



# Review of Environmental Factors The Cooks to Cove GreenWay (In-Corridor Works)

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## Appendix I: Statement of Heritage Impact (ELA, 2021)

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June 2021



# GreenWay In-Corridor Works – Statement of Heritage Impact

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**Inner West Council**

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## DOCUMENT TRACKING

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# 1. Introduction

## 1.1 Background

Eco logical Australia (ELA) was engaged by the Inner West Council to prepare a Heritage Assessment to support the construction of a shared path, lighting and landscaping within the Inner West Light Rail Corridor and adjacent land. The In-Corridor package is the result of the updated concept design for the GreenWay completed in June 2020 and consists of two discrete areas known as the central links and the southern links between Dulwich Hill and Lewisham in Sydney’s inner western suburbs (‘the study area’; Figure 1).

There are multiple heritage items associated with the study area and adjacent to the study area including locally listed items, state listed items and conservation areas (Figure 18). This report should be read in conjunction with previous heritage assessments which remain relevant, particularly the *Heritage Impact Statement for GreenWay Central Missing Links* (Northpoint Heritage 2018). The Northpoint Heritage report has assessed all heritage items in the central links portion of the study area and a detailed history has been prepared. It is not the intention of this report to replicate relevant work already undertaken. Please refer to the Northpoint Heritage report for a detailed historical background and images of the central links portion of the study area.

This report summarises work previously undertaken, identifies and assesses any heritage items associated with the southern links portion of the study area; identifies and assesses any non-listed items of archaeological or heritage significance; identifies and assesses any potential impacts to the heritage significance of the listed items in both sections as a result of the works and proposes management measures to avoid, minimise, mitigate and, if necessary, offset impacts.

## 1.2 Study Area Location

The GreenWay is a 5.8 km urban environmental corridor linking the Parramatta River at Iron Cove with the Cooks River at Earlwood. The corridor follows the route of the Inner West Light Rail and Hawthorne Canal through the suburbs of Earlwood, Dulwich Hill, Lewisham, Summer Hill, Haberfield and Leichhardt and traverses the Inner West Local Government Area into Canterbury Bankstown. The corridor is intersected by several major arterial roads, including Old Canterbury Road, Parramatta Road and the City West Link.

The central links portion of the study area extends from Taverners Hill light rail station, north of Parramatta Road to south of Old Canterbury Road, in Summer Hill. The southern links portion extends from Waratah Mills light rail station to Hercules Street in Dulwich Hill (Figure 1). The study area contains bike and pedestrian pathways, cultural and historical sites, bushland areas and open space on either side of the rail line.

## 1.3 Proposal

The objectives of the GreenWay In-Corridor works are to deliver a continuous active transport corridor from north of Parramatta Road, Leichhardt to Hercules Street, Dulwich Hill with easy and safe connections into the surrounding street network and open spaces. In addition, the GreenWay has been designed to enhance the cultural capacity of the corridor to provide a setting for community use, public

art and integrate a range of passive and active recreation opportunities while protecting the biodiversity of the area.

Proposed works will include construction and / or realignment of on-grade and elevated paths, realignment of services, construction of tunnels under main roads, lighting and electrical work for all sections, including ecological sensitive lighting in Cadigal Reserve, associated fencing, landscaping, ecological restoration, signage and ancillary works.

Site compounds for the central links would likely be established in the light rail corridor at Lewisham West, the carpark in Cadigal Reserve and on the western side of Cadigal Reserve in the existing dog off leash area. Site compounds for the southern links would likely be established at the southern end of Weston Street and in the roadway on Davis Street, in the southern part of Johnson Park and in the roadway on Constitution Road and or Williams Parade and within the light rail corridor between Constitution Road and New Canterbury Road and Hercules Street.

## 1.4 Methodology

This Heritage Assessment has been prepared in accordance with the NSW Heritage Manual ‘Assessing Heritage Significance’ (2001) guidelines. The philosophy and process adopted is that guided by the Australia ICOMOS Burra Charter 1999.

The subject proposal has been assessed in relation to the Ashfield Local Environmental Plan (LEP) 2013, the Leichhardt LEP 2013 and the Marrickville LEP 2011. The Inner West Local Environmental Plan (LEP) 2020 was still in draft form at the time of preparing this document.

Previous heritage and archaeological assessments have been drawn upon and remain relevant, in particular, *Heritage Impact Statement for GreenWay Central Missing Links* (Northpoint Heritage 2018) and *Inner West Light Rail Extension Project, Historical Archaeological Assessment* (Australian Museum Business Services [AMBS] 2012). Please refer to these documents for detailed historical background information and images of the study area in the past. The *Greenway In-Corridor Works Landscape Visual Assessment* prepared by Mode 2021) is also relevant and includes potential visual impacts.

## 1.5 Author Identification

This report has been prepared by Karyn McLeod, ELA Principal Heritage Consultant, (BA Hons [Archaeology] University of Sydney, MA [Cultural Heritage] Deakin University) and Jennifer Norfolk (BSc. (Marine Science) University of Sydney, MSc. (Marine Archaeology) Southampton University).

Field survey was undertaken by Karyn McLeod on Friday 4 September 2020. All site photos were taken by Karyn McLeod unless noted otherwise.



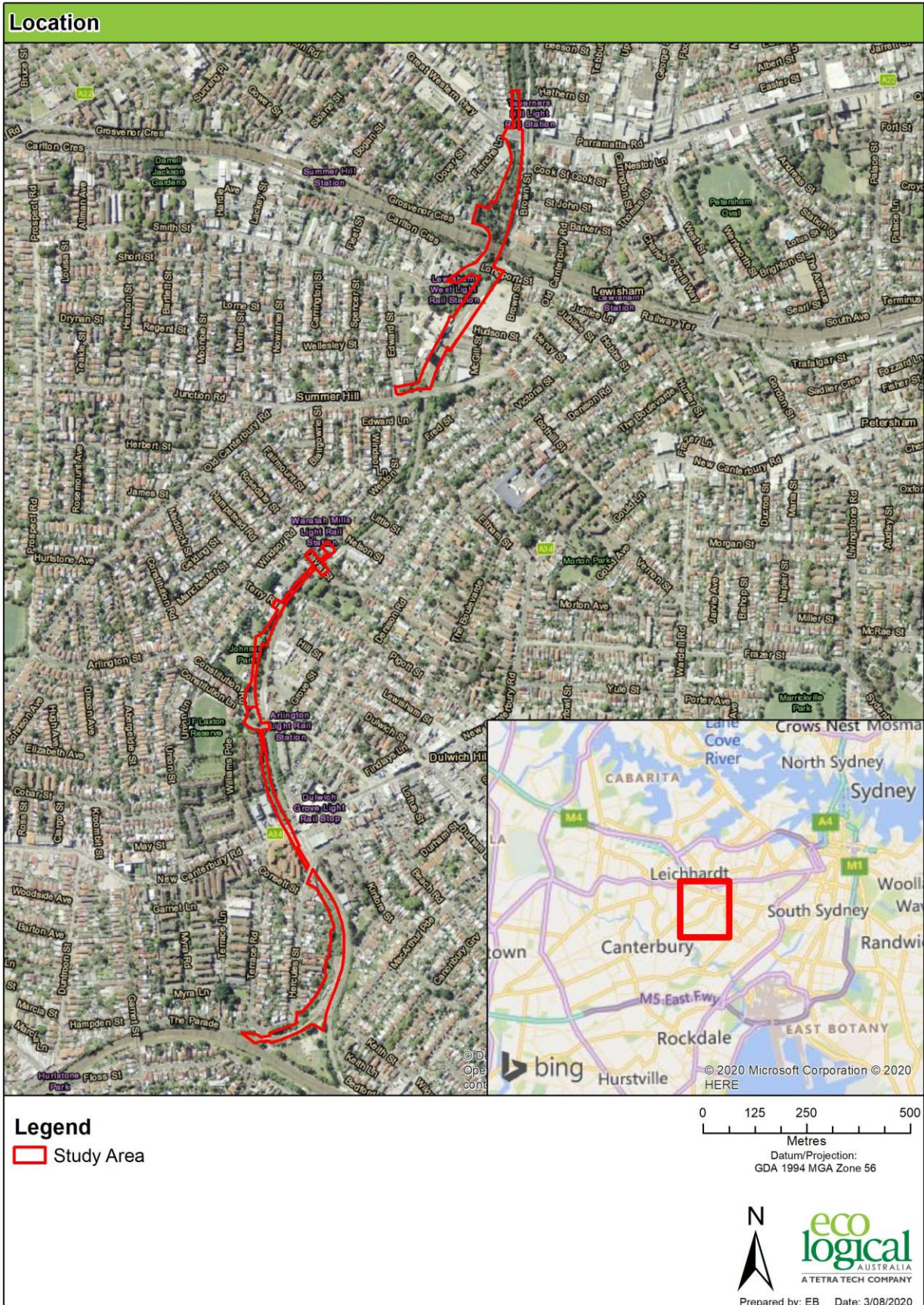


Figure 1 location of the study area, central links at the top and southern links at the bottom



## 2. Site Context

### 2.1 Historical Summary

This historical summary focuses on the study area and has been drawn from a number of previous reports that include detailed site histories and heritage assessment that do not require replication in this report. The previous studies include:

- AMBS, 2010, *Sydney Light Rail Extension: Heritage Impact Assessment*
- AMBS, 2012, *Inner West Light Rail Extension: Heritage Interpretation Strategy*
- AMBS, 2012, *Inner West Light Rail Extension: Heritage Impact Assessment*
- AMBS, 2012, *Inner West Light Rail Extension: Archaeological Impact Assessment*
- MDCA, 2017, *Aboriginal History Along the Cooks River*
- Northpoint Heritage 2018, *Heritage Impact Assessment: GreenWay Central Missing Links*
- Pollard, 2016, *City Meets Country: Centenary of Metropolitan Goods Lines*
- Sabolch, 2006, *Hawthorne Canal: the history of Long Cove Creek*
- Tocomwal, 2018, *Critical Investigation into Aboriginal Landscape and Culture of the Inner West*
- Mode 2021 *Greenway In-Corridor Works Landscape Visual Assessment*.

This report covers only the post colonisation (1788) development of the study area. Assessment and analysis of the Aboriginal occupation of the study area has been prepared in an Aboriginal Heritage Due Diligence Assessment (ELA 2020, MDCA 2017). The following historical background has been summarised from the Northpoint Heritage Impact Assessment (2018). Please refer to Northpoint Heritage report and the previous Historical Archaeological Assessment by Australian Museum Business Services [AMBS] (2012) for a detailed historical background for the study area.

At the establishment of the colony in Sydney in 1788, the landscape of the study area was dominated by open woodland, which was the result of thousands of years of Aboriginal land management in the form of burning undergrowth. The Winnamatta shale soil and the creeks that crisscrossed the area made it ideal for farming. One of these creeks was named Long Cove Creek and rose around Dulwich Hill entering the harbour at Long Cove. The creek was channelised in the 20<sup>th</sup> century forming the Hawthorne Canal.

The first land grant in the study area was 30 acres made in 1794 to emancipist Henry Kable who was transported to Sydney on the First Fleet. Kable rapidly added to his farm with an extra 15 ½ acres granted in 1795 and then the purchase of four small farms made to four privates of the New South Wales Corp in the same year. Kable's land ran along the western bank of Long Cove Creek from Parramatta Road, south to present day Smith Street taking in most of the central links study area. Kable was in partnership with fellow emancipist James Underwood, building boats and trading ventures, and Underwood eventually purchased Kable's property in 1821. Land grants in the area were generally between 40 – 100 acres and were often partly cleared, unoccupied pastoral and agricultural properties. The area remained largely undeveloped or comprising of small farms into the 1840s.

Parramatta Road had been used to connect Sydney and Parramatta by land from as early as 1791, but it was not until 1797, under the direction of Governor Hunter, that any organised work was carried out to formalise the track. A bridge was constructed over Long Creek which was regularly damaged by flooding

or fire and from the 1820s needed regular repair due to the increasing amount of traffic that used Parramatta Road. In 1873 the Public Works Department called for tenders for construction of a new bridge on Parramatta Road across Long Cove Creek. The new bridge, named Battle Bridge, was a stone arch bridge with sandstone abutments and sides. In 1922/23 the bridge was widened by Public Works as part of an upgrade of Parramatta Road. As part of the work the stone arch on the southern side was lost from view under the new additions.

The difficulty of accessing the developing village of Canterbury on the Cooks River was solved in 1855 when the colonial government constructed a road from Newtown along the ridge line via Petersham and Dulwich Hill and link the village to Parramatta Road at Broadway. It was named New Canterbury Road and the old road through Summer Hill and Lewisham close to Long Cove Creek was renamed Old Canterbury Road.

Some of the first industries to move into the area after the farms were brick fields. Good quality clay had been identified in the area by the 1840s and 23 different brick makers operated in and around the Summer Hill, Lewisham and Ashfield area through the second half of the Nineteenth Century, with at least four inside the study area.

In the 1850s, railway contractor William Randle owned a brick yard that provided bricks for the railway viaduct he was building over Long Cove Creek for the Sydney to Parramatta Railway. The largest piece of engineering for the new line was to be an eight arch brick viaduct to carry the line across Long Cove Creek. Work began on the structure in November 1853 and each arch was supported by stone piers, with the stone quarried at Five Dock. In May 1855 the first train ran on the line between Sydney and Parramatta crossing the Long Cove viaduct. It is now known as the Lewisham viaduct and is listed on the State Heritage Register.

By the 1880s, with an increasing number of trains serving Sydney's suburbs and larger engines, it was clear that the old structure needed urgent replacement. The new bridge was designed by assistant engineer for railways Max Thompson using an American design known as a Whipple truss. The advantage of this design was its use of less iron or steel than other designs, and with its pinned joints it was quicker to construct than the traditional riveted system. In 1892 a second bridge was added at Long Cove when the main line was quadruplicated. In 1993 when the Whipple truss bridge was decommissioned and replaced with a new steel bridge, a span of the Whipple truss was erected on new piers adjacent to the railway line to serve in as interpretive reminder of railway engineering heritage.

A direct effect of the new railway and improved road access was the subdivision of the former estates around Summer Hill and Lewisham. In 1879 a platform was opened at Summer Hill and development of the Summer Hill and Lewisham areas from rural enclaves to new suburban commuter suburbs had a major impact on Long Cove Creek. Although the creek was already degraded through rural runoff and the brickyards along its length, the increasing numbers of residents placed extra pressure on it. By the mid-1880s the creek, no longer required for fresh water (which had been connected in the 1870s and 1880s), was being used as an open sewer by the new residents. The construction of new houses in the Summer Hill area outpaced the capability of the Council to provide sewerage systems, and in an 1889 Parliamentary enquiry it was revealed that sewerage from Ashfield and Leichhardt was running untreated directly into the watercourse close to Battle Bridge.



**Figure 2: Battle Bridge 1880 on Parramatta Road over the Hawthorn Canal (Northpoint Heritage: 35)**



**Figure 3: Long Cove Creek 1891 becoming channelised into Hawthorn Canal (Northpoint Heritage: 37)**



**Figure 4: Construction of the Whipple Truss bridge 1886 (Northpoint Heritage: 37)**



**Figure 5: Mungo Scott / Allied Mills 1922 ((Northpoint Heritage: 38)**

Conversion of natural waterways into canals and stormwater drains, was planned to facilitate the rapid flushing of sewerage through the system in areas where sewerage pipes were yet to be laid. By 1890 both Johnston’s Creek and White’s Creek at nearby Glebe had been converted to open stormwater drains by the Metropolitan Water, Sewerage and Drainage Board and work had started on Long Cove Creek. The canal section was completed to Marion Street by 1895, with the remainder of the creek being converted to an open stormwater channel by 1897. In 1900 the sewerage was finally diverted out of the canal with a new sewerage aqueduct built as part of the larger Southern and Western Suburbs Ocean Outfall Sewer (SWOOS). The aqueduct crosses the Hawthorne Canal adjacent to the railway viaduct on five concrete piers, each decoratively faced with sandstone.

The light rail from Pyrmont to Dulwich Hill runs along a former goods line. The separate railway line for goods traffic branched from the main western line around Hurlstone Park, ran alongside Long Cove Creek and Hawthorne Canal to Rozelle where a branch went to wharves and then through Glebe and Pyrmont to the main wharves at Darling Harbour. The line was constructed between 1911 and 1924, with the section between Dulwich Hill, Rozelle and Glebe Island opening to traffic in June 1916. The double track was carried over Parramatta Road on a steel Warren truss bridge completed in 1912, since converted to carry the light rail between Central and Dulwich Hill.

The goods line resulted in the development of industrial properties along its route. In 1921 the flour milling company Mungo Scott began construction of a new flour mill on the goods line at Lewisham. It was a five-storey masonry mill building, with storage, workshops and grain hoppers. Mungo Scott’s



siding was one of nine sidings that were built along the goods line, the remnants of which are now the only example remaining along the former railway. In the 1950s the company was purchased by Allied Mills and then became Goodman Fielder in the 1980s. The mill continued to operate until its closure in 2009 and it has since been undergoing a redevelopment for apartments.

Waratah Flour Mill located further south at Dulwich Hill was opened in 1914. It has central five storey brick mill, concrete silos, timber silos, office buildings, riser shaft, laboratory and amenities which formed an impressive industrial group in association with railway line and the adjoining Hoskins and Johnsons Park. It has also undergone redevelopment for apartments.

Bush regeneration work around Sydney began in the 1970s and in 1988 the Hawthorne Canal was one of the sites selected in the NSW Government’s “Greening the Grey Spots” initiatives. As part of the program, work including the clean-up of the lower canal, planting of native trees and shrubs along its edges, stabilisation of the banks, weed clearance and the installation of a bike path. In 1994 Ashfield Council purchased four derelict properties at the bottom of Grosvenor Crescent which were demolished to create Cadigal Reserve, providing parking for cars and an access to the bike and pedestrian pathway along the canal.

## 2.2 Site Description

A site visit was conducted by Karyn McLeod (ELA Principal Heritage Consultant) on Friday 4 September 2020. The route passes through a variety of landscapes including the light rail corridor, railway and road infrastructure and areas of bush regeneration and comprises bitumen bike/walking tracks and undeveloped land on either side of the Hawthorne Canal and the light rail corridor. The study area is located in densely developed urban areas and is between 30 m wide at its narrowest point and 105 m at the widest point at Cadigal Reserve. Adjoining development comprises residential houses and apartments, parks, major and minor roads, light rail stations and infrastructure corridors.



Figure 6: Battle Bridge over Hawthorne Canal Northern side



Figure 7: Brick lined Hawthorne Canal at Parramatta Road





**Figure 8: Stone faced supports of the sewage aqueduct in Cadigal Reserve**



**Figure 9: Lewisham Viaduct view south from Cadigal Reserve**



**Figure 10: Whipple truss view north from Rail owned land at the southern end of Cadigal Reserve**



**Figure 11: The study area within Cadigal Reserve**

Sections of the study area, particularly the northern section, slope steeply to the canal and are planted with native species as a result of the various bush care projects since the 1970s. In the southern part of the study area, the light rail line is constructed in steep cuts for the majority of its length between Constitution Road and Hercules Street and then on a filled embankment south of Hercules Street with flat areas adjacent to Allied Flour Mills.

The study area is highly disturbed by major land modifications such as the construction of multiple brick works, the Hawthorne Canal, residential subdivision and development of roads, the construction of the Rozelle goods line and the recent light Rail development. Description of the heritage items within the study area is contained in the following section.





**Figure 12: Culvert and Hawthorne Canal running under Longport Street, Lewisham**



**Figure 13: Hoskins Park**



**Figure 14: Waratah Flour Mills and study area to the right**



**Figure 15: The study area adjacent to Hoskins Park**



**Figure 16: The study area at Lewisham West**



**Figure 17: The study area adjacent to Allied Flour Mills**



## 3. Heritage Impact Assessment

### 3.1 Listing

The following heritage items are located in or adjacent to the central links study area (from north to south).

**Table 1: Heritage items located in or adjacent to the central links study area**

Item	Description
Haberfield Conservation Area Ashfield LEP 2013 C42	Australia's first Garden Suburb, Haberfield is characterised by single storey brick houses on generous garden lots with uniform setbacks and a similarity of form and materials (brick and stone, slate or tiles). Within this common design, the architectural detail of the individual Federation houses (and later 1920s and 1930s bungalows) is richly varied and of great visual and architectural significance as a family of modest Federation designs.
Battle Bridge Ashfield LEP 2013 445 RMS s170 4305024	This bridge is located on Parramatta Road and crosses a lined stormwater channel known as the Hawthorne Canal. The bridge comprises a central sandstone arch of good proportions and having high quality stonemasonry, both in the barrel vault of the arch and the solid spandrel walls. Beneath the arch, which springs at a relatively low angle, there is a vertical abutment wall with a traditional corbel at the springing. The bridge has been widened (on both sides) by steel beams with a reinforced concrete deck. Views of the stone arch are largely obscured by the variety of utilities hung from the bridge widenings. It appears that the sandstone pediments on either side of the bridge at footpath level have been relocated from their original location to the new (widened) alignment of the bridge. The original timber railings between the main parapet and the end posts have been replaced with galvanised fencing.
Haig Avenue Conservation Area Ashfield LEP 2013 C45	The Heritage Conservation Area is of marginal local heritage significance. The area is of some historical significance as the development of a 1919 re-subdivision. The area originally comprised 9 allotments within a dead-end street one of which (No. 3-3A Haig Avenue) was purchased later and developed for a pair of 1930s semi-detached residences, and five of these dwellings are substantially altered (through cement rendering, addition of roller shutters, aluminium framed windows, altered roof forms), in a manner unlikely to be reversed. Given the small number of dwellings within this confined streetscape, and the predominance of altered dwellings on the north-eastern side of the street in particular, the aesthetic significance of the area has been substantially degraded. The original pre-1943 brush box street tree plantings have also been largely removed.
Cadigal Reserve Ashfield LEP 2013 Item 505	<p>A small reserve, roughly triangular in shape, is located at the eastern end of Grosvenor Crescent and is listed as a heritage item. It is a simple grassed area edged by trees and separated from the street on the south by timber bollards and rails defining a gravelled parking area, access to which is restricted by a chain. To the east the land slopes steeply down from the edge of the reserve to the storm water channel, a prominent landscape feature that becomes Hawthorne Canal further north. Along the west edge of the channel, alongside the reserve, there is a walkway leading past the east end of Haig Avenue to Parramatta Road. The Lewisham Sewer Aqueduct (an existing heritage item, constructed in 1897) emerges from underground outside the northern boundary of the reserve and, in the form of a dramatic oviform rivetted iron pipe supported on sandstone-faced piers, crosses the channel, to disappear underground again as the land rises towards the southern corner.</p> <p>The walkway is reached by passing under the aqueduct. A footbridge crosses the channel, providing access to an additional grassed area west of the goods railway line. To the south of this corner of the area, the Lewisham Viaduct carries the main railway lines high overhead. The 1885 Whipple trusses of the bridge, pin-jointed wrought iron structures</p>

Item	Description
	<p>formerly part of this complex, have been retained alongside, on separate supports, as visible heritage items. The reserve and the striking juxtaposition of all these elements at different levels below and above the observer, provide a sequence of pleasing and most unusual visual experiences. At the west edge of the reserve there is a small brick pedestal holding two bronze plaques, placed by Ashfield Council. One was fixed in 1994, the Year of the World’s Indigenous Peoples, naming the reserve after the Cadigal (Eora) group of Koori people that fished along these estuaries in the distant past. The other, placed in 1997, was dedicated to the late Burnam, acknowledging his contribution to the reconciliation project.</p>
<p>Lewisham Sewage Aqueduct SHR 01326 Sydney Water s170 4570955 Ashfield LEP 2013 478 Marrickville LEP 2011 154</p>	<p>The Lewisham sewage aqueduct was completed in 1900. It comprises aqueduct comprises two principal elements - the metal oviform carrier, supported on concrete piers faced in sandstone rusticated blocks, with worked decorative bases and capitals. The carrier sections (the Public Work’s reports consistently give the material as steel) are riveted. The carrier is connected to the pier by two rocker plates and metal lattice supports. All of this appears original. The east and west ends of the carrier terminate within an abutment faced in worked sandstone. The Lewisham sewage aqueduct is situated within a wide, shallow valley north of the main western railway line, which is similarly carried over the valley by embankment and viaduct. Between Piers 2 and 3 of the aqueduct is a brick and concrete rendered stormwater channel (c.1899). These three elements of late nineteenth and early twentieth century public infrastructure in close proximity evoke an interesting industrial archaeological scene.</p>
<p>Lewisham Railway Viaducts and Whipple truss and Lewisham underbridge SHR 01043 TfNSW s170 4801584 Marrickville LEP 2011 1229</p>	<p>The area immediately adjacent to Longport Street, approximately 250m west of Lewisham Station is referred to in the proposal collectively as “The Whipple Truss Gallery”. The area is closed from public access with security fencing, although this appears to be relatively ineffective with evidence of recent occupation observed.</p> <p>The operational component of the Lewisham Railway Viaduct includes recently installed plate web girders and the original Warren trusses where local, suburban and main lines run over Long Cove Creek.</p> <p>The original Whipple trusses have been replaced by the plate web girders. Following their removal, they been relocated and displayed adjacent to the viaduct. The pair of original 1886 Whipple trusses that have been retained on site and put on display under the viaduct provide evidence of the historic structures and methods that were employed over the viaducts.</p>
<p>Former Allied Flour Mill complex Ashfield LEP 2013 item 619</p>	<p>The historic core components include the five-storey brick and metal-roofed mill building, displaying a remarkable interior structure of heavy timber storey posts and girders, the voluminous timber framed and corrugated metal clad and roofed silo and workshop building, constructed of full-height log posts and heavy girders, and containing notably large bins and of heavy cross-plank construction, supported on robust posts and braces, ancillary structures including the wheat unloading bay and chutes, and some smaller-scale service buildings such as the stables, now an amenities block. The brick building comprises two adjoining wide structural bays, each gabled and with a full-length roof monitor providing additional storey height. It contains impressive flour milling and conveying equipment, some of which has been in place since the mill was erected. The timber bin building also contains areas for materials handling and storage, as well as early workshop spaces still containing historic machinery. During the years since its inception, there have been many campaigns of additions and alterations in response to the growth of the operation and improvements in industrial processes, the most obvious of them being several ensembles of very large silos and bins for wheat and flour, of both metal and concrete construction, including conveyor systems and access bridges. The Technical Centre building, facing Smith Street, is a three-storeyed International-Style structure of concrete and brick with a pleasing streetscape presentation. Its front garden setting includes Brush Box, Butia Palms and a magnificent Chinese Elm.</p>



The following items are located in or adjacent to the southern links study area (from north to south).

**Table 2: Heritage items located in or adjacent to the southern links study area**

Item	Description
Former Waratah Flour Mills Marrickville LEP 2011 I25	The central five storey brick mill and the adjoining corrugated iron structures and concrete silos form an impressive industrial group, particularly in association with railway line and the adjoining planted areas which include Hoskins and Johnsons Park. The site comprises several buildings including; Office Building, Timber Silos, Concrete Silos, Riser Shaft, Main Factory, North Store, Laboratory, Amenities (toilets change room, lunch room), South Store and Substation.
Hoskins Park Marrickville LEP 2011 I131	<p>Hoskins Park is located in the middle of an established residential area, bounded by Davis and Pigott Street to the north and south respectively, by the former Wardell Road-Darling-Island goods line to the west and by residential allotments to the east. The Waratah Mills development rises beyond the railway to the west. The Park is approximately 550m<sup>2</sup> and provides a combination of passive and active recreational facilities. Hoskins Park has an irregular lot configuration due to the sweeping curve of Davis Street as it approaches the bridge over the railway line and topography that falls towards the railway line and from Davis Street. Davis Street’s topography resulted from the construction of the road bridge in 1914.</p> <p>The Park includes grassed areas and mature plantings, including Brushbox and a variety of palms, which are characteristic of interwar plantings and enhance the character of the locality. The Park is traversed by a diagonal path that bisects it into two sections and a path adjacent to the eastern boundary. A lavatory block is located on the eastern edge of the park and is understood to have been constructed after World War II as evidenced from its forms and utilitarian character. It is currently not open to the public. Other features include seating and a recently upgraded children’s playground area. It is likely that Hoskins Park benefitted from a loan program adopted by the then Petersham Council in 1929 which included provisions for the “beautification and improvement of the various parks...”</p> <p>Hoskins Park has retained a number of features from the interwar period including: Entry pergolas: one at the south west corner of the site on Pigott Street and two on Davis Street. The timber joists are supported off pre-cast concrete Tuscan order columns, one of the latter has had two columns and timber rafters removed, although column bases have been left in place; The name of the Park incorporated into paving beneath the Pigott Street pergola and the stone nameplate on Davis Street, adjacent to the western pergola; Sandstone edging, garden bed retaining walls and steps in the north-western corner of the Park; Coursed concrete paving forming the two footpaths.</p> <p>Hoskins Park was upgraded in 2005 to enhance and consolidate the existing landscaping, provision of picnic tables, seating and other use amenities including an upgraded children’s playground. Other recent minor alterations include relocation of the existing entry plaque on Davis Street, signage on the three entry pergolas, additional seating and concrete edging in the western section of the Park.</p>
Hoskins Park and Environs Conservation Area Marrickville LEP 2011 C36	The area comprising the Hoskins Park & Environs Heritage Conservation Area was developed during the late nineteenth and early twentieth centuries. It is largely the result of the construction of the Wardell Road-Darling Island Railway Line and the formation of Hoskins Park which was put onto separate title in 1911. The unusual configuration of Davis Street reflects the construction of the Wardell Road-Darling Island Railway Line and provides evidence of its impacts on the physical fabric of the Marrickville Local Government Area.



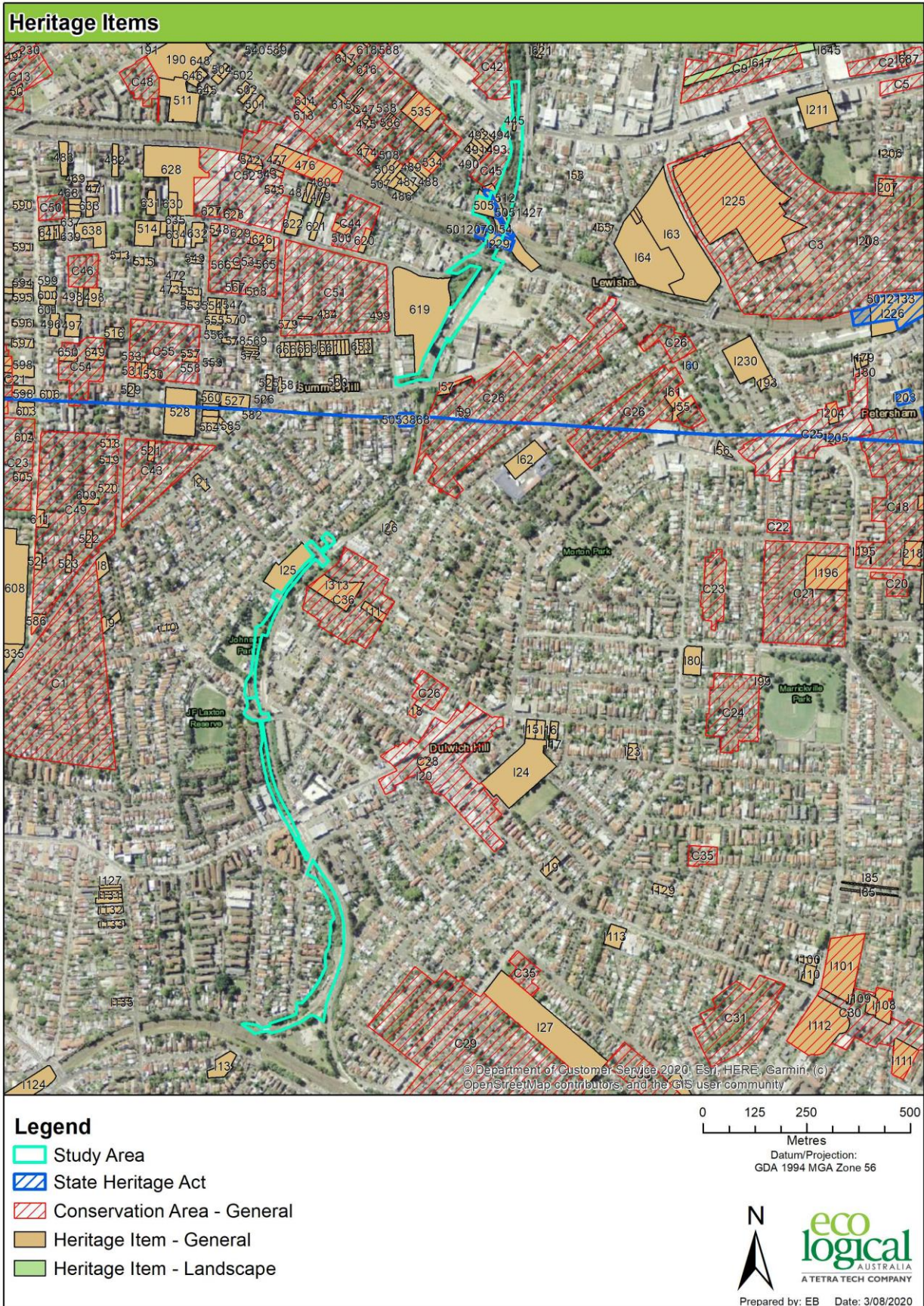


Figure 18 Location of heritage items and the study area



### 3.2 Statement of Significance

The following Statements of Significance are derived from the State Heritage Inventory listing.

**Table 3: Statements of significance**

Item	Significance
Haberfield Conservation Area	Haberfield has historic significance as the first successful comprehensively planned and marketed Garden Suburb in Australia. Designed and developed by real estate entrepreneur and town planning advocate, Richard Stanton, its subdivision layout and tree lined streets, its pattern of separate houses on individual lots (the antithesis of the unhealthy crowded inner suburbs of the period) and its buildings and materials, clearly illustrate his design and estate management principles. Haberfield predates the first Garden Suburbs in Britain by some five years. It is significant in the history of town planning in NSW. The separation of land uses, exclusion of industry and hotels, designation of land for community facilities and its comprehensive provision of utility services and pre-development estate landscaping profoundly affected housing trends, state subdivision practice and planning legislation in 20th century Australia. It is significant in the history of Australian domestic architecture for its fine ensemble of Federation houses and their fences, and shops, most with their decorative elements intact. It is outstanding for its collection of modest Federation houses displaying skilful use of materials and a high standard of workmanship of innovative design and detail particularly reflective of the burgeoning naturalistic spirit of the Federation era in which they were built. The form, materials, scale and setback of buildings and their landscaped gardens fronting tree lined streets together provide mature streetscapes of aesthetic appeal. Haberfield is a major research repository of the Federation era, garden design and plant material, architectural detail, modest house planning, public landscaping and utility provision
Battle Bridge	Battle Bridge is a stone arch bridge located on Parramatta Road at Taverners Hill. It has historic, aesthetic and technical significance and rarity value. Battle Bridge has historic significance at a State level because it has been instrumental in the ongoing improvements to Parramatta Road, the oldest road in NSW, during the nineteenth and twentieth centuries. Although the bridge was modified in c1937 to facilitate the widening of Parramatta Road with the addition of steel girders on either side of the arch and the laying of a concrete deck at road level, the original stone arch is intact and appears to be in sound structural condition. The sandstone arch element of the bridge has rarity value as it is one of a small number of remaining masonry arch bridges in Sydney, still in use. Both elements of the bridge (the masonry arch and steel girder additions) have associations with the watercourse it spans, namely the Hawthorne Canal, which has historically been an important crossing on Parramatta Road. Earlier known as Long Cove Creek or Battle Creek, this watercourse was channelised to form a stormwater canal in the 1890s, at which time it was one of nine stormwater canals constructed in the Sydney metropolitan area. The importance of the road and the crossing is demonstrated by the construction of this substantial and costly type of bridge at this location.
Haig Conservation Area	The Heritage Conservation Area is of marginal local heritage significance. The area is of some historical significance as the development of a 1919 re-subdivision.
Cadigal Reserve	The public reserve is significant for its picturesque and long social history as a feature of Ashfield which continues today as a little monument to indigenous people. The reserve, its extensions to and beyond the stormwater channel, and the striking juxtaposition of all the landscape and engineering elements at different levels below and above the observer, provide a sequence of pleasing and dramatic visual experiences.
Lewisham Sewage Aqueduct	The Lewisham sewage aqueduct, completed in 1900, is a key and highly visible component of the Southern and Western Suburbs Ocean Outfall Sewer system. The extension of this system into Dobroyd Point provided for a sewerage service to the emerging suburbs of Haberfield and Ashfield. The aqueduct is considered unique in Australia for its riveted oviform steel carrier. The functional nature of the carrier is embellished by decorative metal lattice work, and worked sandstone faced piers and abutments. The setting of the aqueduct adjacent the stormwater channel and railway embankment/viaduct make a precinct of high historic and industrial archaeological interest. Elements

Item	Significance
	of significance are the past and ongoing use, technologies of construction, and setting within the shallow valley.
Lewisham Viaduct	Lewisham viaduct over Long Cove Creek has state significance as the site of different railway underbridges which represent significant phases in the development of the NSW railways. At the time of its construction it was the largest bridge on the line; the subsequent use of the extant Whipple Trusses (on display on-site) was historically significant as it was one of only four bridges in NSW to employ such Trusses; the addition of the existing Warren Trusses to the north side of the viaduct dates from the 1926-27 sextuplication of the line. The viaduct with the Warren Trusses which has remained largely intact forms a significant landmark in the local area. The viaduct is also significant for its association with NSW Railways Engineer-in-Chief John Whitton and his successor George Cowdery.
Former Allied Flour Mills	A very important industrial complex, the only one of its kind in Ashfield and now an example of a very rare type fulfilling its original functions in the Sydney area. It has manifest historical associations, a compelling and impressive landmark scale and presence, considerable architectural and engineering values, and landscape interest. Strategically located on the edge of the municipality alongside the goods railway and over the Hawthorne Canal, the complex has an appropriate visual relationship with its surroundings. It also forms a dramatic contrast with and complement to the monumental St Andrew s Anglican Church, located at the opposite end of Smith Street.
Waratah Flour Mills	This is one of two large flour mills in the Municipality and is also one of two along this section of the goods line. It illustrates the industrialisation of this area in the early 1900's following the containment of Long Cove Creek as a channel and the construction of the railway line. "The Waratah Flour Mill is considered to be of local significance as it is one of a number of flour mills constructed throughout Sydney and NSW during the 1920's. It is representative of the industry of the time illustrating the centralised infrastructure in Sydney and typical construction of Flour Mills. The mill has been a prominent visual landmark and maintains a pleasing design and layout on the site. There is minor significance with the association with Great Western Milling Co, Goodman Fielder and Thomas Robinson the original designers and equipment suppliers and with the technical aspects of the timber silo construction is of some interest
Hoskins Park	<p>Hoskins Park has heritage significance for a number of reasons. The site of Hoskins Park consists of land from two early grants – part of 8 hectares originally granted to Sarah Bellamy on 13 December 1794 and part of 10 hectares originally granted to John Hammond on 14 March 1795. It was one of several parks under the control of Petersham Municipality (and subsequently came under the controls of the Marrickville Municipality in 1949). It is representative of these parks, sharing several features from the interwar period with them, and demonstrates the consistent approach that a particular local government instrumentality took to the design of residential amenity in the first half of the twentieth century. Its naming, after a mayor, reflects what may be a relatively common local government practice during the first half of the twentieth century.</p> <p>Hoskins Park and its setting provide evidence of early twentieth century urban consolidation in Dulwich Hill, both by the provision of parks and by the consistent residential development on Davis and Pigott Streets. The character of the park derives from a combination of several features including site configuration and topography, mature trees and landscaping, and smaller detail elements, along with its important visual relationship with late nineteenth and early twentieth century housing along Davis and Pigott Streets.</p>
Hoskins Park and Environs Conservation Area	The Hoskins Park & Environs Heritage Conservation Area is of historical significance as an area providing evidence of early twentieth century urban consolidation in Dulwich Hill, both by the provision of public parks and by the consistent residential development on Davis and Pigott Streets. The character of Hoskins Park derives from a combination of several features including site configuration and topography, mature trees and landscaping, and smaller detail elements from the 1920s, along with its important visual relationship with late nineteenth and early twentieth century housing along Davis and Pigott Streets. The aesthetic significance of the Hoskins Park & Environs Heritage Conservation Area is due to the physical character of Hoskins Park along with the inter-relationship of the park and



Item	Significance
	residential development around it. The aesthetic quality of the HCA is reinforced by the retention of original setbacks, garden spaces and street planting along Davis and Pigott Streets. The HCA has retained the early pattern of subdivision and contains Victorian dwellings along with late Federation and Inter -War era bungalow style houses that reflect the different periods of residential development and subdivision in the locality. Although some individual buildings have been unsympathetically modified, the overall form of most houses is intact and contributes to the character of the streetscape. Hoskins Park is representative of the parks initiated by the Municipality of Petersham in the early part of the 20th century and shares several features with other parks from the interwar period also managed by the Municipality of Petersham. The core period of heritage significance is 1880 -1935.

### 3.3 Unlisted Items

A number of features associated with the former Rozelle goods line were noted within the rail corridor during the field survey, particularly in association with the Allied Flour Mill. These included abandoned sections of track, disused services, pipes and access pits, land modification and raised banks and evidence of former sidings and buildings. Most of this evidence was fragmentary, highly modified or disturbed. The site survey did not identify any unlisted elements of the goods rail line and former sidings or industrial items that could meet the significance criteria as locally significant in their own right. As a group, evidence of industrial development of the local area from the late 19<sup>th</sup> and early 20<sup>th</sup> centuries has been assessed elsewhere (Northpoint 2018) as being locally significant as a rare and representative example of the industrial heritage of the Inner West precinct. Removal, modification or relocation of individual disused and disturbed industrial items such as access pits and disused pipes and rail for the creation of the shared paths will be minimal and will not impact on the overall significance of the industrial development of the local area. Mitigation measures are included in Section 5.

### 3.4 Archaeological Potential

Archaeological relics are 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, and (b) is of State or local heritage significance.*

(<https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/ArchSignificance>).

The surviving evidence of past land use in the study area is likely to concern the Rozelle goods line, between the Hawthorne Canal and Dulwich Hill, constructed between 1910-1916. Any remains associated with the goods line are already disturbed and comprise remnants of rail infrastructure, such as culverts, sidings, services and tracks. A previous report (AMBS 2012) considers the archaeological remnants of late 19<sup>th</sup> and early 20<sup>th</sup> century commercial and industrial activity to make a contribution to an understanding of the development along the goods line alignment, but remaining evidence of the goods line and activities and infrastructure associated with it would not meet the threshold for local or state significance.

The AMBS (2012) report identified the potential for evidence of former brick work kilns dating to the 1860s located near Lewisham West light rail station and the eastern side of the Canal. The report

considers the archaeological remains of several brickworks comprises an unusual resource and would be of local or possibly state significance.

Substantial remains of brickworks that can answer important questions about the history, development, extent and nature of brick working in the mid 19<sup>th</sup> century have low potential to survive in the study area due to past impacts such as the construction of the Hawthorne Canal, the goods line and associated industrial development. In addition, more recent development of roads, apartment buildings and extensive landscaping on both sides of the canal at Lewisham West since the construction of the light rail line as required deep impacts to the area.

Overall, the proposal does not include extensive excavations or bulk earthworks and it is unlikely that local or state significant relics will be in the vicinity of the proposed works due to previous disturbance or lack of features or deposits that could be considered 'relics'. Mitigation measures are included in Section 5.

### 3.5 Visual Assessment

A Landscape Visual Assessment for the study area was prepared by Mode (February 2021). The report analyses the potential visual impacts of the proposed design and considers both user experience, and that of neighbouring residents.

The majority of works comprise of planting or construction of paths, are at ground level and will not impact views to or from the heritage items. Views to and from the items are already limited by surrounding development and vegetation with clear lines of sight obscured. As the Viaduct, Aqueduct and Whipple truss are elevated above Cadigal Reserve the proposal will not result in obstruction of views of important heritage items.

Construction of a shared pathway will introduce an upgraded feature to the local landscape, sections of which are currently used in a similar way, underutilised or inaccessible. It will remove major barriers at Parramatta Road, Longport Street and Canterbury Road allowing access to heritage items, conservation areas, parks and reserves without encountering vehicular traffic and main roads.

- An underpass below Parramatta Road will continue to allow views of both sides of Battle Bridge and allow views of the original section from underneath.
- An on-grade path and ramps through Cadigal Reserve will continue to allow views to the whipple truss, Aqueduct and the Viaduct from directly underneath on land that has not been previously accessible.
- A path through the corridor associated with the Allies and Waratah Mills will continue to allow views to the industrial buildings and their setting.

## 4. Statutory Controls

### 4.1.1 Heritage Act 1977 (New South Wales)

The *Heritage Act 1977* (NSW) provides protection of the environmental heritage of the State which includes places, buildings, works, relics, movable objects or precincts that are of State or local heritage significance. The NSW State Heritage Register (SHR) is the statutory register under Part 3A of the NSW Heritage Act. Listing on the SHR means that any proposed works or alterations (unless exempted) to listed items must be approved by the Heritage Council or its delegates under section 60 of the Act.

Section 57(2) of the Heritage Act provides for a number of potential exemptions to Section 57(1) approval requirements to reduce the need for approval of minor or regular works such as maintenance. Exempted development does not require prior Heritage Council approval. Standard exemptions do not apply to the disturbance, destruction, removal or exposure of archaeological relics.

The study area passes through the curtilage of the State Heritage Register listing for the Lewisham Sewage Aqueduct and the Lewisham Viaduct and Whipple Truss. The works at both locations is considered to meet the criteria for Standard Exemption 8: Non-Significant Fabric (s57(2) Heritage Act), which states the following:

1. *The following development does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) have been met and the person proposing to undertake the development has received a notice advising that the Director-General is satisfied:*
  - a. *the alteration of a building involving the construction or installation of new fabric or services or the removal of building fabric which will not adversely affect the heritage significance of the item.*
2. *A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed development. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1(a), the Director-General shall notify the applicant.*

Archaeological features and deposits are afforded statutory protection by the ‘relics provision’. Section 4(1) of the Heritage Act (as amended 2009) defines ‘relic’ as *any deposit, artefact, object or material that relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and is of State or Local heritage significance*. The ‘relics provision’ requires that no archaeological relics be disturbed or destroyed without prior consent from the Heritage Council of NSW.

- The study area passes through the curtilage of the State Heritage Register listing for the Lewisham Sewage Aqueduct and Lewisham Viaduct and Whipple Truss. Standard Exemption 8: Non-Significant Fabric applies.
- The proposed works will not impact on known archaeological sites. No approvals are required from the Heritage Council in regard to archaeological permits.

### 4.1.2 Environmental Planning and Assessment Act 1979 (New South Wales)

The *Environmental Planning and Assessment Act 1979* (EP&A Act) requires that consideration is given to environmental impacts as part of the land use planning process. In New South Wales, environmental

impacts are interpreted as including cultural heritage impact. Proposed activities and development are considered under different parts of the EP&A Act, including:

- Major projects (State Significant Development under Part 4.1 and State Significant Infrastructure under Part 5.1) require the approval of the Minister for Planning
- Minor or routine developments requiring local council consent are usually undertaken under Part 4 activities which, in limited circumstances, may require the Minister’s consent
- Part 5 activities which do not require development consent. These are often infrastructure projects approved by local councils or the State agency undertaking the project.

Notwithstanding this, under Section 5.5 of the EP&A Act, a determining authority has the duty to fully consider the environmental impact of an activity and is required to “take into account to the fullest extent possible all matters affecting, or likely to affect the environment” arising from the proposal. This is facilitated through the current assessment, the purpose of which is to identify, assess, and determine the significance of potential heritage impacts, as well as mitigating actions and responsibilities that can be taken to minimise potential impacts.

Clause 79 of the State Environmental Planning Policy (Infrastructure) (ISEPP) provides that development for the purpose of rail infrastructure facilities may be carried out on any land by or on behalf of a public authority without consent. The proposed GreenWay in-corridor work, being pedestrian and cycleway facilities, is within clause 78 of the ISEPP’s definition of rail infrastructure facilities and Council is a public authority within the definition of that term in the EP&A Act.

- The GreenWay in-corridor works will be carried out under clause 79 of the ISEPP as development permitted without consent and assessed under Part 5 of the EP&A Act.

#### 4.1.3 Local Environmental Plans

The study area is located across three former local government areas and the proposal has been assessed in relation to the Ashfield LEP 2013, the Leichhardt LEP 2013 and the Marrickville LEP 2011. All three LEPS have the same heritage clauses.

**Table 4 Section 5.10 LEP clauses**

Clause	Discussion
<p><b>Objectives</b></p> <p>The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> <li>• to conserve the environmental heritage of the Ashfield, Leichhardt and Marrickville areas</li> <li>• to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,</li> <li>• to conserve archaeological sites,</li> <li>• to conserve Aboriginal objects and Aboriginal places of heritage significance.</li> </ul>	
<p><b>2) Requirement for consent</b></p> <p>Development consent is required for any of the following:</p> <p>demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):</p>	<p>The study area contains a number of state and locally listed heritage items.</p> <p>The proposed works will not disturb or destroy known Aboriginal or historical archaeological objects or relics.</p>



Clause	Discussion
<p>(i) a heritage item,  (ii) an Aboriginal object,  (iii) a building, work, relic or tree within a heritage conservation area,  altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,  disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,  disturbing or excavating an Aboriginal place of heritage significance,  erecting a building on land:</p> <ul style="list-style-type: none"> <li>i on which a heritage item is located or that is within a heritage conservation area, or</li> <li>ii on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance, <ul style="list-style-type: none"> <li>- subdividing land:  on which a heritage item is located or that is within (i) a heritage conservation area, or;</li> <li>(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.</li> </ul> </li> </ul>	<p>The study area is not located in a conservation area but adjacent to two conservation areas.</p> <p>This Heritage Impact Statement is required to consider potential impacts to the significance of heritage items within or adjacent to the study area.</p> <p>It is considered that the proposal will not impact the identified heritage significance of any of the heritage items in the study area or vicinity.</p>
<p><b>(4) Effect of proposed development on heritage significance</b></p> <p>The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).</p>	<p>This Heritage Impact Statement has been prepared in order to accompany the REF for the proposed works, in order to assist the consent authority in determining the impact of them upon the heritage listed subject site.</p>
<p><b>(5) Heritage assessment</b></p> <p>The consent authority may, before granting consent to any development:</p> <ul style="list-style-type: none"> <li>a) on land on which a heritage item is located, or</li> <li>b) on land that is within a heritage conservation area, or</li> <li>c) on land that is within the vicinity of land referred to in paragraph (a) or (b),</li> </ul> <p>Require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.</p>	<p>This document fulfils this requirement as the study area contains portions of land on which a heritage item is located, land adjacent to heritage items and land adjacent to conservation areas.</p>

The Inner West LEP 2020 was still in draft form at the time of preparing this document.

## 4.2 Heritage Office Guidelines

The proposed works are addressed in relation to relevant questions posed in the Heritage Office’s ‘Statement of Heritage Impact’ guidelines.

**Table 5 Heritage Office guidelines**

Question	Discussion
<p>The following aspects of the proposal respect or enhance the heritage significance of the item or conservation area for the following reasons:</p>	<p>Generally, the subject proposal is considered to have a positive impact on the identified heritage values of the precinct. Users of the shared path will have the opportunity to appreciate the unique industrial heritage of the precinct, whilst facilitating greater use and enhance passive and visual surveillance. The Whipple Truss bridge is a unique piece of industrial heritage located in an area that is currently an inaccessible and unused space. The proposal area will activate this space and open it up to community use and appreciation.</p> <p>The proposal to remove three major barriers at Old Canterbury Road, Longport Street and Parramatta Road will provide a safe, heritage-rich, well-trafficked travel corridor and revitalise the precinct, thereby providing both a positive heritage and community outcome.</p> <p>The relatively low profile of the works, including elevated path, means the heritage values of significant local landscapes are maintained.</p> <p>The proposal demonstrates compliance with the existing controls and objectives regarding heritage conservation.</p>
<p>The following aspects of the proposal could detrimentally impact on heritage significance.</p> <p>The reasons are explained as well as the measures to be taken to minimise impacts:</p>	<p>Detrimental impacts have not been identified. The project does not include extensive excavations or bulk earthworks, new structures will be built along the route, however significant fabric associated with battle bridge, Lewisham Viaduct and sewage aqueduct will require measures to ensure significant fabric is protected during construction.</p>
<p>The following sympathetic solutions have been considered and discounted for the following reasons:</p>	<p>No sympathetic solutions have been considered and discounted.</p>
<p><b>Minor additions</b></p> <p>How is the impact of the addition on the heritage significance of the item to be minimised?</p> <p>Can the additional area be located within an existing structure? If no, why not?</p> <p>Will the additions visually dominate the heritage item?</p> <p>Is the addition sited on any known or potentially significant archaeological deposits? If so, have alternative positions for the additions been considered?</p> <p>Are the additions sympathetic to the heritage item? In what way (e.g. form, proportions, design)?</p>	<p>This simple design outcome has limited scope for impacts to heritage items. The proposal includes construction of paths, lighting and lightweight structures to be built under or adjacent to existing heritage items. None of the proposed additions will visually dominate the heritage item, are not sited on any known or potentially significant archaeological deposits and generally low profile and sympathetic to the heritage item.</p>
<p>New development adjacent to a heritage item</p>	<p>Views to and from the heritage items are not impeded by the proposal and in the case of the whipple truss and Battle Bridge, views to the item will be improved and the items will be better appreciated.</p>

Question	Discussion
How does the new development affect views to, and from, the heritage item?	Measures will be imposed to ensure significant fabric is protected during construction.
What has been done to minimise negative effects?	Alternative sites are minimal due to the surrounding urban development; however, the proposal has been designed to avoid impacts to heritage items.
How is the impact of the new development on the heritage significance of the item or area to be minimised?	The additions will not visually dominate the heritage items and the public, and users of the item will still be able to view and appreciate its significance of the heritage items.
Why is the new development required to be adjacent to a heritage item?	The heritage curtilage of the items is minimal and does not contribute to the retention of its heritage significance.
How does the curtilage allowed around the heritage item contribute to the retention of its heritage significance?	
Is the development sited on any known, or potentially significant archaeological deposits?	
If so, have alternative sites been considered? Why were they rejected?	
Is the new development sympathetic to the heritage item?	
In what way (e.g. form, siting, proportions, design)?	
Will the additions visually dominate the heritage item?	
How has this been minimised?	
Will the public, and users of the item, still be able to view and appreciate its significance?	

## 5. Heritage Impacts and Mitigation

### 5.1 Proposed works near heritage items

The proposed works are described in the *GreenWay In-Corridor Project Overview* prepared in June 2020 by Inner West Council. Specific plans, elevations and extent of the works have been provided in the *Concept Design Engineering Drawings* which should be referred to for specifics. Detailed concept designs can be found in Appendix A of the REF. Refer to section 2 of the REF for specifics regarding staging, early works and construction methods. The following describes the works associated with heritage items.

The final route consists of a shared path on the western side of the light rail from north of Parramatta Road to south of Old Canterbury Road and from Weston Street to Jack Shanahan Reserve and Hercules Street. The project consists of a number of discrete activities in different areas with different impacts and control measures likely need to be tailored to each specific activity and location. In regard to heritage items, the proposal will run under Battle Bridge, through Cadigal Reserve, under the Lewisham Viaduct, Aqueduct and the whipple truss, and adjacent to Allied Mills and Waratah Mills.

#### **Battle bridge**

- A suspended path under Parramatta Road and over the Hawthorne Canal, suspended from support beams externally or from support beams within the Canal (Figure 25),
- An elevated path, south of Parramatta Road, cantilevered over the Hawthorne Canal on the eastern side, with footings integral with the Canal wall,
- Realignment of a length of a 500 mm water main and modification to another existing water main, plus sewer and disused gas main near and under Parramatta Road,
- Stairs linking from the GreenWay path to the southern side of Parramatta Road and Light Rail lift east of the Canal.

Segments of the channel wall and floor will be removed to enable bored piles to support the cantilevered path. The original bridge arch is intact but obscured by the c1937 widening of Parramatta Road across Hawthorne Canal. The current northern and southern facades of the bridge are the 1937 additions. No new additions will be attached to the original bridge fabric. The removal of obsolete services will open the area for better viewing and access.

#### **Cadigal Reserve and Aqueduct**

- An on-grade path on the eastern side of the Hawthorne Canal (on land owned by Rail Corp NSW) within Cadigal Reserve,
- A new concrete bridge over the Hawthorne Canal north of the existing pedestrian bridge,
- Ecological restoration, a rest/nature play area on the eastern side and a separate observation area on the western side of Cadigal Reserve,
- Ecologically sensitive lighting in Cadigal Reserve.

The elevated pathway will be supported by piles and piers for access to the Longport tunnel. The remaining path works would largely be on-grade concrete paths. The existing asphalt path on the western side would be removed. Activation of a shared path will improve use of the reserve and appreciation of the Viaduct, Aqueduct and whipple truss.

### **Viaduct and whipple truss**

- An elevated path under the main western rail line and whipple truss (on land owned by Rail Corp NSW),
- A jacked box culvert tunnel under Longport Street.

Excavation of a launch pit on the southern side of Longport Street will minimise the impacts to Cadigal Reserve. Installation of hoardings over and around Sydney Water assets on the northern side will protect the assets and installation of an acoustic and light shield across the service tunnel will provide protection for the threatened micro-bat habitat. As the Viaduct, Aqueduct and Whipple truss are elevated above the park and tunnel entrance there will be no obstruction of views of heritage items.

### **Allied and Waratah Mills**

- A path through the light rail corridor (owned by Rail Corp NSW) west of the light rail tracks from Longport Street to Old Canterbury Road, connecting to the Summer Hill Flour Mills near Lewisham West light rail, and inclusive of rest areas,
- Dog off leash area on the eastern side of the light rail tracks and north of Lewisham West Light Rail Stop,
- A wetland on the eastern side of the light rail tracks and south of Lewisham West Light Rail Stop.

The route is largely on-grade concrete paths, associated with hard and soft landscaping. Views will not be obscured.

#### **5.1.1 Summary**

The majority of works comprise of planting or construction of paths, are at ground level and will not impact views to or from the heritage items. Views to and from the items are already limited by surrounding development and vegetation with clear lines of sight obscured.

Construction of a shared pathway will introduce an upgraded feature to the local landscape, sections of which are currently used in a similar way, underutilised or inaccessible. It will remove major barriers at Parramatta Road, Longport Street and Canterbury Road allowing access to heritage items, conservation areas, parks and reserves without encountering vehicular traffic and main roads.

Overall, the proposal does not include extensive excavations or bulk earthworks and it is unlikely that local or state significant relics will be in the vicinity of the proposed works due to previous disturbance or lack of features or deposits that could be considered significant.



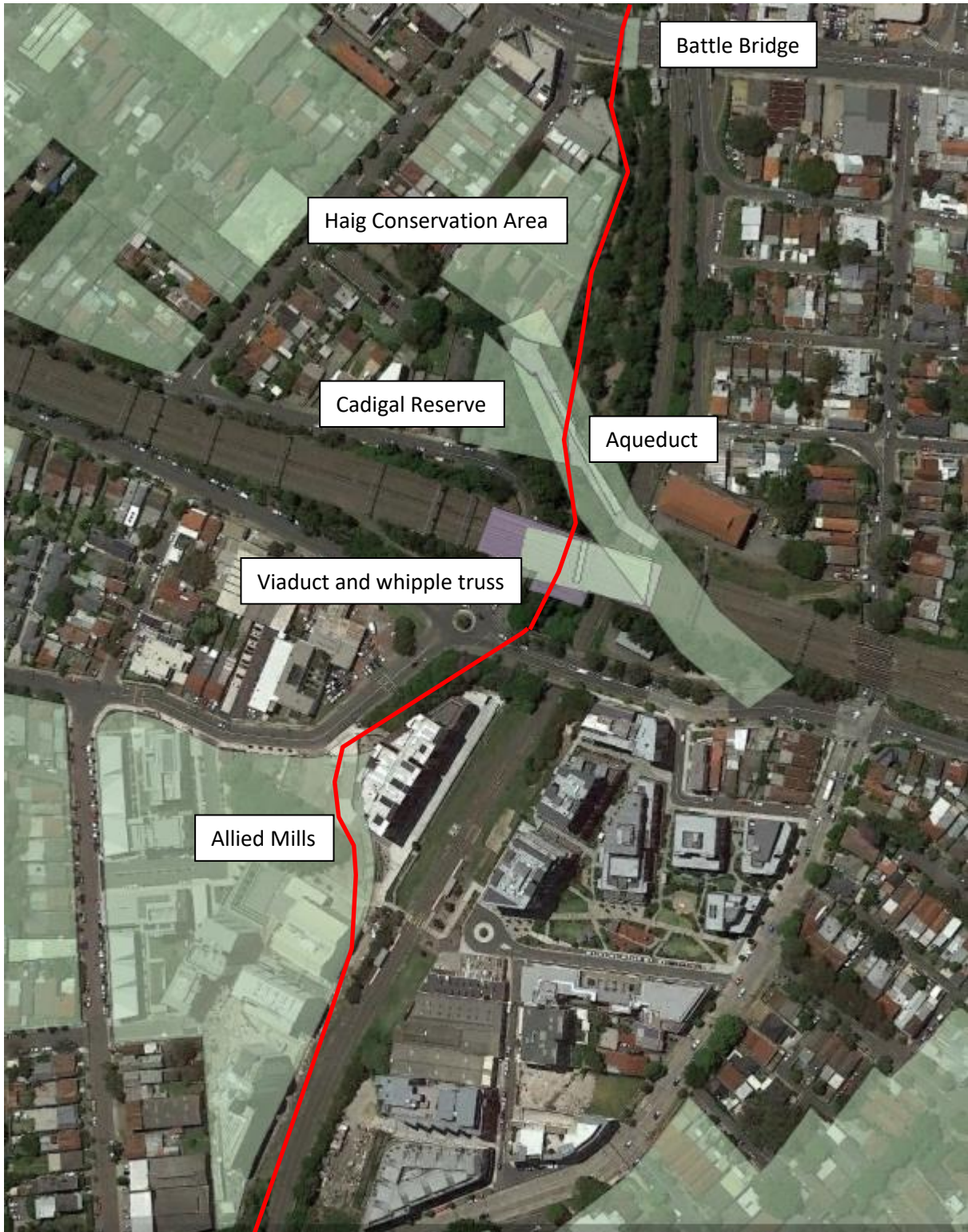


Figure 19: Curtilage of heritage items (green) potentially impacted and proposed GreenWay route (red) (Google Earth)



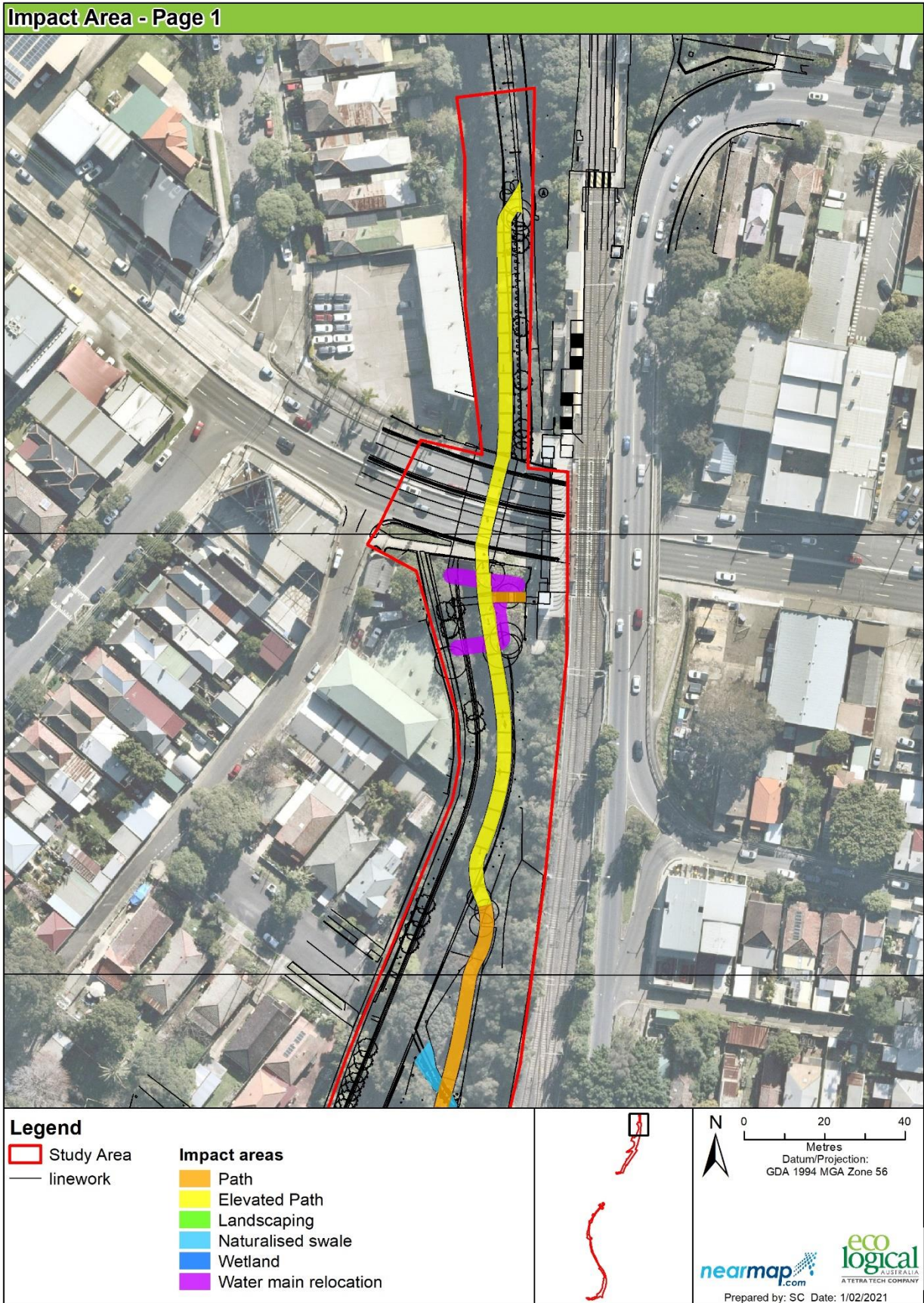


Figure 20: Extent of impacts associated with Parramatta Road and Battle Bridge



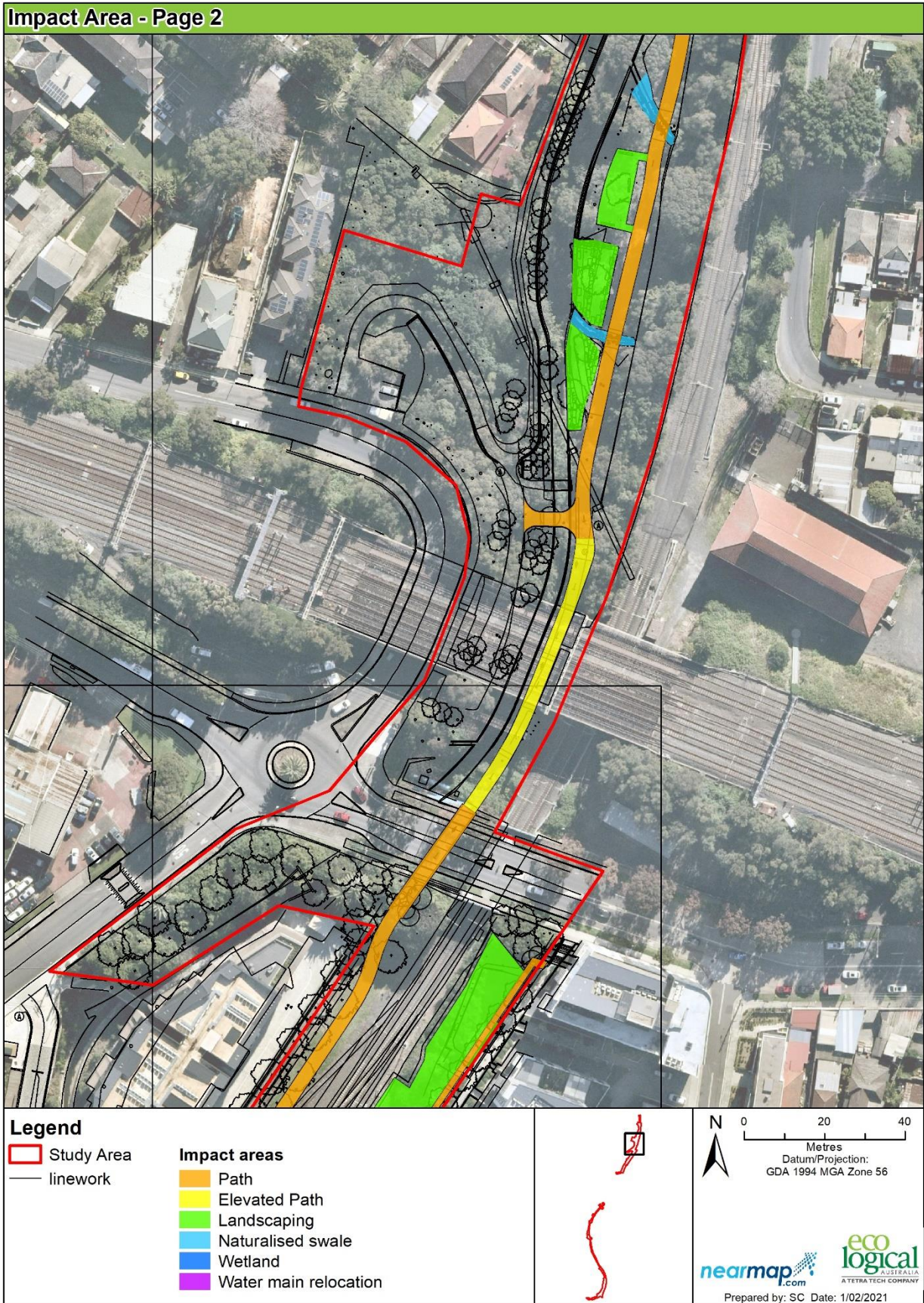


Figure 21: Extent of works associated with Cadigal Reserve, the Lewisham Viaduct and the whipple truss



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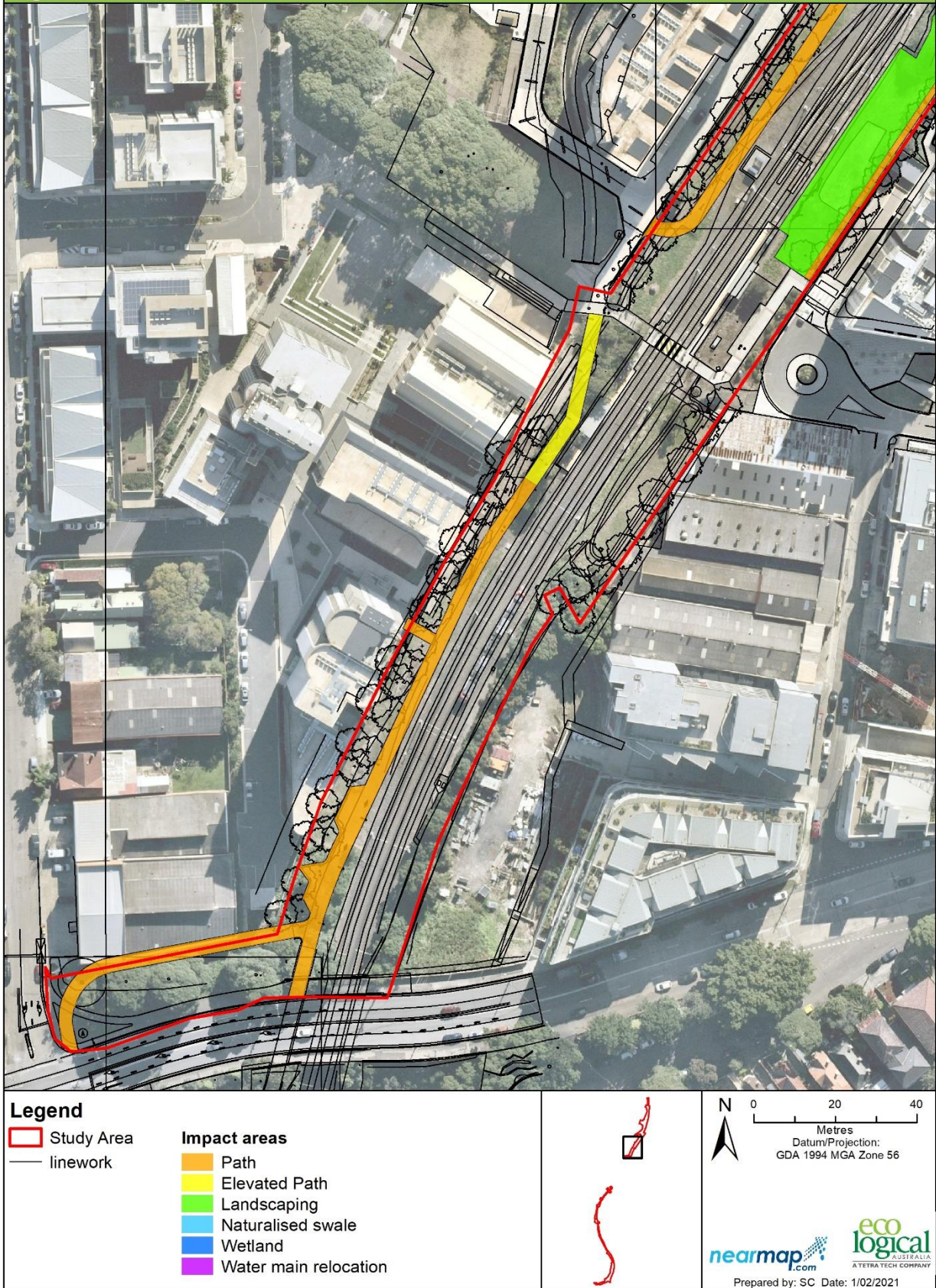


Figure 22: Extent of works associated with Allied Mills



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Figure 23: Extent of works associated with Waratah Mills





Figure 24: Artist impression - proposed elevated lightweight structure under rail line, and tunnel under Longport Street (Northpoint Heritage: 52)



Figure 25: Artist impression - elevated lightweight structure under Parramatta Road at Battle Bridge (Northpoint Heritage:55)

The following table details the proposed works and identified impacts.

**Table 6 Potential impacts to heritage items**

Item	Proposal	Potential heritage Impacts
Battle Bridge	An underpass below Parramatta Road connecting to a path on the eastern side of Cadigal Reserve to the west of the light rail line.	Inadvertent or accidental harm to the bridge or canal during path construction. Barriers or new fixings anchored into significant fabric. Low potential for archaeological evidence associated with brickworks An underpass below Parramatta Road will continue to allow views of both sides of Battle Bridge and allow views of the original section from underneath.
Cadigal Reserve including sewage aqueduct	Construction of an on-grade path on the eastern side of the Hawthorne Canal (on land owned by Rail Corp NSW) within Gadigal Reserve; Creation of a channel access ramp and bridge construction in Gadigal Reserve to facilitate construction and maintenance. Ecological restoration, a rest/nature play area on the eastern side and a separate observation area on the western side of Gadigal Reserve.	Inadvertent or accidental harm to the sewage aqueduct. It is considered unlikely that any archaeological evidence will be exposed or disturbed in this area. An on-grade path and ramps through Cadigal Reserve will continue to allow views to the whipple truss, Aqueduct and the Viaduct from directly underneath on land that has not been previously accessible.
Lewisham Viaduct and whipple truss	An elevated path under the main western rail line viaduct and whipple truss bridge (in land owned by Rail Corp NSW) and a jacked box culvert tunnel under Longport Street (a regional road managed by Council).	Inadvertent or accidental harm to the railway viaduct, whipple truss bridge and the sewer aqueduct from construction. Barriers or new fixings anchored into significant fabric. The elevated pathway ensures surface disturbance is kept to a minimum and archaeological impacts will not occur.
Allied Mills	A path through the western side of the light rail corridor from Longport Street to Old Canterbury Road connecting to the Allied Mills near Lewisham West light rail, and inclusive of rest areas and a signalised crossing at Edward and Weston Streets. Dog off leash area on the eastern side of the light rail tracks and north of Lewisham West Light Rail Stop. A wetland on the eastern side of the light rail tracks and south of Lewisham West Light Rail Stop.	There are a number of remnant items associated with the industrial precinct located in this area however none of it is significant in its own right nor is there likely to be any archaeological potential due to past disturbances. A path through the corridor associated with the Mills will continue to allow views to the industrial buildings and their setting.
Waratah Mills	A tunnel in the light rail corridor on the western side of the light rail tracks to link with the path on the western side of the light rail tracks	No heritage impacts. It is considered unlikely that any archaeological evidence will be exposed or disturbed in this area.

Works at each location also includes lighting and electrical work, fencing, landscaping, ecological restoration, signage and ancillary works. Lighting, signage, fencing and landscaping already exists along the route and the proposed changes are unlikely to present any discernible visual impacts in relation to the heritage items as they are generally on grade and small scale. A lighting assessment and design report has been prepared by Lighting Art and Science (2020).

## 5.2 Mitigation

The concept has been designed to comply with the existing controls and objectives regarding heritage conservation by minimising or avoiding heritage impacts wherever possible. The following mitigation measures are recommended in order to appropriately manage the potential heritage impacts identified for each site.

**Table 7 Mitigation measures for heritage items**

Item	Mitigation measures
Battle Bridge	<p>Measures to be erected to protect Battle Bridge from inadvertent or accidental harm to heritage fabric such as fencing and covering.</p> <p>Ensure any permanent or temporary barriers or fixings are not anchored into significant fabric.</p> <p>Removal of non-significant, intrusive or unsympathetic fabric is acceptable.</p> <p>Interpretation would increase appreciation.</p>
Cadigal Reserve including sewage aqueduct, railway viaduct and whipple truss	<p>Measures to be erected to protect the sewage aqueduct, railway viaduct and whipple truss from inadvertent or accidental harm to heritage fabric such as fencing and covering.</p> <p>Ensure any permanent or temporary barriers or fixings are not anchored into significant fabric.</p> <p>Removal of non-significant, intrusive or unsympathetic fabric is acceptable.</p> <p>Interpretation of these items would increase appreciation.</p> <p>An unexpected finds policy for archaeological items is included in section 5.3.</p>
Allied Mills	<p>Measures to be erected to protect heritage buildings from inadvertent or accidental harm.</p> <p>Removal of remnant rail infrastructure or sidings should be avoided where possible and interpretation of these items would increase appreciation.</p> <p>An unexpected finds policy for archaeological items is included in section 5.3.</p>
Waratah Mills	No impacts identified.

## 5.3 Unexpected Finds

An ‘unexpected heritage find’ can be defined as any unanticipated archaeological discovery, that has not been previously assessed or is not covered by an existing approval under the *Heritage Act 1977* (Heritage Act) or *National Parks and Wildlife Act 1974* (NPW Act). These discoveries are categorised as either:

- a. Aboriginal objects (archaeological remains ie stone tools)
- b. Historic (non-Aboriginal) heritage items (archaeological remains (ie artefacts or movable objects)

c. Human skeletal remains.

Should any unexpected historical archaeology be uncovered during any future excavation works, the following procedure must be adhered to:

- Stop all work in the immediate area of the item and notify the Project Manager.
- Establish a 'no-go zone' around the item. Use high visibility fencing, where practical. Inform all site personnel about the no-go zone.
- No work is to be undertaken within this zone until further investigations are completed.
- Engage a suitably qualified and experienced Archaeologist to assess the finds.
- The Heritage Council must be notified if the finds are of local or state significance. Additional approvals will be required before works can recommence on site (s146 permit).

If the item is assessed as not a 'relic', a 'heritage item' or an 'Aboriginal object' by the Archaeologist, work can proceed with advice provided in writing.

Aboriginal objects are protected under the NPW Act regardless if they are registered on AHIMS or not. If suspected Aboriginal objects, such as stone artefacts are located during future works, works must cease in the affected area and an archaeologist called in to assess the finds. If the finds are found to be Aboriginal objects, Heritage NSW must be notified under section 89A of the NPW Act. Appropriate management and avoidance or approval under a section 90 AHIP should then be sought if Aboriginal objects are to be moved or harmed.



## 6. Conclusion and Recommendations

This report has summarised work previously undertaken, identified the potential for significant non-listed items or archaeological features and deposits, identified and assessed any potential impacts to the heritage significance of the listed items in both the central and southern links study areas as a result of the works and has proposed mitigation measures to avoid and minimise any identified impacts.

This report concludes that;

- The proposal will result in negligible impacts to the heritage significance of listed items within the study area.
- The study area has low potential for significant archaeological features or deposits.
- The works will provide users of the precinct with the opportunity to appreciate the unique view of the Battle Bridge arch, the rail viaduct and the whipple truss from underneath which has not been previously possible.
- The works associated with Cadigal Reserve will highlight the bush regeneration efforts in this area and present the significant railway infrastructure to an audience that may not be fully aware of its significance.
- The works at Allied Mills will open the precinct to visitors and allows them to appreciate the past industrial heritage of the precinct as well as conservation areas and reserves.
- Opportunities exist for heritage interpretation throughout both the central and southern links which will allow a broader appreciation of the precinct.

Recommendations include;

- A Standard Exemption Notification (8: Non-Significant Fabric s57(2) Heritage Act), will be required to be submitted to the Heritage Council with this report for endorsement for works within the heritage curtilage of the sewage aqueduct and the rail viaduct.
- A Heritage Interpretation strategy should be prepared by a suitably qualified heritage consultant in accordance with the NSW *Heritage Interpretation* guidelines ([environment.nsw.gov.au/resources/heritagebranch/heritage/interpretationpolicy](http://environment.nsw.gov.au/resources/heritagebranch/heritage/interpretationpolicy))
- Detailed design and construction methodology should be prepared in consultation with Transport for NSW (TfNSW) and Sydney Water Heritage Specialists.
- The proponent should consult with Transport for NSW Heritage Specialists to ensure that significant fabric is appropriately protected at Battle Bridge, the rail viaduct and whipple truss.
- A photographic Archival Record of Battle Bridge and the whipple truss should be completed and prepared by a suitably qualified and experienced heritage consultant consistent with the Heritage Office guidelines *Photographic Recording of Heritage Items Using Film or Digital Capture*. ([environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/](http://environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/))
- If in the unlikely case that significant historical archaeological features or deposits are encountered, the Unexpected Finds procedure (Section 5.3) should be followed.

## 7. References

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