South Eveleigh including the LES study area is known for its historical association with significant figures such as Mr. W Scott, Locomotive Engineer, as well as a social significance for the General Strike in 1917 and other union activities, the historical significance of the ERW has strong cultural and intangible significance that would be unlikely to be well represented or demonstrated by the potential archaeological resources on site.

⁸⁵ NSW Heritage Division 2009:6

⁸⁶ Bickford & Sullivan 1894: 23-24

Potential archaeological deposits within the LES study area are unlikely to be of local or state significance under these criteria.

Aesthetic or Technical Significance (Criterion C)

The archaeological remains of the subject site may have varying levels of aesthetic value. Depending on their level of intactness, and their ability to be understood, archaeology can retain aesthetic qualities as picturesque ruins that can be recycled, with approval, for landscaping and furniture onsite (such as at previous work at South Eveleigh), be utilised for interpretation and display purposes—and (where possible) retention. 87

Archaeological evidence located within the study area has the potential to contribute to our understanding of the technical development and growth of the railway rolling stock manufacture and maintenance in a heavily industrial site from the railway boom period in NSW. Archaeological investigation of remains would add to our understanding of the nature of growth and development of the site as well as the physical changes required to adapt and accommodate financial and technological challenges.

Potential archaeological deposits within the LES study area have potential to meet this criterion at a local level.

Ability to Demonstrate the Past through Archaeological Remains (Criteria A, C, F & G)

The potential of any archaeological evidence of the ERW use of the LES study area would be beneficial in furthering the understanding of the use and function of the site, such as information on the Laundry building or Driver's Barracks function and relationships with the surrounding buildings, and further information of the function and evolution of the LES building itself.

Archaeological remains within the study area are likely to potentially include elements of the rare design of the Eveleigh Workshops and can be considered rare in their original context.

Historical Archaeological Research Potential (Criterion E)

The study includes varying levels of low to high archaeological potential across the site linked with phases from the use and expansion/evolution across the LES study area. There is potential for archaeological remains to contribute to information about the development and functioning of the Eveleigh Workshops, particularly what the role of the work undertaken in the LES building was in the functioning of South Eveleigh and the Eveleigh Workshops as a whole.

Potential archaeological deposits within the LES study area have potential to meet this criterion at a local level.

6.5.2. Summary Statement of Historical Archaeological Significance

The study area has moderate to high potential to include historical archaeological deposits, resources, features that are associated with the railway occupation phase of the study area, with the potential to contribute further to the understanding of the development and function of the LES building, and wider ERW, as a critical component of the overall running of the ERW complex. The potential historical archaeological resources within the LES study area is likely to have research potential to contribute to the understanding of the significance of the LES building and within the ERW site overall at a local level.

⁸⁷ For further representation and description of the interpretive opportunities for archaeological relics and works, see Section 7.8 of this report – Heritage Interpretation, and the separate Heritage Interpretation Plan report by Curio in preparation in parallel with this Heritage Study for the LES study area.

The potential archaeological resources, should they be discovered within the LES study area, provide the opportunity to document the former below-ground network of workings and elements of the area that may have been critical to the successful movement and servicing of trains across the site. There is the opportunity to digitally record any archaeological relics, deposits or 'works' encountered within the LES study area for interpretation purposes, for example for use in digital re-creations of the former LES/South Eveleigh layout, and to retain, exhibit and/or repurpose former industrial archaeological elements of lower significance as part of landscaping, furniture design on site (similar to what has been applied in other areas of South Eveleigh).

If intact archaeological resources associated with the former use of the LES study area- and its wider function and connection in South Eveleigh as a whole- be present, these have the potential to add existing knowledge and records of the former industrial workings of the LES study area and surrounds as part of the process of the renewal of the precinct and has potential to contribute to the archaeological research undertaken across North and South Eveleigh to date.

7. Constraints & Opportunities



7. Constraints & Opportunities

The following section considers the key heritage opportunities & constraints for the site and provides overarching heritage management recommendations to guide future development and planning within the LES study area.

The following subsections provide discussion of how to best minimise heritage impacts and work within given constrains, as well as identifying main opportunities to promote positive heritage conservation and outcomes for the study area.

Recommendations are presented to on how to manage the heritage significance of the site into the future to ensure that future development avoid and/or minimise impact to heritage values as much as possible. These recommendations have been developed and informed by the heritage context as discussed through the preceding sections of this heritage study report, with specific consideration given to appropriate location, bulk, height, and scale of future development in the context of the existing significant elements of the site.

Key heritage recommendations that should be applied to future planning and development of the LES study area include:

Retention and adaptive reuse of the LES building and significant heritage fabric.

Recognition and retention of connectivity and views between key heritage items, as well as from the South Eveleigh Precinct north across the railway line to the Carriage Workshops and Paint Shop. Archival recording of the LES building and elements prior to commencement of any future development works

7.1. New Development

The potential impacts of the re-zoning proposal within the will primarily relate to how well the fit out (form, fabric, bulk and heigh) and adaptive reuse of the structure sits within the LES building.

7.1.1. Constraints

The placement, locations, form, fabric, bulk and height of the fit-out form and development should aim to be subservient to the LES building.

High quality architectural design is required to ensure that new development will not overly dominate the heritage item to the point that the original heritage character is no longer readable.

The nature and form of new development should also be considered within the wider historical and physical context within which the South Eveleigh Precinct is located e.g., within the broader cultural landscape of the site when viewed from surrounding heritage areas.

7.1.2. Management

Heritage management recommendations for new development within the LES study area are summarised below. The New development fit-out and built form should:

- Adhere to the relevant heritage management principles and policies to the upcoming 2022
 South Eveleigh Precinct CMP to ensure that the adverse impacts to the state heritage values of the overall precinct are avoided as part of any future development.
- The scale, bulk, form of the new development should respect the scale, height, form and materiality of the LES and its surrounding heritage context.
- Consider the visual relationship between the new development and key heritage items, including the Locomotive Workshop and North Eveleigh, to ensure that the key physical and

visual attributes of the heritage items are respected and reinforced – not diminished- by the new buildings.

- Adopt an appropriate setback/curtilage from the LES building
- Adopt an appropriate height, form, scale, materiality, and colour appropriate with the surrounding heritage fabric and industrial heritage context according to location within South Eveleigh
- Incorporate heritage interpretation elements as part of the fabric and/or design of new buildings.

7.1.3. Opportunities

The LES building is currently underutilised and inaccessible to the public and has potential to become a commercial and retail hub through adaptive reuse along the lines of Mirvac's recent development across South Eveleigh, whilst still remaining a significant SHR listing within the City of Sydney.

7.2. Built Heritage

As the LES building is of high heritage significance, it should be retained on site, in its original location, with opportunities for sensitive modifications as appropriate to the form, history and significance. Any future works to the LES study area should be retained in its dominant form, layout, and significant fabric.

7.2.1. Risks, Constraints & Opportunities

The risks, constraints, and opportunities regarding the built heritage for the LES study area include the following.

- Future design and development will need to consider presence of sub-floor features including pits, machine bases, rails and works etc associated with the original function of the LES building (i.e., particularly rails and pits in centre six rows).
- Opportunity to include the openness and industrial character of interiors including visibility
 of industrial architecture including roof trusses and iron columns and arched windows as
 part future architectural design.
- Contains moveable heritage items that will require consideration and insitu retention throughout.
- · Opportunities for future interpretation displays within the LES building
- Opportunity to retain rolling stock/trains in some form within the LES building as part of heritage interpretation and adaptive re-use works of the building, retaining the final tangible link between trains and the ERW.

7.2.2. Management Recommendations

The management recommendations regarding the built heritage for the LES include the following.

- · Retain, adaptively reuse with a compatible use.
- Retain significant fabric (see Section 6.3).
- Remove intrusive fabric
- Retain openness and industrial character of interiors, including views to steel roof trusses, visibility of cast iron columns etc.
- Any future internal mezzanines should retain views to roof trusses and columns etc.
- · Amend South Eveleigh CMP, approved by Heritage NSW, which will include the LES building
- Retain and interpret movable heritage items/machinery related to Eveleigh kept in building.
 Ensure moveable heritage is kept in appropriate secure location and proactively managed to ensure its conservation.

7.3. Visual Impacts

7.3.1. Constraints

The heritage views to and from the LES building for both internal users and external members of the public are an integral part of the state significance of the LES building, and the wider ERW complex. Adverse impacts to the primary heritage views have potential to diminish the heritage values of the site.

Significant heritage views to and from the LES building should be considered and retained as part of future development, this may include the need to carefully consider the location and positioning of proposed development (building) locations to ensure that key visual connections between existing heritage items and the overall ERW site and surrounds are maintained.

Significant heritage views that will require consideration and retention in future development include:

- Views from Locomotive Street to the study area- High significance
- View lines between North Eveleigh and the LES Building- High significance
- Views between the LES building and other heritage buildings within South Eveleigh- High Significance

The loss of views along these corridors is likely to impact the readability and visual comprehensive of the key functionality, connectivity, and operational nature of the site and has potential to have an impact to the key relationships that currently exist between the remaining heritage buildings.

7.3.2. Opportunities

There is an opportunity to retain and incorporate key heritage view lines into future development at the site, such as embedding these views into a holistic design and landscaping of any new development, which could facilitate a positive heritage outcome by retaining a clear visible connection to help the public to inherently understand the relationships between heritage buildings and overall ERW site. Retention of these view lines would allow site users to appreciate how the LES building functioned as part of the wider Eveleigh complex, and the relationships of key heritage buildings across both the north and south of the site to each other.

7.3.3. Management

Connectivity of views and historic pathways connecting the LES building with the surrounding South Eveleigh Precinct and wider ERW should be retained.

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 LES and wider South Eveleigh Precinct, should be considered and retained through future development works.

7.4. Setting

The setting and primary context of the LES building is primarily industrial in nature, surrounded by other former industrial sites and bounded by suburbs, and close proximity to heritage conservation areas where houses are generally from the nineteenth century, besides the modern residential apartments directly south of the study area. This existing and historical context requires recognition and consideration during planning for future development.

7.4.1. Constraints

The context of the industrial nature of Eveleigh and the surrounding heritage conservation areas and suburbs limit the density and height of the buildings which can appropriately be developed on site without having an adverse impact to the heritage context and significance of the area/listings.

The industrial and historical context of the LES building presents some influence and constraints regarding the landscaping choices for the site (discussed further in Section 7.5 below).

7.4.2. Opportunities

With the right architectural design, an opportunity exists for a unique modern fit out to blend with its surrounding heritage context through the appropriate use of design, scale, materials and landscaping.

Connection of new adaptive reuse within the LES study area to that at the rest of South Eveleigh, through use of elements such as urban design, layout, architecture, use, and heritage interpretation.

7.4.3. Management

- Development at the site should consider and be designed appropriately for the context in which it sits a State significant industrial heritage site.
- New development should be designed so that it is appropriate in the context of the surrounding heritage conservation areas and streetscapes.

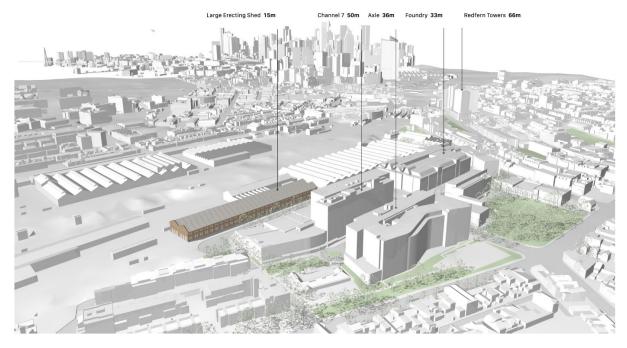


Figure 7.1: Aerial view of South Eveleigh and the LES building showing the context of the wider landscape (Source: FJMT 2022)

7.5. Landscaping

Adoption of a cohesive landscaping scheme within the LES study area, and the wider South Eveleigh Precinct, would be an important element to help unify the heritage buildings and new development at the site into a well-organised, and interconnected location. Development of future landscaping schemes should consider both the aspirations of the new development, as well as the industrial nature of the site's state significance heritage.

7.5.1. Constraints

Excessive greening or landscaping strategies, if not developed sensitively, has the potential to overwhelm the industrial heritage landscape, visually, and obscure the significance of the relationships between the buildings within the LES study area and broader ERW.

Introduction of large groups of new mature trees has the potential to block significant views to and from the heritage buildings within the LES study area and wider South Eveleigh Precinct, as well as views across the main rail line site to North Eveleigh, potentially impacting the heritage significance of the precinct.

It is important to note that there are locations within the site where there is an opportunity to consider an interpretation of the site's former natural landscape and environment, which would contribute to our understanding of the layering of the site's history, from Aboriginal occupation, through to farming and then industrialisation and urbanism.

7.5.2. Opportunities

It is acknowledged that integration of additional green space, gardens and trees may be appropriate as part of site use to improve public amenity, shade, sustainability aims etc. Appropriate locations for new landscaping and plantings etc, could be informed by the history of the site,

7.5.3. Management

- The significant industrial heritage nature of the LES study area means that future proposed landscaping for the site should seek to appropriately integrate and coexist with the industrial environment, rather than overwhelming and dominating it with inappropriate or insensitive greening strategies and locations.
- Design appropriate landscape features and use of vegetation consistent with the site's industrial history. 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.
- 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.

7.6. Moveable Heritage

The LES study area contains moveable heritage within the building. This moveable heritage collection is a significant and important resource which speaks to the heart of Eveleigh's transport history. Management of this resource is an important part of maintaining the LES building's heritage values.

7.6.1. Constraints

A comprehensive and current assessment of the number, location, nature, condition, and significance of all moveable heritage currently located within the LES study area is yet to be updated since being listed on the Section 170 Heritage Conservation Register. Management of them as yet unknown quantum of the moveable heritage resource may have associated financial, locational, and time considerations as part of future development. For example, management of the moveable heritage on an ad-hoc basis during building works (rather than via a holistic management plan developed and implemented prior to commencement of detailed design and/or future development works) may increase costs and create additional time delays for relevant site works and construction etc.

Finding suitable locations to store/incorporate the moveable Heritage items on site may have some constraints on the location/areas of development.

7.6.2. Opportunities

Incorporation of suitable moveable heritage items from the LES study area into future site-wide heritage interpretation is a substantial opportunity for a positive and engaging heritage outcome for the site by encouraging site users to understand and experience elements of how the site worked and significant machinery and equipment functioned.

7.6.3. Management

- Undertake a comprehensive moveable heritage survey and current inventory of all moveable heritage items within the LES, prior to commencement of development to determine the nature, presence, and condition of all moveable heritage items within the LES study area.
- Any moveable heritage study should include a significance assessment, retention, storage, disposal and interpretation policies to guide how the moveable heritage should be managed.
- Include moveable heritage conservation and long-term storage into any development plan for the site so that the immediate, medium, and long-term costs associated with keeping and conserving this significant and important resource can be built into the project costs.

7.7. Historical Archaeology

Based on the assessment of historical archaeological potential and significance for the LES study area (as presented in the sub-sections above), a high level historical archaeological management framework, including overarching recommendations, potential mitigation measures, and process recommendations have been developed for the study area.

7.7.1. Constraints

The LES building likely contains moderate to high potential to sub-floor deposits and features to be present below the existing floor surface associated with the building primary function of constructing and repairing engines. These sub-floor features are likely to be similar to those encountered below the floor both within the Carriage Workshops at North Eveleigh, and the Locomotive Workshop at South Eveleigh, and are likely to include elements such as former machine pits and bases etc.

The area south of the LES building is assessed as low potential for archaeological deposits.

The area in the north eastern portion of the LES study area is assessed to have low potential for archaeological deposits.

Along the eastern boundary of the study area where the traverser use to be located is assessed as low to nil archaeological potential.

7.7.2. Opportunities

There are several opportunities relating to archaeology which provide public outcomes for the development.

The first is the ability to publicise the archaeology as a positive outcome of the development of the site using website pages, and (depending on the potential nature of the archaeology and site conditions) open days to allow the public to view archaeological monitoring and excavation works as they occur.

Post excavation works, the best and perhaps most meaningful opportunity for a positive public heritage outcome in relation to historical archaeology, is to incorporate archaeological features, relics, and works etc uncovered during site works into the permanent interpretation of the new development. This provides the opportunity for the public to be able to see, understand and appreciate what can be very tangible reminders of the site's history.

These opportunities also exist for any Aboriginal archaeology uncovered at the site (see Curio's Aboriginal Cultural Heritage Study report for specifics on this topic).

7.7.3. Archaeological Management Framework

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 approach to, methodologies, and management, of historical archaeological resources within the LES study area should be relatively consistent with that applied to the management of archaeological resources within the remainder of 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 LES study area as was applied at South Eveleigh (e.g. within the Locomotive Workshop 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.

Management strategies proposed through future ARD reports as developed for the LES study area may include:

- Targeted archaeological excavation in the key areas identified as having archaeological potential prior to the commencement of construction works and during site works
- Archaeological monitoring in areas with nil to low archaeological potential.
- Managed archaeological recording and removal of sub-surface features confirmed to be
- 'works' over relics (comparable to the approach undertaken for similar features at South Eveleigh see discussion on relics vs works and associated management considerations in Section 5)
- Archival Recording In areas with nil to low archaeological potential (if any archaeology is uncovered during monitoring)
- Development and incorporation of an Unexpected Finds Protocol into a Construction Management Plan (or similar management document)
- Heritage Interpretation of Historical Relics and works.

7.7.4. Legislative Implications

Works which will impact archaeology within the LES study area will likely require approval under a Section 60 fast-track or full Section 60 Application under the NSW Heritage Act 1977 (depending on the nature of the approvals pathway that applies to future stages of development at the LES study area).

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 historical archaeological resources. This would be determined and confirmed during preparation of an Archaeological Research Design specific to site works proposed.

7.8. Heritage Interpretation

7.8.1. Opportunities

There are a number of potential opportunities for heritage interpretation throughout the LES study area. Potential zones have been identified based on visitor journey and use of space in unison with the form, nature and interactivity of potential interpretive elements. Different spaces and design elements need to be considered to ensure that the site can cater to the diverse needs of multiple audience groups. Opportunities include:

- Highlight the significance of the site, and its surrounds, to the local community, including the Aboriginal community, in consideration of ongoing cultural connection to the site and wider Eveleigh/Redfern/Alexandria area;
- Acknowledge and consider interpretation opportunities that link to other interpretation initiatives, public art and strategies in the surrounding areas (e.g. South Eveleigh, North Eveleigh, Redfern Station)
- Expand and complete the South Eveleigh Cultural Heritage Tourism Activities and Interpretation developed for the South Eveleigh Precinct;
- Retain a locomotive insitu on site as an interactive interpretative element, including opportunities for adaptive reuse as a key destination e.g. café /bar, mini-museum
- Opportunity for Aboriginal people 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;
- 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;
- Tell the relevant and significant phases of the site's history and ensure they are adequately considered and interpreted;
- Conserve, maintain and interpret the heritage significance of the Eveleigh Locomotive Workshop, its remnant machinery collection and intangible assets;
- · Create display and exhibition spaces within the public realm;
- Include contemporary elements to draw site users to the LES, such as pop up retail, exhibitions, light-weight elements that work within the space;
- Allow uninterrupted views along Locomotive Street that highlight and interpret the significant connection between the LES and the Locomotive Workshop;
- Work within the adaptive reuse framework of the LES design intent to create relevant and engaging heritage interpretation opportunities from furniture to wayfinding.

7.8.2. Constraints

There are a number of constraints that will influence and guide any heritage interpretation throughout the Large Erecting Shop site. It is important that the content, form, and locations

selected for installation of interpretative elements aim to be accessible and inclusive of all residents and visitors, regardless of age, cultural background, education, accessibility requirements or interests. Constraints include:

- Ensuring all stories associated with the subject site are told in a way that is inclusive;
- Financial considerations, ongoing maintenance and care, reach of the audience for the zone, and the need to protect both the artefacts/moveable heritage items on display, as well as the audience that may be interacting with/in the vicinity of the items
- Safety requirements and protocols for signage, wayfinding, access, lighting, crowd management and naming of areas/spaces;
- Consultation with relevant stake holders, the local community and local Aboriginal
 community (where interpretation is to address Aboriginal cultural heritage values) during the
 process of development
 Interpretation that is consistent with the identity and visual appearance (look and feel) of the
 South Eveleigh precinct when trying to respond to the uniqueness of this site's stories and
 culture;
- Weather consideration for interpretive products required to ensure interpretive elements are as robust and durable as possible;
- Consideration for the high number of daily workers, locals and visitors that will be passing through these spaces. This includes designs that are both robust and durable, as well as non-invasive to visitors
- Consideration of the nearby heritage interpretation installations, colour and form in South Eveleigh, to ensure a cohesive and 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, adequate seating and audio alternatives to written interpretation.

Please see Curio's 2022 *LES Heritage Interpretation Plan* for more information on interpretation for the Large Erecting Shop.

8. Conclusions & Recommendations



8. Conclusions & Recommendations

This Non-Aboriginal Heritage Study has assessed the nature of the proposed rezoning proposal in the context of the heritage significance and context of the Large Erecting Shop, South Eveleigh and it's part of the wider SHR listed ERW complex), in order to provide overarching recommendations to guide future development and planning within the study area.

The conclusions and recommendations of this report, as summarised below, have been informed by a comprehensive understanding of the setting, context, streetscape, visual and physical characteristics of the locality, surrounding conservation areas, and heritage items. Management recommendations for the heritage significance of the overarching site have also been detailed in Section 7.

8.1. Heritage Building & Fabric

Recommendations and preliminary principles regarding the concept design elements of the Rezoning Proposal that will require further development and careful consideration through the detailed design phase in order to reduce or avoid the impact to heritage fabric and significance include the following:

- The proposed redevelopment should be recessive, deferential, and respectful to the original fabric, form, and industrial character of the LES.
- Design of external additions/annexes, including final location and facade treatment, should be developed in consultation with heritage specialists to minimise impacts where possible and explore sympathetic materiality and interpretive solutions to re-purpose and include the modern fabric as part of the interpretation strategy for the precinct.
- Treatment of the remnant rail tracks, in ground pits, overhead gantry cranes, and other original elements within the site
- Details and design of future adaptive re-use of the LES, including the proposal for management, conservation, and treatment of associated moveable heritage collection contained within—including additional surveys and structural assessment to inform future design constraints and opportunities with respect to form and condition.

8.2. Moveable Heritage

The scope of the Rezoning Proposal does not include specific details about the proposed treatment, management, and incorporation of the significant moveable heritage collection associated with the LES. It will be required to be addressed in future detailed design phases and is also addressed as part of the Heritage Interpretation Plan (Curio, 2022).

Recommendations regarding the future management of the moveable heritage collection include:

- Transference and placement of rolling stock and heritage moveable items require careful
 consideration prior to being undertaken. An experienced and qualified heritage consultant
 commissioned by TAHE should manage the process, taking into consideration the strategies
 and guidelines provided by the Heritage Interpretation Plan (Curio, 2022) prepared for the
 site.
- Undertake a comprehensive moveable heritage survey and establish a current Moveable Collections Catalogue that records and catalogues all moveable heritage items across the LES, and updates relevant heritage listings with the detailed of this updated inventory. The

inventory should form a sub-section of the broader South Eveleigh Moveable Heritage Catalogue being prepared by Curio and ICS and should be included as a sub-section of the Moveable Collections Management Plan for South Eveleigh (currently in progress).

 Include moveable heritage conservation and long-term storage into any detailed development planning for the site so that the immediate, medium and long-term costs associated with keeping and conserving this significant and important resource can be built into the project costs and ongoing asset maintenance costs

8.3. Historical Archaeology

As the LES study area is part of South Eveleigh and are both elements of the same overarching site of the former ERW, a consistent of approach will be applied to the management of archaeological resources. Therefore, it is proposed that a similar differentiation between 'relics' and 'works' (where relevant) be applied to the LES study area (the context in which archaeological relics and works have been successfully managed at South Eveleigh previously), 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.

Future development works that will impact the ground surface within areas of moderate or high archaeological potential, as well as works that will impact the ground level within the LES subject site, will have potential to encounter and impact historical archaeological features, resources, and works but not as much relics.

The Rezoning proposal does not include substantial bulk excavation works and therefore targeted areas may include areas of excavation of lift pits and piling. Depending on the depth and location of excavation proposed, these works have potential to be a moderate to major archaeological impact, potentially removing a proportion of the historical archaeological resource remaining within the LES study area.

The archaeological impact of the project will require management as part of the future stages of the development, following the finalisation and approval of the proposed works, and commencement of detailed design phases that will determine the exact nature and extent of the potential archaeological impact in each area of the site.

8.3.1. Recommendations

The following overarching recommendations are made regarding the management and mitigation of the removal of historical archaeology within the LES study area:

- Historical archaeology within the LES study area should be managed in accordance with the
 archaeological potential and management framework outlined in Section 5 of this report,
 which should be further developed through a future Archaeological Research Design (ARD),
 specific to the impacts and final design of the precinct renewal development. It should also
 be managed in accordance with the archaeological provisions of the Draft South Eveleigh
 Precinct Conservation Management Plan.
- Archaeological works carried out within the study area should be undertaken under a
 Section 60 Excavation Application under the NSW Heritage Act 1977, depending on the
 assessed significance of the potential archaeological deposit and location in question. The
 appropriate approvals pathway (i.e., a s60 Application, or a s60 Fast Track Application) would
 depend on the nature and extent of works proposed, and the corresponding impact to
 potential historical archaeological resources. This would be determined and confirmed
 during preparation of the ARD.

- Archaeological mitigation program developed through the ARD should be specific to the location and nature of ground penetrating works at the site, but may include:
 - Targeted archaeological test excavation undertaken in the key areas identified as having moderate-high archaeological potential before construction works commence
 - o Unexpected finds protocol.
 - o Archaeological monitoring in areas with nil low archaeological potential.
 - Archival recording, surveying, photogrammetry, and 3D scanning should be performed to selected features for future heritage interpretation products if any archaeological features are uncovered during monitoring and testing.
 - o Significant archaeology uncovered will need to be incorporated into the heritage interpretation on site.
- Landscaping may also be redesigned to avoid physical impacts on the archaeological resource by 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. Where it is not possible to avoid archaeology through redesign or use of previously disturbed areas, further archaeological assessment and investigation will be necessary.
- Where possible, detailed design options and solutions should be investigated to reposition structural and built elements that have potential to impact archaeology, for example, minor relocation of support columns or options to span across areas identified as having high archaeological potential with two or more columns. A similar avoidance approach may also be employed with the 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.

8.4. Landscaping & Public Domain

The detailed design of the landscaping and public domain should:

- Ensure a seamless connection between the LES and the South Eveleigh Precinct, proposing cohesive elements throughout Locomotive Street and in-between the LES and Locomotive Workshop to extend the overall look and feel (e.g. materiality, furniture, interpretation, etc.) to the subject site.
- Avoid over-landscaping, especially along the southern and eastern facades, as it would risk a reduction of the legibility of the significant fabric of the LES.
- Develop appropriate lighting solutions to improve the visibility of the façade during daytime and nighttime, highlighting the original and interpretive elements, and activating the public domain.
- Include inclusive, durable, safe, and inviting elements to help active the precinct by attracting visitors to the site. This includes the development of innovative and engaging interpretation and public art products that will help to retell significant stories related to the subject site

- and are consistent with the interpretation strategy developed for the South Eveleigh precinct.
- Any proposed car parking areas should not overtake the public domain area along Locomotive Street or interrupt the pedestrian route towards the LES building or any interpretive/public art element.

8.5. Future & Detailed Design

Recommendations and preliminary principles regarding future detailed design for the LES include the following:

- Detailed design should be developed in close consultation with an appropriately
 experienced and qualified heritage consultant to provide heritage advice and input
 throughout the detailed design process, especially with respect to the key additions,
 changes, and modifications proposed to elements that have potential to have an adverse
 physical and/or visual impact to heritage items and significance, that will require
 minimisation and mitigation through careful, sensitive, and sympathetic design solutions.
- Adaptive reuse of the heritage building (specifics to be detailed through future detailed design phases) should be undertaken in a sympathetic, reversible, and sensitive manner that ensures the original use of the building continues to be understood and communicated to audiences through retention of as much of a building's original fabric and internal layout as possible, supported by complementary heritage interpretation initiatives where appropriate. Where modern additions must be incorporated into the significant heritage item, the design of these elements should adhere to the Burra charter principles of 'as much as necessary, as little as possible', and should complement the original structure and form while also using contrasting but sympathetic materials to ensure that modern additions can be readily distinguished from the original form and fabric.
- Detailed design of the Rezoning Proposal elements presumably to be undertaken through
 future stages of the planning and redevelopment process will require the preparation of
 future heritage impact assessments (subsequent and additional to Curio's 2022 LES
 Statement of Heritage Impact) to specifically respond to and assess the impacts of the detailed
 design, once developed.
- New additional volume to the southern facade should consider the visual connectivity between the LES and Locomotive Workshop, as well as the significant view lines of the LES along Locomotive Street and when approaching the building from the South East Village Square, to ensure that the key physical and visual attributes of the heritage items are respected, prominent, and not obstructed.
- New elements should adopt appropriate materiality and colour palettes commensurate with the surrounding heritage fabric and context of the South Eveleigh Precinct.
- Investigate opportunities for reuse and recycling of materiality and fabric of little significance (e.g., rolling stock parts, memorabilia, etc.).

8.6. Heritage Interpretation

Heritage interpretation strategies as identified within the Stage 1 HIP will support the development of innovative interpretation elements within the LES site that will convey an inclusive account of the

site's rich history, its function within the Eveleigh Railway Workshop as well as accounts from the local community, both past and present.

Heritage interpretation initiatives throughout the LES site should be engaging, authentic, relevant, and appropriate to ensure that they not only continue to celebrate the significance of the subject site, but also the highly significant on-going Aboriginal cultural heritage connection to the place.

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