Interpretation Strategy

BAYS 1 AND 2 LOCOMOTIVE WORKSHOP
ATP EVELEIGH

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Issue	Notes / Description	Date	Initials
1	Issued to Client for comment.	07.03.13	SF
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EXECUTIVE SUMMARY

The subject site is located to the northern portion of Bays 1 and 2 of the former Eveleigh Locomotive Workshop. The building is comprised of 16 bays, of which only the subject site, which is currently used for the purpose of storing tools and machinery, has not been adaptively re-used. Minor changes in 2010 – 2011 saw the rearrangement of some of the historic tools and addition of "interpretive infrastructure" to provide facilities for regular unguided access and to act as an interpretative base on which interpretative media could be added at a later date. The southern portion of Bays 1 and 2 are currently used by a blacksmithing firm a used which is consistent with the historic use of the site.

The Eveleigh Locomotive Workshops operated for just over a century, from 1887 until their closure in 1988. The peak of locomotive manufacture at the site was between the initial construction phase and the 1930s when many of the trades were relocated to the new Chullora workshops. A further decline in the use of the Eveleigh Locomotive Workshops occurred in the 1960s when NSW Railway began to introduce more diesel engines and phase out the use of steam. The workshop finally closed in the late 1980s.

Traditionally, Bays 1-4 contained trades such as blacksmithing and boiler making while the remaining bays were used for machining and assembly.

The Eveleigh Railway workshops are listed as an item of Significance to the State of NSW and are protected by the NSW Department of Environment and Heritage under the *Heritage Act 1977 (NSW)*. The site is also identified as an item of significance on the s.170 register. Other listings include the heritage register of the National Trust of Australia (NSW) and the Register of the National Estate[1].

Research undertaken for the preparation of this document has identified the following key messages which should be relayed to future site users and visitors:

- Origins of the site: The Chisholm Estate 1835-1882;
- Development of the NSW Railway;
- History of the Eveleigh Railway Workshops;
- The role and influence of John Whitton and George Cowdery;
- E.E. Lucy, Chief Mechanical Engineer 1911-1932;
- The demonstration of technological advancements from 1882 – 1986; and
- The social history of the site: union action, political careers, the changing role of women and the workers.

[1] The Register of the National Estate has ceased to exist as a statutory heritage list, although it continues to exist as an inventory of Australian heritage sites that were registered between 1976 and 2007.

The former Eveleigh Workshop is now home to the Australian Technology Park. Rappoport believes that the relating of the history of the site can utilise modern technology, changing and evolving over time as new stories are revealed and new technologies formulated. In the immediate term, digital media should be utilised, alongside the more traditional approaches to interpretation such as signage and printed media. This could include, but not be limited to, holographic models, interactive touch screen technology and the re-making of the existing videos of the history of the place to create short theme based interpretative videos.

As previously noted the study area already contains interpretation infrastructure which Rappoport has reviewed and deemed to be well constructed, deferential to the heritage significance of the place and laid out in a well-executed manner. It provides good visual connections to the existing machinery and includes ample space for displays, installations and visiting members of the general public. It is the intention of Rappoport that the proposed interpretation shall be designed to support and complement the existing infrastructure.

The following interpretation strategy is intended to be a "base" from which the displays and use of space can be altered to demonstrate historic images, stories and items as they are made available or discovered. The vision of this interpretation strategy is to lay the foundation for a historical destination, encouraging visitors to return and be rewarded with new exhibits, interactive equipment and the revealing of other interesting aspects of Eveleigh's history.

1.0 INTRODUCTION

This Interpretation Strategy has been prepared by Rappoport Pty Ltd on behalf of the owner of the site, Urban Growth (NSW) part of the Australian Technology Park.

Urban Growth (NSW) seeks to develop Bays 1 and 2 as an interpretative centre representing the history and technology employed within the Eveleigh Locomotive Workshop. This proposal forms part of the greater redevelopment of the site which has been considered by the office of Environment and Heritage (OEH).

Development consent has been granted by the Redfern Waterloo Authority (RWA) on 27 July 2011 for DA 077-03-11 *"The Interpretive and Exhibition Fit Out and Use of Bays 1 & 2 of The Locomotive Workshops, Australian Technology Park",* subject to conditions including condition *D2 Interpretation Strategy* which states that:

> *"Details of proposed interpretive signage and media and associated re-organisation and display or relocation/disposal of machinery is to be the subject of a detailed review of Heritage Significance, Scope of Works and Statement of Heritage Impact (this must include details of all conservation works proposed to the Subforeman's office demountable building, overhead travelling crane and any other machinery or tools for display) and to be subject to appropriate consultation. Such details and outcome shall be approved by the RWA or successor agency prior to the issue of an Occupation Certificate. The approved Interpretation Strategy must be implemented to the satisfaction of the RWA or successor agency."*

This Interpretation Strategy is, therefore, required to obtain Occupation Certificate for Bays 1 & 2. It is intended to show how the history of the site can be demonstrated and incorporated into Bays 1 and 2 of the former Locomotive Workshops. In accordance with condition D2, Rappoport Pty Ltd has also provided a Statement of Heritage Impact for the Subforeman's office, dated March 2013.

Upon approval of this Interpretation Strategy by the consent authority, ATP will contract a wayfinding company to implement this Interpretation Strategy.

1.1 Site Location

This brief relates to works to be carried out in Bays 1 and 2 within the existing listed building, the Eveleigh Locomotive Workshop at the Australian Technology Park, 2 Locomotive Street, Eveleigh. The location is illustrated in Figure 1 below.

Figure 1: Map depicting the location of the subject site at 2 Locomotive Street, Eveleigh, indicated by the red box. It should be noted that the area to the immediate south of the subject site is currently used as a Blacksmiths workshop which does not form part of the study area. (Source: www.maps.google.com.au, accessed 16.02.13).

1.2 Study Area

As mentioned above, the study area is located to the northern portion of Bays 1 and 2 of the former Eveleigh Locomotive Workshop. The building is comprised of 16 bays of which Bays 3-16 have been converted for a variety of modern commercial uses. Bays 1 and 2 have not undergone major alteration and have been retained in a largely unaltered condition. The northern portion of Bays 1 and 2 are currently used for the purpose of storing tools and machinery until they are required for interpretative purposes, while the southern portion is currently used by a blacksmithing firm which has been noted as using continuing to use some of the historic equipment[2].

Although, as noted previously, the study area has not been adaptively reused or heavily modified, in 2010 - 2011 "interpretive infrastructure" was added to provide:

- Central corridor glass fencing;
- Metal chequer plate pathway ;
- Metal wire fencing around pathway;
- The gathering/exhibition space;
- Relocated demountable office;
- Relocated machinery/tools; and
- Lighting[3]

[2] FUTUREPAST Heritage Consulting Pty Ltd., Statement of Heritage Impact, "Interpretive Infrastructure" Bays 1 and 2 North, Locomotive Workshops, November 2010, page 8

[3] FUTUREPAST, November 2010, page 11-12.

The aim of the 2010-2011 works was to provide facilities for regular unguided access and act as an interpretative base on which interpretative media could be added at a later date.

For ease of reference the site plan, from the FUTUREPAST *Statement of Heritage Impact* (SOHI)2010, has been reproduced at Figure 2 to provide a better understanding of the study area and provide an inventory of the remaining machinery, tools, fabric and interpretative base.

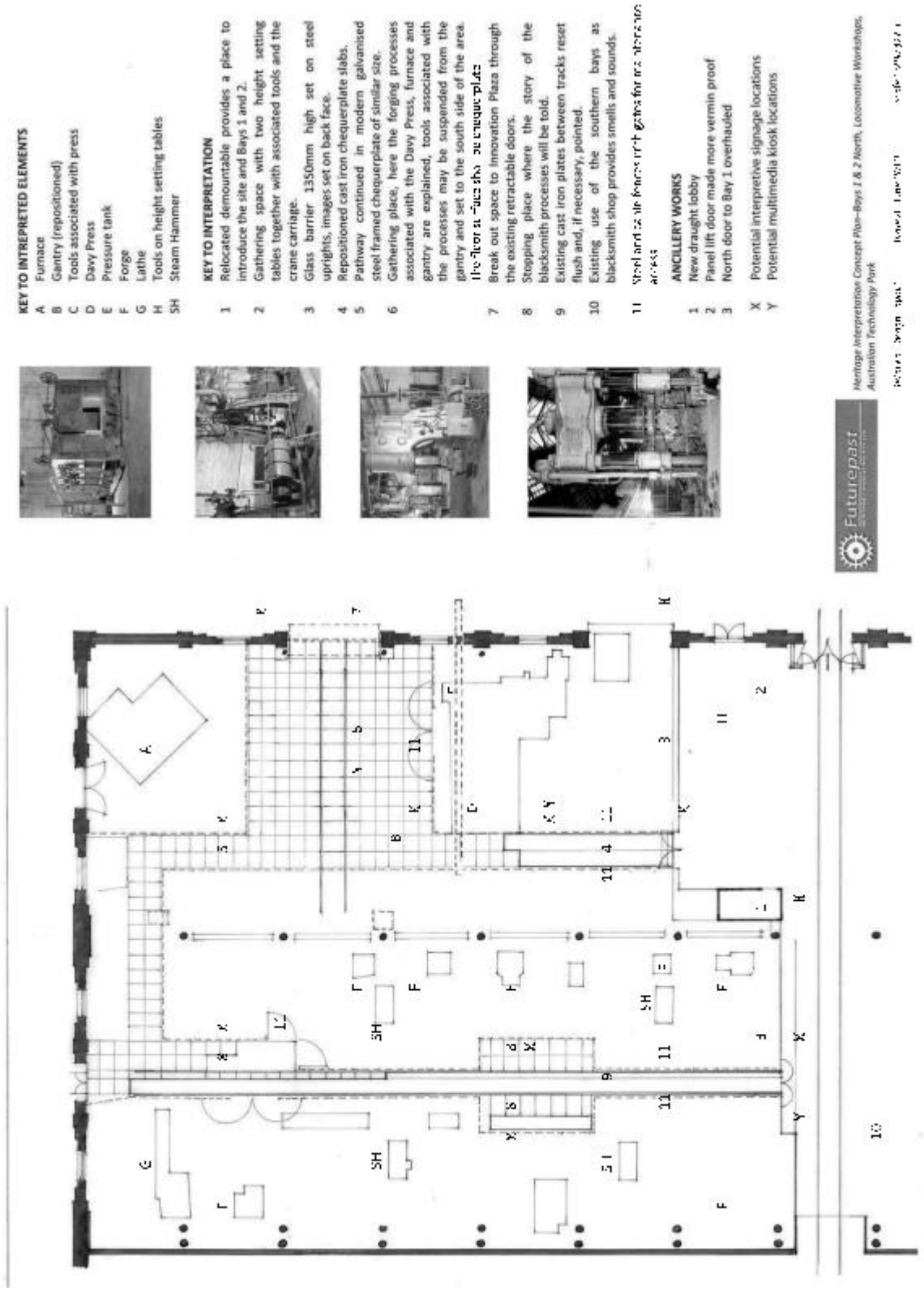

Figure 2: Futurepast site plan of the proposed 2010 introduction of base interpretive infrastructure.
(Source: Futurepast Heritage Consulting P/L, *Statement of Heritage Impact* (Draft), November 2010, p 10)

1.3 Heritage Listings

The Eveleigh Railway workshops are listed as an item of Significance to the State of NSW and are protected by the NSW Department of Environment and Heritage under the *Heritage Act 1977 (NSW)*. The site is also identified as an item of significance on the s.170. Other listings include the heritage register of the National Trust of Australia (NSW) and the Register of the National Estate[4].

1.4 Statement of Significance for the Eveleigh Locomotive Workshops

The Heritage Values of the site have not been assessed within this document. In recent years, several assessments of the heritage values of the site have been undertaken. The most recent being carried out by Godden Mackay Logan (GML) in March 2012 as part of the Australian Technology Park Conservation Management Plan (CMP), the Statement of Significance from that document has been reproduced below:

> *ATP provides important evidence of the founding and gradual expansion of the largest railway workshops in NSW over a period of 100 years. The Eveleigh Railway Workshops was a highly significant and ambitions public endeavor of a type that rarely occurs today. Eveleigh was a government-established and government-run industrial workshop designed to provide self-sufficiency for the Sydney and NSW railways, without reliance on private operators who did not possess the funds or workforce to cope with demand during the nineteenth century. The ATP site contains an amalgam of land gradually resumed for railway use during the nineteenth and twentieth centuries. The land was resumed for a number of expansions of the Locomotive Workshops, establishment of the Alexandria Goods Yard and construction of an area of housing north of Henderson Road. At its peak, the area was the most important rail precinct in NSW.*
>
> *Three or four remaining buildings and a significant machinery collection from the State-significant Eveleigh Locomotive Workshops are contained within the ATP site. The Locomotive Workshops building, New locomotive Shop and Works Manager's Office form a historically and aesthetically significant group that demonstrates the scale and importance of the Eveleigh Locomotive Workshops and are a landmark along the western railway. The distinctive, highly detailed industrial buildings provide powerful evidence of the workshops as a major industrial undertaking in NSW during the late Nineteenth century.*

[4] The Register of the National Estate has ceased to exist as a statutory heritage list, although it continues to exist as an inventory of Australian heritage sites that were registered between 1976 and 2007.

Individual items of the Locomotive Workshops Machinery Collection remain significant items of technical achievement. These range from the Davy Press, a unique machine in Australia and rare in a world context, to the Departmental Lathe, a precision machine built locally. While the Machinery collection is not entirely intact, it retains a high level of significance and the collection within the blacksmiths workshop is relatively complete.

The ATP site holds great significance for members of the local community and current and former workers within the NSW railways and is central to many local community members connections with the Redfern/Darlington area. As the site of the former Eveleigh Locomotive Workshops, ATP is emblematic of a type of work no longer common in NSW and the remaining buildings are seen as a testament to the many thousands of workers and their families that made their living within its walls. The pride in the history of the Eveleigh Locomotive Workshops is evident through the dedication of the many volunteers that continue to work in the Large Erecting shed, the blacksmith business in Bays 1 and 2 South and the open days and tours led by former workers, as well as the many views expressed during the community consultation process.

The ATP site has strong historical connections with the surrounding area, including North Eveleigh and Redfern Station, as well as a historical connection with the expansion, pattern and type of development that occurred in adjacent suburbs. While the former Eveleigh Locomotive workshops are significant in their own right, this significance is increased by their relationship to the Eveleigh Railway Workshops as a whole, including the former Carriage and Wagon workshops at North Eveleigh and the former Macdonaldtown Gas Works.[5]

1.5 Methodology

The methodology used in this Interpretation Strategy is consistent with the Heritage Interpretation Policy contained in the NSW Department of Planning Heritage Information Series, as endorsed by the Heritage Council of NSW in August 2005. It has been prepared in accordance with the principles contained in the most recent edition of the *Burra Charter* (ICOMOS Australia).

[5] Godden Mackay Logan, *Australian Technology Park Conservation Management Plan*, draft report March 2012, p92-93.

1.6 Limitations

This Interpretation Strategy is intended as a research document formulated to collate the types of information available for the site. Preparation of this document has not included the seeking of copyright approval for use of any pictures, or information being used on any site interpretation medium. If, and when, the information is selected for use, as on site interpretation, the necessary copyright must be acquired. The sources of all photographs used in this document are shown in Appendix A – Photolog.

This report is prepared as a strategic overview of appropriate interpretive concepts for the heritage significance of the site. While developing themes and key messages for the identified audience at the subject site, it does not specify a content development, installation strategy or a maintenance plan for the proposed interpretive media.

Despite extensive searches, the author of this report was unable to find an image of George Cowdery.

1.7 Author and Copyright

This Interpretation Strategy has been prepared by Paul Rappoport of Rappoport Pty Ltd - Heritage Consultants in conjunction with Louise Doherty, Heritage Consultant.

2.0 HISTORICAL CONTEXT

2.1 The Story of the Eveleigh Locomotive workshops

The following historic timeline was prepared using information from Chapter 2 of the draft CMP undertaken by GML in March 2012 and Chapter 3 of the Eveleigh Locomotive workshops Conservation Management Plan prepared by Otto Cserhalmi and Partners P/L in September 2002. Further details about the history of the place can be found within those documents.

Date	Event
1835	60 acres of land is granted to James Chisholm, former member of the NSW Corps. Chisholm built a house in the North East portion of the site which he named Calder House after his birthplace in Scotland.
1837	Chisholm dies leaving Calder House to his wife.
1849	The *Sydney Railway Act* is passed authorising the Sydney Railway Company to build a railway from Sydney toward Goulburn and Bathurst.
1854	Commencement of construction of Railways in Melbourne, Newcastle and a short goods line to Darling Harbour.
1854-1855	The rails, locomotive and passenger wagon, made in England and purchased by the Sydney Railway Company, arrive in Sydney.
1855	An inquiry into the development of the railways in NSW determines that the current system of encouraging private enterprise to construct the railways is not successful. The NSW Government takes control of the Sydney Railway Company after they experience financial difficulties and continues the development of the rail system. The first railway line is completed in September 1855. It is known as the Western Line running from the first Redfern Station to Parramatta. This line, consequently, dissects the Chisholm Estate. New railway sheds are constructed to the south western end of the Old Sydney railway yards. At this time Calder House is used as a school.
1856	John Whitton arrives from England. He is the Engineer-in Chief of the Railway; a position he will hold until 1890. Part of Whitton's restructuring work will result in the resumption of land at Eveleigh for the construction of the workshops.
1857	A Railway line connecting Maitland and Newcastle with Sydney is opened. This line was principally used for the exportation of coal.
1871	The Railway sheds at the Old Sydney Railway yards are quickly outgrown and new facilities are required.

Date	Event
1873	The line is extended to Goulburn in the South, Raglan in the west and a short line is added to Richmond.
1874-1876	NSW Locomotive Foreman, William Scott makes several complaints about the inadequacy of the existing small workshop and the difficulty experienced by his men trying to maintain the growing Government Railway vehicles. Whitton, Chief Engineer, agrees with Scott and lobbies the Commissioner for increased accommodation. Whitton recommended that the commissioner purchase the Chisholm Estate due to its close proximity to the Redfern Tunnel.
1875	The Chisolm Estate, a survey of the estate shows that it is largely undeveloped containing only a house, a cottage and a stable to the south-west corner of the site, being the modern day location of the ATP site.
1876	83 Acres is purchased at Duck River (later known as Chullora) the Minister for Public works, John Lackey believed it was appropriate for use for development as workshops Whitton and Mason, The Engineer for existing lines, both declared it unsuitable.
1878	R.H Burnett appointed Locomotive Engineer and petitioned the Commissioner for improved workshop facilities and identified a backlog of maintenance due to the existing inadequate and small facilities. He also agrees with Whitton and Mason regarding the unsuitability of the Duck River site.
1879	Parliament voted to purchase the Chisolm Estate. The Duck River land was used as a goods marshalling yard until 1909 when it was used as the goods wagon workshop and renamed Chullora.
1879	NSW Railway system is recorded as having 177 Steam locomotives, 444 Coaching Vehicles and 3,867 goods wagons.
1881	The NSW line is extended to Albury to meet with the Melbourne line, which is constructed on a different gauge.
1882	Construction work for the Eveleigh Workshops commences. The Railway Line to Hay is completed.
1884	The contracts for construction of Bays 1-4 won by George Fishburn for £40,725.
1885	The Engine Running Shed is completed and put into operation. Bays 1-4 of the Locomotive Workshop are completed and put into operation. The contact for Bays 5-15 is won by John Ahern for £80,837. Railway line to Bourke is completed.
1887	Bays 1-4 containing the Foundry, Boiler Making Workshop and Blacksmiths are officially opened.

Date	Event
	Late in the year Bays 5-15 containing the Carriage and Wagon Workshops are opened.
1888	NSW Line extended to Wallangarra to meet with Brisbane Line which, like the Melbourne Line was constructed using a different gauge.
1899	The large Erecting Shed is constructed to help increase the capacity of the existing Erecting Shed located in Bays 6-8 of the Locomotive Workshop. Bays 12 and 13 are converted for use as an Interlocking shed. A compressed air plant is inserted in an annexe near Bays 3 and 4. The new foundry is erected and the Boiler Shop expanded into Bay 4.
1892	Union negotiations led to workshops being closed on Saturdays.
1896	200 feet extension added to the Large Erecting Shed.
1900	Eveleigh Railway workshops are the biggest employer in the state with over 1500 men on site.
1900-1906	Large Erecting Shed extended.
1901-1916	The process of electrification is undertaken with AC power supplied by Ultimo Power Station (now the Powerhouse Museum).
1902	Copper and Tinsmiths shop erected on the south side of Bays 5-9. Their former shop between Bays 4 and 5 is demolished. A 5ton Craven Electric Crane is installed in Bay 9.
1905	The capacity of the Blacksmiths and Boiler Shop is expanded to meet demand. The Blacksmiths having previously been located in Bay 2 were now located in Bays 1 and 2. The Spring and Hammer Shop which had previously been located within Bay 1 were moved to the area now known as Innovation Plaza. The annex between Bays 4 and 5 is roofed and fitted out for use as the Boilershop.
1906	Ground traverser between Bay 15 and Large Erecting shed is converted to Electric power.
1907	NSW Government decided that new locomotives, which had previously been built overseas and then assembled at Eveleigh, were to be constructed at Eveleigh and new workshops had to be erected to accommodate this.
1908	New locomotive shop completed. Four “M” class locomotive boilers are installed in the Boiler House (Bays 2 and 3).
1908-1910	All boilers are replaced or refurbished.
1908-1925	153 locomotives are manufactured on site. In 1925, Eveleigh needed more space for the repair of locomotive and the production of new locomotives was moved to Chullora.
1910	Workers negotiate indoor toilet facilities.

Date	Event
1912	3720 men are recorded as being employed at the site.
1914	New Locomotive Shop extended. Machinery in workshops was slowly being converted to electric power. Steam pipes lagged with asbestos.
1914 - 1918	In an attempt to help the war effort, gun shells are manufactured at Eveleigh. However this was not a successful venture as repair work was still in high demand, there was little available space to set up the munitions manufacture, most employees were fully engaged with their own work, the existing machines not suited to manufacturing munitions and were difficult to modify.
1915	Machine Shop wall mounted steam engines were replaced by Electric Motors; however, some wall mounted steam engines were recorded as being used as late as the mid-1950s. New overhead travelling crane added to Bay 4. Public Works annual report concludes that Eveleigh works are congested and recommends that a new Locomotive and Repairing Works is added to the site.
1915-1917	Eight strikes recorded during this time period. The introduction of the Taylor Card System in 1916 leads to an 82 day strike which remains to be the largest strike in Australian history. The railway being operated by volunteers and school boys until the workers returned having been defeated and having to adhere to the Taylor Card System. Several employees were sacked due to their involvement in the strike action.
1916	Machinery in Bays 10-13 is recorded as being electrified. Ajaz forging machines installed in Blacksmiths Shop.
1917	Pattern Shop constructed. Bay 1 and 2 is recorded at this time as being the Blacksmiths Shop
1919	To facilitate further expansion works 2 acres of land were resumed in the south western end of the site to enable the construction of the new Foundry, Pattern Shop and associated sidings.
1922	The Steel Foundry is extended and the old Foundry is converted for use as a Boiler Repair Shop.
1923	Much of the boiler repair work is moved to Chullora (Duck River)
1924	Australian Railways Union (ARU) shop committee established at Eveleigh
Mid 1920s	The railways are electrified.
1925	7000 Workers are recorded as being on site. Eveleigh is working at full capacity with no further expansion room. Manufacture of new locomotives

Date	Event
	moves to Chullora. 153 Locomotives have been built. New Locomotive Shop used for repairs. Northern Half of Bay 1 was cleared and the Davy Press installed. Imported from England it had a 1500 ton Capacity. A new crane was also installed to service the Davy Press.
1927	Further Railway Workshops opened in Chullora it was intended that Chullora would replace Eveleigh but high demand results in the two workshops operating in tandem.
1935	Diesel trains are introduced they were produced overseas and maintained locally. Eveleigh staff had to be retrained to enable them to maintain the new trains.
1937	Repair work moves from Eveleigh to Chullora.
1939	Union Action results in shower facilities being fitted at Eveleigh.
1941-1945	Eveleigh was again used to help with the war effort. However, this time the Department of Defence supplied the machinery. Eveleigh was used to manufacture 25lb field gun shells, produced the machinery required to manufacture Bren Guns and for a short time manufactured tanks. Bays 5 and 6 were dedicated to the war effort with a timber mezzanine layer added to Bay 5. Concrete air raid shelters were constructed to both sides of the workshops. All Department of Defence machinery was removed at the end of the war.
1945-1952	Locomotives were again being constructed at the workshops. However, by 1950 contracts were being won by private contractors, workers were being lured to the private contractors by higher wages which led to a labour shortage at the workshops which in turn resulted in more work being contracted out.
1947	Forty-eight AC welding power points were installed throughout Eveleigh
1948	Hail damage to the glass roof resulted in the glass being replaced with corrugated plastic sheeting
1949	Mezzanine in Bay 5 was converted for use as a Staff Canteen and Rec Room.
1950	The NSW Government was keen to retain the services at Eveleigh and so updated machinery, retrained staff in the repair and overhauling of diesel engines.
Mid 1960s	Steam Locomotion phased out.
1968	Cleaning and Servicing Sheds were added to the side of the Engine Running Sheds.
1970s	Bays 1 and 2 recorded as being used as Blacksmiths.

Date	Event
1986	The Locomotive Workshops closed.
1989	Eveleigh Railway workshops closed
1991	Creation of the Australian Technology Park announced as a joint venture between University of NSW, University of Sydney and University of Technology, Sydney.

2.2 The Chisholm Estate

Further information about James Chisholm, Calder House and the Estate on which it stood is contained within the Eveleigh Locomotive Workshops Conservation Management Plan prepared by Otto Cserhalmi and Partners P/L and has been reproduced below.

> *In 1835 the 62 acres was granted to James Chisholm who was born at Calder, Midlothian, Scotland in 1770 and arrived in Sydney in 1790 with the NSW Corps. On his grant, Chisholm erected "Calder House" The date of the house is uncertain, with various sources suggesting it was built c.1820, in 1823, 1824 and in the late 1930s. Chisholm died in 1837 and the house was presumably complete by this date. His widow lived in the house until 1855. It is shown on the 1855 plan drawn when part of Chisholm's grant was resumed for the railway. At this time the construction of the new railway cut Chisholm's grant in half and the house was effectively cut off from the remainder of the land. It was leased as a school to Mr Castle and taken over in 1865 by Dr Sly who operated Dr Sly's Academy until the site was resumed by the railways in 1878.*
>
> *Calder House was used for several years, at least between 1916 and 1921, as a residence for the Locomotive Works Manager of the Eveleigh Railway Workshops. In 1923, it burnt down and its remains were demolished in 1924.*[6]
>
> *The site for the Eveleigh Railway Workshops (Chisholm's grant) was chosen in 1875, and the estate by this time reduced to 10 acres, was resumed in 1878 with the compensation price settled in 1880. Clearance began two years later and development continued into the 1890's. The first Eveleigh Railway Station was built in about 1876 in the centre of today's Eveleigh Site in the approximate location of the Illawarra Drive. In c.1886-87, the second Eveleigh Station (the Current Redfern*

[6] Otto Cserhalmi + Partners P/L, *Eveleigh Locomotive Workshops Conservation Management Plan*, 2002, p25.

Station) was built further to the north east. It was renamed Redfern Station in 1906 when the new Sydney Terminal (the current Syndey/Central Station) was completed[7].

2.3 E.E. Lucy

In 1905, Ernest Edward Lucy arrived in NSW to become the Assistant Chief Mechanical Engineer at Eveleigh Workshops. His move from England had been prompted by his wife, Florence's development of the early stages of tuberculosis. The family initially considered a post in Egypt but Florence's doctor determined that Egypt was too humid and suggested finding a country with dry heat and access to sea air[8].

As a child Lucy had demonstrated an aptitude for Mathematics and Engineering and had dreams of attending Oxford University. But despite being born into a wealthy family, the premature death of his parents resulted in the financial burden of a university degree being beyond the means of his guardian, Aunt Mary. Lucy instead joined the "Cadet Management Training" apprenticeship provided at the Great Western Railway workshops in Wolverhampton. He remained an advocate for apprenticeship training for the rest of his working career[9].

Lucy was to hold the position of Assistant Chief Mechanical Engineer until 1911. After the retirement of his superior William Throw, Lucy moved into the role of Chief Mechanical Engineer, he remained in this role until 1932 when at the age of seventy one he entered into retirement[10]. Lucy's years at Eveleigh were among the peak production eras of the workshops, as is evident from the timeline in *Section 2.2* of this report, a great deal of changes occurred during this time both in terms of production output and changes to the workshops.

Lucy was a great innovator and inventor; he was responsible for the design of several locomotives produced at Eveleigh. Other achievements included: the improved design of carriages and sleepers, to provide comfort for passengers; creation of larger wagons, to improve goods haulage; he oversaw the expansion of Eveleigh; he encouraged innovation through the establishment of an innovation workshop; the introduction of the internal combustion engine; the improved design of coupling systems and despite his own claims that he knew *"enough about electricity not to want to meddle with it*[11]*"* he was also responsible for overseeing the electrification of the yards and wider rail system.

[7] Cserhalmi 2002, p27.
[8] Burke, D., Man of Steam, 1986, p26.
[9] Burke, D., Man of Steam, 1986, p14.
[10] Burke, D., Making the Railways, 1995, p187.
[11] Burke, D., Man of Steam, 1986, p146.

However, Lucy's time also included some of the lowest points of Eveleigh's history including World War I when a significant number of men enlisted and did not return, and the 1916 strike.

E.E. Lucy died on 17th July 1944.

2.4 Historical Themes

2.4.1 Introduction

A framework of historical themes has been developed by the Heritage Council of New South Wales which links in with the National framework of themes developed by the Australian Heritage Commission. These themes identify the historical values that might be used to interpret heritage significance.

By presenting information about the key historical themes which have shaped the subject site in an enlightening and interesting way, weighed up from an analysis of the building and an assessment of its cultural significance, good interpretative outcomes will be achieved. The key messages which emanate from the historical themes relevant to subject property help us to identify the stories about the site which should be relayed to future site users.

- Origins of the site: The Chisholm Estate 1835-1882;
- Development of the NSW Railway;
- History of the Eveleigh Railway Workshops;
- The role and influence of John Whitton and George Cowdery;
- E.E. Lucy, Chief Mechanical Engineer 1911-1932;
- The demonstration of technological advancements from 1882 – 1986; and
- The social history of the site: Union action and workers.

All source locations for the images used in *Section 2.3.2* have been provided at Appendix A – Photolog.

2.4.2 Key Historical Themes

2.4.2.1	Origins of the site: The Chisholm Estate	
Theme:		
National:	**State:**	**Local:**
Building Settlements towns and cities	Land tenure	Activities and processes for identifying forms of ownership and occupancy of land and water, both Aboriginal and non-aboriginal
Key Messages:		
• The use of the site prior to becoming the location of the Eveleigh Railway Workshop. • The later role of Calder House as the residence of Eveleigh Railway workshop's Locomotives Works Manager. • The fire and subsequent demolition in 1923-1924 of Calder House.		
Source/Illustration		**Key message**

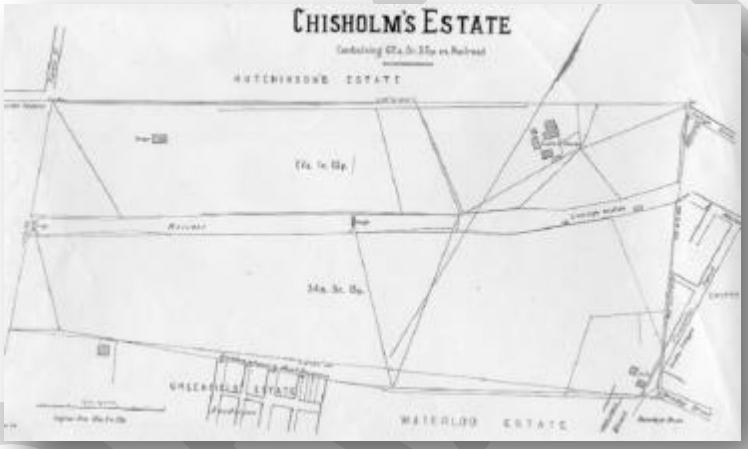

Figure 3:
The Chisholm estate was granted to James Chisholm in 1835. Chisholm constructed his home Calder House on the land. The land and buildings were purchased in 1879 by the NSW Government for the purpose of constructing the Railway workshops.

Figure 4:
Calder House, which was used as the residence of the Locomotives Workers Manager, burnt down in 1923 and was demolished the following year.

2.4.2.2	Development of the NSW Railway	
Theme:		
National:	**State:**	**Local:**
Developing local, regional and national economies	Transport	Activities associated with the moving of people and goods from one place to another, and systems for the provision of such movements.

Key Messages:

- The 19th century was, globally, the age of the railway and the industrial era.
- The 1849 Sydney Railway Act and the establishment of the Sydney Rail Company.
- The take-over of the Sydney Railway Company by the government and the subsequent establishment of the railway.

Source/Illustration	Key Message

Figure 5: 1887 Map of Railways and Mail Roads

Figure 6: a depiction of the original timber central station building

The first railway in the world was developed in England. Stock and goods in Australia were transported over land or by sea. The vast distances between settlements made it difficult to open up new land for farming due to the amount of time it would take for settlers to get good and stock to market. The advent of the railway would help to improve the livelihoods of New South Wales' free settlers and farmers.

The Government of New South Wales attempted to follow Englands example in allowing private companies to develop the railway. Unfortunately this did not work in Australia and the Government had to take over the construction of the railway, making it the only Government run railway in the world.

2.4.2.3	The History of the Eveleigh Railway Workshops	
Theme:		
National:	**State:**	**Local:**
Developing local, regional and national economies	Industry	Activities associated with the manufacture, production and distribution of goods.

Key Messages:

- The selection and purchase of the site.
- The initial development of the site.
- Physical changes to the site throughout its history.
- Demise of the Eveleigh Railway Workshops.

Source/Illustration

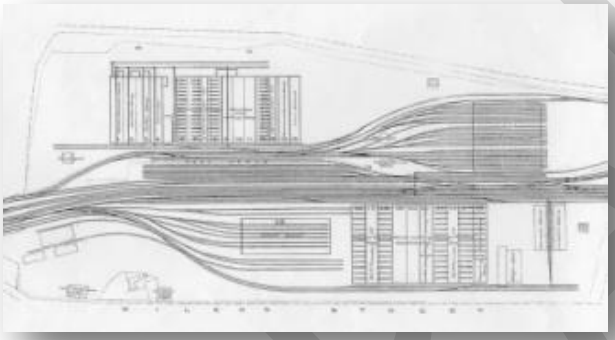

Figure 7: 1889 plan of the site

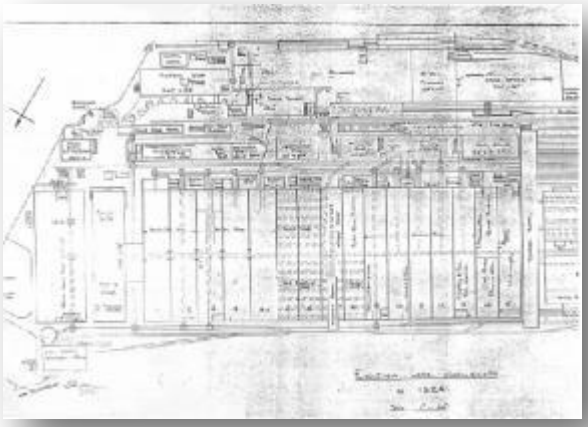

Figure 8: 1924 site plan

The earliest plans for the site in 1881 included a: Running shed; workshops; shunting yard; carriage and wagon repair shops; general railway store and locomotives engineers stores to be set on either side of the lines to provide easy access to all sheds.

By 1897, the needs of the site had evolved and the following buildings were included on the site. Bays 1-15 of the locomotive Workshops, Bays 16-25 of the carriage sheds, engine running shed, paint shop and associated infrastructure. Other changes included the construction of a copper and tinsmiths shop to the south of bays 5-9. Their original workshop between Bays 4 and 5 was demolished and the space/laneway between these bays was roofed over and incorporated into the large workshop building.

In 1907, the new Locomotive Shop was constructed to all for the construction of Locomotives and in 1917 the last of the new buildings were added to the site after this time the site was at capacity and if more space was required the existing function were rearranged or relocated to Chullora.

2.4.2.4	The role and influence of John Whitton and George Cowdery	
Theme:		
National:	**State:**	**Local:**
Marking the phases of Life	Persons	Activities of, and associations with, identifiable individuals, families and communal groups

Key Messages:

- The career of John Whitton including his training in England and his role in the development of the Australian Railway system.
- The career of George Cowdery including his training in England and his role in the development of the Australian Railway system.

Source/Illustration	Key Message

Figure 9:
John Whitton c.1870

John Whitton was the Engineer in Chief of the NSW Railways from 1857-1890.
In 1835, at 15 years of age he started his engineering apprenticeship with his older cousin William Billinton who was a civil engineer. In 1847 Whitton was employed by John Hawkshaw of the Lancashire and Yorkshire Railway. The following year Whitton moved to the East Lincolnshire railway working with revered railway Engineer John Fowler. Whitton and Fowler then worked for the Oxford, Worcester and Wolverhampton Railway Company (OWW). In 1855 Whitton was offered the role of Engineer in chief of the New South Wales railway, which he accepted and commenced work in 1857.
Whitton lobbied for the construction of a railway workshops at Eveleigh and vocally dismissed Chullora as being an unsuitable location for the workshops.

George Cowdery was the Chief Engineer for Existing Lines and Tramways 1880-1890. Cowdery is also English born he was the son of a railway Engineer. He started work at 14 years of age with a company who constructed railways and bridges. Cowdery worked on the construction of the Oxford, Worseter and Wolverhampton Railway where he met Whitton, who would later employ him in NSW.
In 1856, Cowdery moved to Australia in search of work; his first project took him to Victoria and he was later employed by Whitton as District Engineer of the Great Southern Highway.
By 1880 he was the Chief Engineer for Existing lines and Tramways and began to plan the Eveleigh Railway Workshops.

2.4.2.5	The role and influence of E.E Lucy	
Theme:		
National:	**State:**	**Local:**
Marking the phases of Life	Persons	Activities of, and associations with, identifiable individuals, families and communal groups

Key Messages:

- The career of E.E. Lucy including his training in England and his contribution to the enhancement of the technology used at Eveleigh and in the wider Australian Railway system.

Source/Illustration	Key Message

Lucy started his working career as an apprentice in the Great Western Railway workshops in Wolverhampton, England. He moved to New South Wales in 1905 for the betterment of his wife's health.

He was a great innovator and inventor who made many improvements to the existing infrastructure and designed new locomotives, carriages, wagons, coupling systems and combustion engine.

Figure 10:
E.E Lucy

Figure 11:
The NN one of several locomotive types that was designed by E.E Lucy and produced at Eveleigh.

2.4.2.5 The role and influence of E.E Lucy

Figure 12:
D57 another Lucy designed locomotive.

Figure 13:
The TBC sleeper carriage designed by Lucy

Figure 14:
The interior of a Lucy Designed TBC Carriage.

2.4.2.6	The Demonstration of Technological Advancement from 1882 - 1986	
Theme:		
National:	**State:**	**Local:**
Developing local, regional and national economies	Technology	Activities and processes associated with the knowledge or use of Mechanical arts and applied science.

Key Messages:

- Original lighting provided by natural light
- The electrification of the workshops.
- The role of Steam power
- Hydraulic power
- The advent of diesel engines
- The Davey press and other technological advances.

Source/Illustration	Key Message
 **Figure 15:** Bay 1	Prior to the introduction of electric lighting work was conducted by natural light which flooded through the glazed roofs. Additional lighting would have been provided by Gas lighting. The workshops were electrified in the early 20th Century. The glazed roof was replaced with corrugated plastic sheeting after a hail storm in 1948.
Figure 16: Steam Hammer	

2.4.2.6	The Demonstration of Technological Advancement from 1882 - 1986

Figure 17: The Davy Press which is capable of creating 1,500 tons of pressure to forge large pieces of metal.

Figure 18: The Wheel house note how the machines are all belt driven running to a wall mounted steam engine. These engines were slowly replaced after electrification.

Figure 19: Crane System in use. These overhead cranes reduced the need for shunting.

2.4.2.7	The Social History of the Site: Union action and the workers	
Theme:		
National:	**State:**	**Local:**
Working	Labour	Activities associated with work practises and organised and unorganised labour

Key Messages:

- Union Action and response to the Taylor Card system.
- The establishment of the Australian railway union.
- Role in the War effort during WWI and WWII.

Source/Illustration

Figure 20:
The workers of Eveleigh

Figure 21:
The men of the erecting shed

At its peak 7000 men were employed at Eveleigh. They had a job for life and had followed their fathers, uncles and brothers into the workshops.

The Workshop had a union movement who had been very successful in creating better working conditions for the men including a two day weekend, and the provision of showers and toilets. In 1917 the union striked against the introduction of the Taylor Card System. The strike went on for 82 days before the Union admitted defeat and the workers returned under the new card system.

Several key politial members started their working career at Eveleigh Workshops, including former NSW premier JJ Carhill.

Figure 22:
Showing support for the ANZACs

Figure 23:
The lily white button worn by the workers who had striked in 1917.

3.0 SITE INVENTORY AND AUDIENCE

3.1 The Circumstances of the Existing Site

As mentioned in *Section One* of this report, the subject site pertains to Bays 1 and 2 of the Australian Technology Park, located at the former Eveleigh Workshops. The majority of the former workshops have already been adaptively reused for a range of commercial ventures including: offices, conference space and several cafés. The exterior of the space is also used for a variety of commercial and non-commercial used. The subject site being the northern portion of Bays 1 and 2 whilst not completely unaltered by the modern phase of development are currently used for the purpose of storing tools and machinery until they are required for interpretative purposes.

The southern portion is currently used by a blacksmithing firm which has been noted as continuing to use some of the historic equipment[12]. This portion of the workshop, at this stage, is not included within the scope of this interpretation strategy. However, should the blacksmiths, at some stage in the future, choose to vacate the southern portion of the workshop the space should continue to be used for either a continuation of blacksmithing or the expansion of the interpretation area to include blacksmithery. In the case of a continuation of trade, where possible, preference should be given to traditional metal working trades such as wrought iron works, cast iron works or other heritage based metal trades.

Although, as noted previously, the study area has been altered to include "interpretive infrastructure", Rappoport has reviewed the interpretation infrastructure and has found it to be well constructed, deferential to the heritage significance of the place and laid out in a well-executed manner. It provides good visual connections to the existing machinery whilst providing ample space for displays, installations and visiting members of the general public. It is the intention of Rappoport that the proposed interpretation shall be designed to support and complement the existing infrastructure. As noted previously, the interpretive infrastructure includes:

- the central corridor with glass fencing, which has a stainless steel handrail at the top to serve as a clamping point for signage;
- the metal chequer plate pathway, following a pathway that dates back to the 1950s;
- Metal wire fencing around the pathway, including breakout bays in Bay 2 North to allow visitors to come closer to the machinery and to allow for further interpretation;
- A gathering/exhibition space of modern chequer plate flooring to the north of the Davy Press, for temporary exhibitions or functions;
- The sub-foreman's demountable office is to be fitted out with display cases and used as a mini museum. Rappoport has provided a Statement of Heritage Impact for this structure, dated March 2013, addressing the repainting of the structure internally and externally;

[12] FUTUREPAST Heritage Consulting Pty Ltd., *Statement of Heritage Impact, "Interpretive Infrastructure" Bays 1 and 2 North, Locomotive Workshops*, November 2010, p8.

- Machinery and tools currently in Bays 1 and 2 North; and
- The approved lighting plan.

Figure 24: Photograph of Bays 1 showing current arrangement. The plan can be seen at *Figure 1* (Source: Rappoport Pty Ltd, December 2012)

A physical analysis of the site with graphic evidence is contained in the CMP prepared by Otto Cserhalmi and Partners P/L in 2002 and the Draft CMP prepared by GML in March of 2012, and a Photographic Archival recording currently being prepared by Rappoport Pty Ltd.

3.2 Audience

As noted within this report, the ATP is currently used for a range of commercial and social uses which has resulted in a wide audience from a range of backgrounds and ages, including:

- Adults visiting other parts of the ATP Conference Centre also housed within the Locomotive Workshop;
- Adults working at and visiting other tenants on the ATP site;
- Rail enthusiasts currently restoring locomotives in other sections of the site;
- School children, both with their families and on school excursions; and
- Weekend visitors attending events staged in the grounds of the ATP site.

Given the diversity of the audience, the range of scientific and locomotive based knowledge careful consideration will need to be given to the dissemination of interpretative information to ensure that the varying levels of understanding can be accommodated.

It is further considered that a wider audience can be reached through interpretative information being made available on the ATP website and through the provision of information to the City of Sydney Council, Library and History Services.

3.3 Interpretive Materials

While the site has a vast collection of remaining industrial heritage items, discussed further within *Section 4.2.5* of this report, further information pertaining to the history of the site can be sourced from the wide range of conservation documents which have already been prepared for the Eveleigh Railway Workshops. These documents provide a wealth of secondary historical source material and their bibliographies refer to further material. These documents include, but should not be limited to:

- 3D Projects, *Implementation Plan & Strategy, Eveleigh Railway Workshops*, February 2012.
- Don Godden & Associates. 1986. *Eveleigh Workshops Heritage Study.* This study was prepared as the workshops were closing and while NSW State Rail still kept its own archive.
- Heritage Group, State Projects, NSW Department of Public Works. 1995. *Eveleigh Railway Yards Locomotive Workshops Conservation Management Plan.*
- Godden Mackay. 1996. *Eveleigh Workshops Management Plan for Movable Items and Social History.* Volume II contains a social and oral history and Volume V contains transcripts of oral histories taken in the preparation of Volume II.
- Otto Cserhalmi & Partners. 2002. *Eveleigh Locomotive Workshops Conservation Management Plan Volume 1.*
- Godden Mackay Logan. 2012. *Australian Technology Park – Conservation Management Plan (draft)*
- ATP Section 170 listing at http://www.atp.com.au/About/Section-170/Section-170---Heritage-and-Conservation-Register

Other books, papers, reports and other sources that refer to the site include:

- David Moore. *Railways, Relics and Romance: The Eveleigh Railway Workshops.* This is a book of photographs taken in the mid-1990s together with reminiscences of workers who worked at the site.
- Video from heritage branch library
- Video on the internet, such as
    - http://aso.gov.au/titles/newsreels/australasian-gazette-strike/clip1/ general strike
    - http://vimeo.com/22688663 The Davy Press
- Davis, Dr M. 2012. *Aboriginal Connections with Eveleigh: A Report Prepared for the Sydney Metropolitan Development Authority*[13], which discusses the role of the Aboriginal community in the railway workshops and the workshops as a political force.

[13] http://www.smda.nsw.gov.au/sites/default/files/file_root/PDFs/Development/RedfernWaterloo/AB_Connections_Eveleigh_report.pdf

4.0 PROPOSED INTERPRETATION STRATEGY

It is intended that the interpretation bays of the Eveleigh Workshop will be a space which will change and evolve over time. The following interpretation strategy is intended to be a "base" from which the displays and use of the space can be altered to demonstrate historic images, stories and items as they are made available or discovered. Furthermore, given that the interpretation bay is located within the wider technology park, it is intended that the methods of relating the history will change, incorporating new technologies as they become available.

The intention of this interpretation strategy is to lay the foundation for a historical destination that encourages visitors to return and be rewarded with new exhibits, take home messages, interactive equipment and the revealing of other interesting aspects of Eveleigh's history.

4.1 Key Messages – The Stories To Be Told

The key historic messages, contained in the Historical Themes analysis, see *Section 2.3.2*, help us to identify the fabric to be conserved and the stories to be told in order to interpret and enhance an understanding of the place, its role in the story of Eveleigh and the development of the railway in NSW. Many of the key messages, under the various Historical Themes, overlap and this helps to identify the pertinent stories. Storytelling is an important component of interpretation. Provided the account of the site is told in an informative and interesting manner, rather than conveying a lot of facts about the place, interpretation will be achieved which taps into the imagination of the audience.

Some of the stories which are derived from these key messages are as follows:

- The physical development of the site from the Chisholm Estate to the modern day;
- The early development of the NSW Railway and its importance to the state;
- Peak production; Eveleigh Workshops from 1900 – 1950;
- The changing face of technology from steam to the modern technological era; and
- The social history of the site: Union action, political careers, the employment of Indigenous people at the workshop, the changing role of women and the workers.

4.2 Interpretation Strategy

Interpretation should engage the senses of the audience. Communicating the history of the site should not be limited to merely providing facts and information. Nevertheless, to help to tell the stories outlined in *Section 4.1*, it would be appropriate to include some of the information to be presented within printed media, such as a brochure or the use of Interpretative boards.

The interpretation of the site could, if this Interpretation Strategy is approved, include (but not be limited to) the following:

- Interpretive Signage;
- Printed Media;
- Digital Media;
- Live/interaction Interpretation;
- Integration of historic images within the site;
- Interpretation of former and existing site elements;
- Social history;
- Alternative uses of the site for events, functions and launches etc.;
- Use of Public Art;
- Photographic Recording; and
- Community based Interpretation.

Some of these measures have already been implemented by the ATP in relation to other areas of the site and include the following:

- Historical photographs and interpretation signs in public spaces throughout the ATP;
- Machinery exhibited in public spaces throughout the ATP;
- Adaptive reuse of structural girders for seating in Innovation Plaza and in the external wayfinding signage;
- Public Art exhibits;
- Heritage Volunteer Program; and
- Information and social media available on the ATP website.

Rappoport Pty Ltd recommends that future interpretive signage and media are based on the design of existing interpretive media in order to maintain the overall character of interpretation at the site.

The following photographs taken by Rappoport Pty Ltd in December 2012 and March 2013 show some of the existing interpretive media at ATP:

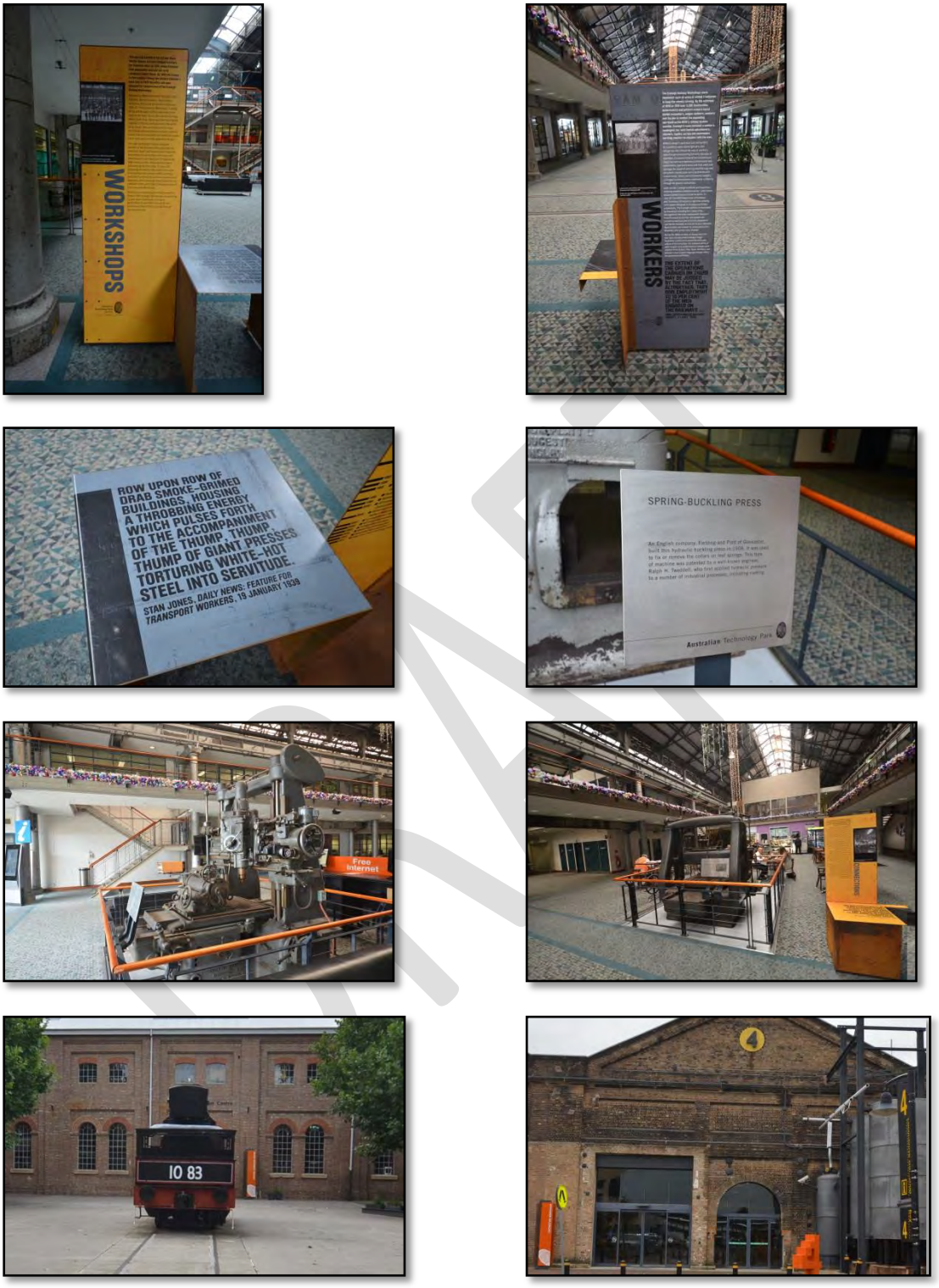

Figure 25: Photographs showing a selection of existing interpretive media and signage at the site. (Source: Rappoport Pty Ltd, December 2012)

4.2.1 Interpretive Signage

A number of interpretive panels containing text and photographs about some of the key themes are already on display in the southern section of Bays 1 & 2, as shown in the photographs below, taken by Rappoport Pty Ltd in December 2012:

Figure 26 & Figure 27: Existing signs in Bays 1 and 2. New signage should complement and reflect the style of signage seen elsewhere within the site. The existing signage is predominately constructed of metal.
(Source: Rappoport Pty Ltd, December 2012)

Further small Interpretive boards, containing photographs and text about the key stories identified in *Section 4.1*, could be placed along the southern edge of the interpretative area, where it meets with the walk way through to the courtyard, informing visitors of the broader history of the workshop with the intention of drawing them into the interpretative area.

Additional small interpretative plaques should be mounted along the railing within the interior of the interpretative area relaying further details about the items currently on display.

Further signage would include: labels, plaques and explanatory text located next to objects on display; free standing signage boards with stories relating aspects of the social history of the site, including quotes from former workers at the workshops; and photographs positioned in the location from which they were taken to show a "now and then" style arrangement, *Figure 17*, shown on page 28 of this report, would be a good example of a photograph that could be used in this manner.

Signage should also be placed along the edge of the blacksmiths area, informing visitors that this is a continuing business, relaying the history of blacksmithery and procedures used.

The interpretative signage could be produced in several ways including but not limited to back lit graphic display panels and etched metal. The existing interpretative signage at the Eveleigh Workshops is predominately constructed in metal. All new signage should maintain the theme of the existing signage.

Figure 28:
An example of a rail mounted interpretative sign. (Source: http://www.cunneensigns.com.au, accessed 05.03.13)

Figure 29: Modern signwriting allows interpretation to fit the space available and to utilise colours and a range of materials in both internal and external settings. (Source: http://www.cunneensigns.com.au accessed 05.03.13)

4.2.2 Printed Media

At present there are no interpretive brochures available at the site apart from leasing brochures which include a short section about the history of the ATP. While it is possible that various interest groups and volunteers could provide assistance to visiting parties no formal arrangement, at this stage, has been agreed. It is therefore likely that any visitors, at least in the short-term, would be self-guided. To aid this experience, due to the vast quantity of information which needs to be relayed, it may be necessary to produce brochures containing a condensed timeline, historic photographs, and map of the equipment displayed with an explanatory note to aid the self-guided experience.

Figure 30: An example of the style of brochures that could be used to facilitate self-guided tours. (Source: http://www.castleprinters.co.uk/Folded%20Leaflets.html, accessed 05.03.13)

4.2.3 Digital media

Given the technology based nature of the wider site, it stands to reason that digital media should play a key theme in the presentation of the history of the Eveleigh workshops. Existing digital media at the site include interactive touch screen directories showing historical photographs and alternative uses of the site as well as a short video sequence on the ATP Website.[14] Further interactive touch screens could be carried into Bays 1 & 2 and further videos could be provided on the ATP Website.

Additional digital media could include, but not be limited to: holographic models of the locomotives that were produced at the site; presentation of the various videos of the history of the place; interactive touch screen presentations located on securely mounted computer or tablet style technology designed to be operated by a single viewer. Differing "app" style programs could be developed for different audiences i.e. children or adults.

Touch screen or tablet style technology screens could be permanently mounted adjacent to the major pieces of machinery. When activated these screens would show images of the machinery in action and, where possible, accompanied by head phones so that the viewer has a complete visual and auditory experience of the operational machinery. Should any narrative about the machines, and their use, be included with this technology it is preferable that this should be presented by a former worker or operator, rather than a professional narrator, as this will enable the user to engage more effectively with the presentation.

Consideration could also be given to using QR codes. These barcodes are designed to be read with a smartphone which already has a QR code reader app installed. Scanning of the code would direct the mobile devise to a website containing further information about the item that the visitor has scanned.

[14] http://www.atp.com.au/About/Heritage---History (accessed 28.03.13).

Figure 31: QR Code (Source: Wikipedia, accessed 27.02.13)

As stated above, video imagery has previously been made for the site; one such video currently features on the ATP website. The video appears to be a modified version of the video produced at the time of the closure of the Eveleigh workshops. Rappoport has reviewed both videos and believe that further extracts and modernisation can be made from the original video to include short extracts exploring the following stories:

- Strike Action (6.00 – 7.56[15]);
- The later political careers of the former Eveleigh workers(7.57 -9.05);
- The changing role of women at Eveleigh (10.25 – 11.00);
- The effects of dieselisation (11.49 – 12.05) ; and
- The current role of the APT site.

These short films could be made to either/or be: interactive with a permanently mounted viewing screen operated by the viewer; played in sequence on a wall mounted LCD screen in the Interpretation Bays; and/or accessed through the APT website.

[15] Reference to time seen on video.


Figure 32 & Figure 33: Engaging with young audiences, ensure that some interpretation devices are set at a lower height to entice even the youngest visitors to become engaged. Pictures taken at the Powerhouse Museum. (Source: Rappoport Pty Ltd, December 2012)

4.2.4 Live/ Interactive Interpretation

As evidenced in the Erecting Shed and nearby Blacksmiths, many of the skill bases utilised at the workshops are still practised. Therefore the potential, dependant on the availability and willingness of a volunteer base, remains to provide live demonstrations of some of the skills that were previously employed at Eveleigh. These demonstrations could be planned to coincide with special events, or pre-organised group visits, located at the workshops.

Figure 34: An event organised at Elizabeth Farm for school children on excursions. Note that some of the children have been dressed as convicts and the adults leading the group are also dressed in historically accurate attire.
(Source: Rappoport Pty Ltd, December 2012)

Figure 35: A skills demonstration at Eveleigh Workshops.
(Source: http://www.atp.com.au, accessed 05.03.13)

An important element in the Locomotive Workshops narrative is the power of the heavy machinery used there and the dangerous and skilled nature of the work of the men who operated it. Interpretation should incorporate sound and movement to convey this sense of power. While it is appreciated that it may not be easy to return the machines to an operable state, investigations should be undertaken to determine whether the machines can run in a limited capacity with air pressure and other techniques used to demonstrate the motion and sound of the equipment.

Another avenue that should be explored is the recreation of the sounds of the workshop. Some sounds may be provided by the neighbouring blacksmiths but it may also be prudent to consider the production of an audio piece which is either initiated as part of a guided tour or demonstration, linked to a permanently mounted viewing point experienced through headphones, as mentioned in Section 4.2.4, or located in an enclosed space, such as a small sound proof room.

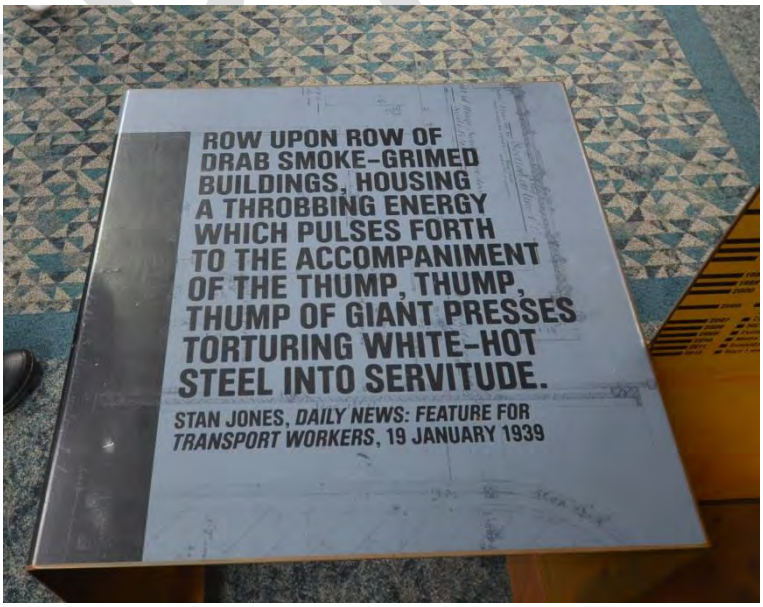

Figure 36: This part quote found on an existing interpretation panel located in Bays 3 & 4 could be brought to life in an audio recording that visitors could listen to using headphones located throughout the display.
(Source: Rappoport Pty Ltd, March 2013)

The scientific processes at work need to be explained on a variety of levels, from the basic physics for school children, through to more complex explanations for scientifically literate adults. This can be done by means of hands on science museum style interpretation, supplemented by more detailed signage with diagrams. The size and type of font can be used indicate which parts of the narrative are overview and which are additional detail provided for the enthusiast.

Figure 37: Create models which can be operated by a child; accompany with interpretation panels describing the process in simply for children and in detail for an adults. Picture taken at the Powerhouse Museum. (Source: Rappoport Pty Ltd, December 2012)

4.2.5 Integration of Historic Images within the Site

At present, some historical images are contained within existing display panels in Bays 1 & 2 at the site (refer to Section 4.2.1). However, there is opportunity to use a large collection of further historical imagery in additional display panels and other interpretive media.

With perhaps the exception of George Cowdery; the workshops, the locomotives and the men who constructed and influenced their history have been well photographically documented. It is therefore reasonable that the collection of photographs should be housed and displayed at the Eveleigh Workshop buildings. Given the wealth of archival material, consideration should be given to creating a continuous loop slide show played on a large wall mounted LCD screen displaying both an image and a short description of the image*, Figure 29* below demonstrates how this could be laid out.

Workers pouring molten metal into moulds. The bucket is suspended from one of the overhead cranes. This was dangerous work. Note the holes in the man to the left's clothes and the lack of safety gear.

Figure 38: An example of a digital still which could be displayed on a large LCD screen within the interpretative area. (Source: State Library of NSW, Digital Order No. hood_17145, accessed 05.03.13)

These images should include all photographs from the oldest historic images to the more recent photographs taken of the bays prior to the installation of the Interpretative infrastructure.
A further area which could be used for the display of historic photographic images is the non-original wall between Bay 2 and Bay 3. This could either be used to create a large scale image based on historic photos of what it would have looked like looking west from Bays 1 and 2 or perhaps used as a canvas to create a mural or painting depicting the history or elements of the history of the space.

4.2.6 Interpretation of Former and Existing Site Elements

In 2010, Futurepast Heritage Consulting P/L as part of the interpretation infrastructure works created a plan, shown at figure 2, suggested the proposed layout of the site. Much of this work has been carried out. The following table has been prepared to update the status of the proposed works.

Proposed Action	Status
Relocate demountable to Bay 1	Completed
Create a gathering space with two height setting tables together with associated tools and the crane carriage	incomplete
Insert glass barrier 1350mm high set on steel uprights, images set on back face.	Completed
Repositioned cast iron chequer plate slabs	Completed
Pathway continued in modern galvanised steel framed chequer plate of similar size.	Completed
Create a gathering place between the Davy press, furnace and gantry tools associated with the processes may be suspended from the gantry	Partially completed
Break out space to innovation plaza through the existing retractable doors	Completed
Create a stopping place where the storey of the blacksmith processes will be told	Completed
Existing cast iron plates between tracks are reset flush and, if necessary, repointed.	Completed
Existing use of the southern bays as blacksmith shop provides smells and sounds	Unchanged
Add steel and cable fences with gates for maintenance access to machinery and exhibits	Completed

The remaining pieces of machinery and infrastructure within the space include:

- Furnace;
- Gantry;
- Davy Press
- Pressure Tank
- Forge
- Lathe
- Steam Hammers

Some of these elements are accompanied by a selection of tools which were used as part of their use. Where possible, it would be beneficial to visitors if individual tools were incorporated into a mounted display where the name, role of the individual tools and any interesting facts about the piece are clearly and concisely provided. A billet rack could be manufactured for the display of left over materials. If possible, pursuant to safety and insurance measures, visitors could also be given the opportunity to handle the tools to understand their weight and to re-enact the movements in which they were used.

The Futurepast report suggested that the demountable shed could be used as a mini-museum with display cases used for the demonstration of smaller items. Rappoport believes that this or the recreation of a foreman's office with furniture, plans, paperwork and small items set out on display would be a good use of this small space. Alternatively, should patronage to the interpretation bays grow, it could be used as a kiosk for the sale of Eveleigh related memorabilia and railway related items.

It should be noted that the forman's office has been the subject of a recent Section 57 Application with the Heritage Branch of NSW. The application included the proposed encapsulation, with paint, of "Sutho's Office" weatherboard cladding, barge boards, windows and door. These conservation works, now completed, included repairs to damaged fabric so as to restore the original appearance of the structure and ensure that the public is able to safely access and interpret the structure. The "Sutho's" insignia and horseshoe have been retained in all its former detail, shape and colour.

The overhead crane should be used to suspend a piece of interpretative material, such as an engine or part of a locomotive, depending on the load bearing capacity of the crane. Further consideration should be given to make the overhead crane operational so that is moves either on a timed basis i.e. once an hour, or when operated by a volunteer for demonstration purposes.

Figure 39: Existing arrangement of tools. This could be retained and used to display duplicate items which have been explained elsewhere.
(Source: Rappoport Pty Ltd, December 2012)

Figure 40: An existing collection of tools. The table could be moved and used to display smaller hand held objects.
(Source: Rappoport Pty Ltd, December 2012)

Figure 41: These tools could be interpreted with signage mounted to the edge of the hand rail.
(Source: Rappoport Pty Ltd, December 2012)

Figure 42: The Davy Press with the crane set behind both of these objects could be key elements of the interpretation strategy.
(Source: Rappoport Pty Ltd, December 2012)

Figure 43: The demountable shed which could be used in a variety of ways from mini-museum to a museum kiosk.
(Source: Rappoport Pty Ltd, December 2012)

4.2.7 Social History

As shown in *Section 2.3.2.7* of this report Eveleigh has a rich and varied social history, from the day-to day stories of manufacturing, to the role of Eveleigh in the union movement and the people who went on to become influential members of society, such as JJ Cahill.

Some methods of telling these stories should include interpretative signage board to tell the wider stories such as the strikes, role of women, community events etc. Former member of Eveleigh staff should be encouraged to act as tour guides relating personal stories of the place and in the event that a former Eveleigh worker should visit the place they should be given the opportunity to relate their stories of the place, either through having a facility for lodging a story on the website or in person via a comments box.

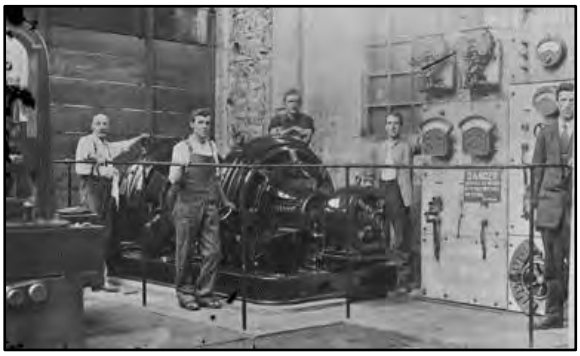

Figure 44: Visiting Former Employees should be given the opportunity of contributing further to the history of the place. This picture was donated to the City of Sydney Archives in 2011 by the granddaughter of one of the men shown. (Source: City of Sydney Image Library, File No. SRC22659, accessed 06.03.13)

4.2.8 Alternative uses of the space – Revenue Generating Activities

By enabling the space to be used for temporary revenue generating activities such as corporate events, product launches, fundraising activities, film location shoots, photographic shoots, and even fashion events, a twofold benefit could be provided to the site by: creating additional revenue opportunities, which could be used to update or change the interpretation media; and by creating a venue for people to visit and therefore reaching a wider audience.

These activities and the information required for hiring the space could be advertised on the existing ATP website. ATP has already run corporate events from other parts of the site, refer to *Figure 44*, they therefore have experience using temporary furniture, bar areas, food preparation areas and services such as lighting.

Figure 45: An image of a low impact corporate/public event at Auckland Heritage Festival 2009 on Queens Wharf
(Source: http://joelcayford.blogspot.com.au/2010/05/auckland-heritage-festival-2009-on.html, accessed 05.03.13)

Figure 46: The wider ATP site already hires out its heritage space for corporate and public events and bays 1 and 2 could become an extension of the existing business model.
(Source: http://www.atp.com.au, accessed 05.03.13)

4.2.9 Use of Public Art

The ATP currently exhibits an original railway carriage and a steam locomotive at the site and several original items have been interpreted in external spaces. Rappoport believes that the site at Eveleigh workshops would benefit from the development of a public art program, specially pertaining to the courtyard area to the immediate east of the subject site. A site specific program could be created to enliven this space and help to draw people to the interpretation bays. Local heritage volunteers could be involved in the cleaning, restoration and preservation of old machinery currently stored off-site. Such community involvement could provide for positive media opportunities and could be uploaded onto the Australian Technology Park social media websites.

The public art program should be designed to engage visitor's imagination and promote conversation. It could incorporate lifelike sculpture, abstract sculpture, inlaid text, painted pieces or

even textiles. Old machinery could be mounted on concrete plinths with an interpretive plaque and lighting and could be incorporated into the courtyard.

It is recommended that such a program be designed with a company such as Urban Arts Program (UAP) based in Brisbane who would create a site specific program from initial concept design phase to final installation.

Figure 47: A life like sculpture in Omsk, Russia
(Source: http://commons.wikimedia.org/wiki/File:Public_Art_in_Street_-_Omsk_-_Russia.JPG, accessed 05.03.13)

Figure 48: A commissioned piece of painted street art in Melbourne.
(Source: http://www.jackmangallery.com.au, accessed 05.03.13)

Figure 49: Inlaid text located in Sydney
(Source: Rappoport Pty Ltd, December 2012)

Figure 50: An abstract sculpture in Vancouver, Canada.
(Source: http://www.archithings.com, accessed 05.03.13)

4.2.10 Photographic Recording

A photographic archival recording was commissioned by Urban Growth Pty Ltd, the owners of the subject site, and is currently being prepared by Rappoport Pty Ltd.

4.2.11 Community Based Interpretation

Heritage documentation should be placed in the local history collection at City of Sydney Library to enable members of the local community to research the site.

Figure 51: Make documents available for future reference at a local library.
(Source: http://www.cityofsydney.nsw.gov.au/explore/libraries/branches, accessed 05.03.13)

5.0 CONCLUSION AND RECOMMENDATION

This report is structured to communicate the history and key messages of Bays 1 & 2 of the Eveleigh Locomotive Workshop.

It is believed that these messages can be related using a combination of modern and traditional interpretation methods to create a dynamic historical destination designed to entice people to return to learn more about the history of the site.

Rappoport recommends that the implementation of this Interpretation Strategy is prepared in consultation with the appointed heritage architect, based on the concepts and ideas discussed and the primary historical themes canvased in this report.

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APPENDIX A

Photolog

Prepared by Rappoport Pty Ltd, February 2013

Reference	Source
Figure 1	Google Maps (Accessed 16/02/2013)
Figure 2	Future Past
Figure 3	SRAO EL 1 via Otto Cserhalmi CMP 2002, p25
Figure 4	Sharpe 1999: 78 via Otto Cserhalmi CMP 2002, p78
Figure 5	Mitchell Library ZM3 810gms/1887/1 Otto Cserhalmi CMP 2002, p30
Figure 6	National Library of Australia Image no: nla.pic-an7537535 (accessed 16.02.13)
Figure 7	SRAO Otto Cserhalmi CMP 2002, p36
Figure 8	SRA Plan Room Otto Cserhalmi CMP 2002, p39
Figure 9	State Library NSW digital order No: a4366047 (accessed 16.02.13)
Figure 10	Burke, Man of Steam p222
Figure 11	State Library NSW Digital Call No DCP -01348 (accessed 18.02.13)
Figure 12	Burke, Man of Steam p228
Figure 13	Burke, Man of Steam p53
Figure 14	Burke, Man of Steam p53
Figure 15	ML GPo Video Disk 1 06679 SH 1884 (accessed 19.02.13)
Figure 16	SHFA Otto Cserhalmi CMP 2002, p65
Figure 17	SRAO ELW 601/43 Otto Cserhalmi CMP 2002, p75
Figure 18	SRAO ELW 601/19 Otto Cserhalmi CMP 2002, p66
Figure 19	Burke, Making the Railway, p224
Figure 20	Burke, Man of Steel P 31
Figure 21	SRAO ELW 601/17 Otto Cserhalmi CMP 2002
Figure 22	Otto Cserhalmi CMP 2002, p45
Figure 23	Screen Shot from Taksa, L., *Steam Power: the Eveleigh Railway workshops (video),* Summer Hill Media, Surry Hills, 2000 (accessed 22.02.13)
Figure 24	Rappoport Pty Ltd, December 2012
Figure 25	Rappoport Pty Ltd, December 2012
Figure 26	Rappoport Pty Ltd, December 2012
Figure 27	Rappoport Pty Ltd, December 2012
Figure 28	http://www.cunneensigns.com.au (accessed 05.03.13)
Figure 29	http://www.cunneensigns.com.au (accessed 05.03.13)
Figure 30	http://www.castleprinters.co.uk/Folded%20Leaflets.html (accessed 05.03.13)

Figure 31	Wikipedia (accessed 27.02.13)
Figure 32	Rappoport Pty Ltd, December 2012
Figure 33	Rappoport Pty Ltd, December 2012
Figure 34	Rappoport Pty Ltd, December 2012
Figure 35	http://www.atp.com.au (accessed 05.03.13)
Figure 36	Rappoport Pty Ltd, March 2013
Figure 37	Rappoport Pty Ltd, December 2012
Figure 38	State Library of NSW, Digital Order No. hood_17145 (accessed 05.03.13)
Figure 39	Rappoport Pty Ltd, December 2012
Figure 40	Rappoport Pty Ltd, December 2012
Figure 41	Rappoport Pty Ltd, December 2012
Figure 42	Rappoport Pty Ltd, December 2012
Figure 43	Rappoport Pty Ltd, December 2012
Figure 44	City of Sydney Image Library, File No. SRC22659 (accessed 06.03.13)
Figure 45	http://joelcayford.blogspot.com.au/2010/05/auckland-heritage-festival-2009-on.html (accessed 05.03.13)
Figure 46	http://www.atp.com.au (accessed 05.03.13)
Figure 47	http://commons.wikimedia.org/wiki/File:Public_Art_in_Street_-_Omsk_-_Russia.JPG (accessed 05.03.13)
Figure 48	http://www.jackmangallery.com.au/artists_frank_malerba.html (accessed 05.03.13)
Figure 49	Rappoport Pty Ltd, December 2012
Figure 50	http://www.archithings.com (accessed 05.03.13)
Figure 51	http://www.cityofsydney.nsw.gov.au/explore/libraries/branches (accessed 05.03.13)