

HISTORICAL ARCHAEOLOGICAL IMPACT ASSESSMENT

28-32 Bourke Road, Alexandria, Gadigal Land

Prepared for **ALEXANDRIA PROPERTY DEVELOPMENT PTY LTD** 10 June 2022

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Balazs Hansel, MA Archaeology, MA History, M. ICOMOS		
Senior Consultant	Meggan Walker, BA Archaeology (Hons) & Ancient History		
Consultant	Wade Goldwyer, BA Archaeology (Hons)		
Project Code	P0037375		
Report Number	D01 – Draft issued 1 June 2022		
	F01 – Final issued 8 June 2022		

Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

All information supplied to Urbis in order to conduct this research has been treated in the strictest confidence. It shall only be used in this context and shall not be made available to third parties without client authorisation. Confidential information has been stored securely and data provided by respondents, as well as their identity, has been treated in the strictest confidence and all assurance given to respondents have been and shall be fulfilled.

© Urbis Pty Ltd 50 105 256 228

All Rights Reserved. No material may be reproduced without prior permission.

You must read the important disclaimer appearing within the body of this report.

urbis.com.au

CONTENTS

Execu	utive Sum	mary	1
1.	Introd	uction	2
	1.1.	Background	
	1.2.	Site Location	
	1.2.	Proposed Works	
	1.4.	Authorship	
	1.5.	Response to Sears	
	1.6.	Methodology	
	1.7.	Limitations	9
2.	Statut	ory Context	
	2.1.	National Legislation	10
		2.1.1. Environment Protection and Biodiversity Conservation Act 1999	10
	2.2.	State Legislation	10
		2.2.1. NSW Heritage Act 1977	
		2.2.2. Environmental Planning and Assessment Act 1979	
	2.3.	Heritage Context	
3.	Histor	ical Overview	15
э.			
	3.1.	Alexandria Site History	
		Hutchinson Estate, c.1810-c.1870s	
		Agricultural Subdivision, c.1880s-c.1928	
		Early Industrial Land Use, c.1929-c.1969	
		Later Industrial Land Use, c.1969-Present	24
4.	Site In	spection	31
5.	Archa	eological Context	
•••	5.1.	Previous Assessments of the Subject Site	
	0.1.	Fortify Geotech, 2022. Proposed Commercial Development: 28-32 Bourke Road,	
		Alexandria, NSW	
	5.2.	Previous Assessments in Proximity	
		Extent Heritage, 2017. Alexandria Park Community School: Historical	
		Archaeological Assessment. Report prepared for TKD Architects	36
		Cultural Resources Management, 2013. 2-20 Botany Road, Alexandria –	
		Archaeological Assessment Historic Period.	36
		Thorp, W., 2000. Archaeological Report: Excavations at the First Stage Chubb	
			27
	5.0	Factory, Waterloo.	
	5.3.	Summary of Archaeological Context	37
6.	Archa	eological Potential	
	6.1.	Assessment of Archaeological Potential	
	6.2.	Statement of Archaeological Potential	
7.	Archa	eological Significance	42
••	7.1.	Terms and Definitions	
	7.2.	Assessment of Archaeological Significance	
	7.3.	Statement of Archaeological Significance	
8.	Impac	t Assessment	47
9.	Concl	usions and Recommendations	48
10.	Biblio	graphy and References	<u>7</u> 0
Discla	aimer		50

FIGURES

Figure 1 – Regional location	3
Figure 2 – Subject site location.	
Figure 3 – Site plan showing proposed elevations of the new development.	
Figure 4 – Site plan showing concept design of the basement level that is subject to a design	
competition and Stage 2 detailed SSD	
Figure 5 – Heritage items and constraints.	13
Figure 6 – Historical map from 1843, showing the William Hutchinson Estate with associated roads and swamplands. The red outline shows the approximate location of the subject site. Note that the subject site is on vacant land and is intercepted by a dirt track. The white arrow indicates north	16
Figure 7 – Undated (assumed circa-1820s). Waterloo properties with owners and occupiers – Bourke Road, Gardeners Road. The subject site is not shown on this map as it is located a further 1.8 km north-east from the corner of Bourke Road and Gardeners Road (direction of red arrow). The Waterloo Estate is outlined in blue. The Chinese market garden properties are outlined in pink along Bourke Road. The green arrow indicated north.	17
Figure 8 – Atlas of the Suburbs of Sydney, 1885-1890 – Alexandria. Approximate location of subject site indicated by blue circle. The green arrow indicates north	
Figure 9 – Map of the country around Sydney, 1881 from Reconnaissance by Lieut. Parrott, Volr. Engineers. The approximate location of the subject site is circled in red. The green arrow indicates north.	20
Figure 10 – Historical survey of the subject site (outlined in red), dated 1891, showing the subject site is part of a larger property, likely used for agriculture. Property boundaries (fences) and small structures are visible. The red square shows the location of the subject site. Note that watermains have been installed. The green arrow indicates north.	21
Figure 11 – Survey taken in 1925 along Bourke Road showing small structures within the subject site (outlined in red). A vegetable garden is visible on the eastern side of the subject site. The green arrow indicates north.	22
Figure 12 – Land title records, c.1929, showing the three separate allotments contained within the subject site (outlined in red). The green arrow indicates north	23
Figure 13 – City of Sydney - Building Surveyor's Detail Sheets, 1949-1972. Subject site indicated in red (green arrow indicating north). Note the subject site is occupied by two companies, namely F.H. Booth & Co Pty Ltd (eastern side) and Paul, Roberts & Parsons Pty Ltd (western side)	24
Figure 14 – Detail from 1987 plans showing alterations to façade of subject site.	
Figure 15 – Detail from 1987 plans showing alterations to interior of subject site. The green arrow indicates north.	26
Figure 16 – Aerial imagery from 1943 showing a large warehouse structure on the western section of subject site (outlined in red). Note the eastern and southern section of the subject site containing smaller warehouse structures with open space around them. The green arrow indicates north	27
Figure 17 – Aerial imagery from 1951 showing an extension of the large western warehouse structure within the subject site (outlined in red). Note the eastern section of the subject site remains relatively unchanged with the exception of an additional small structure to the southern section of the subject site. The green arrow indicates north.	
Figure 18 – Aerial imagery from 1978 showing minor building extensions to the smaller buildings on the eastern section of the subject site (outlined in red). The green arrow indicates north	
Figure 19 – Aerial imagery from 2022 showing further warehouse extensions to the eastern section of subject site (outlined in red). Note the small rectangular open space along the central eastern boundary of the subject site. The green arrow indicates north	
Figure 20- Front of the subject site from Bourke Road.	
Figure 21- Inside view of the subject site showing concrete floor.	
Figure 22- Interior view of the subject site showing concrete neor	
Figure 23- Interior view of the subject site showing concrete floor and brick walls	
Figure 24- Outside area showing concrete is present.	
Figure 25- Interior view of the subject site	
Figure 26 – Location of geotechnical boreholes within subject site. The red arrow indicates north	

TABLES

Table 1 – SEARs and relevant report sections	8
Table 2 – Listed heritage items in proximity to the subject site	. 12
Table 3 – Geotechnical borehole findings	. 33
Table 4 – Assessment of Archaeological Potential	. 39
Table 5-6 Significance Criteria	. 42
Table 7 Assessment of Archaeological Significance.	. 44

EXECUTIVE SUMMARY

Urbis has been engaged by Alexandria Property Development Pty Ltd ('the proponent') to conduct an Historical Archaeological Impact Assessment (HAIA) for proposed redevelopment for 28-32 Bourke Road, Alexandria, Gadigal land, NSW, legally referred to as Lot 1-3 in DP324707 (the subject site) (Figure 1 and Figure 2).

The HAIA has been undertaken to support Stage 1 of a three stage State Significant Development Application (SSDA), which seeks approval to redevelop the subject site for a hospital and medical centre uses.

Stage 1 of the SSDA (SSD-38600121) is for the concept envelope of the building, which will be followed by a design competition for the design of the building. No physical works are proposed to be undertaken as part of Stage 1. Stage 2 of the SSDA will seek approval for the detailed design of the building and its construction.

The HAIA was undertaken to investigate the potential for historical archaeological resources which meet the threshold for Local or State significance to be present within the subject site and investigate the impact of the proposal on these relics. As no physical works are proposed at this stage, the assessment of impact included in Section 8 is preliminary only, and formed on the basis of the concept envelope.

This assessment has identified the following:

- In general, there is Low potential for historical archaeological resources to occur in conjunction with the early agricultural phases at the subject site, with moderate potential associated with the early industrial land use phase (c.1900s-c.1943).
- Archaeological resources which may occur at the subject site, including general discard items, rubbish dumps and structural remains of industrial workshops, are anticipated to meet the threshold for significance on a Local level, specifically for their historic value and research potential. Relics of Local significance will be primarily associated with the early industrial land use phase, with earlier relics not anticipated be to be retained with sufficient integrity.
- The detailed design will be subject to a further SSDA process at a later staged. Due to the nature of the approval sought, there are no impacts currently proposed to occur at the site. However, this impact assessment has considered the likelihood that impacts would occur at the site on the basis of the concept design. As the concept design involves a 1-1.5m basement excavation across the whole of the site, this is likely to remove all previously accumulated archaeological deposits and result in a total impact to any relics of Local significance which may occur. As such, mitigation measures should be implemented at demolition and construction phase. This should be in accordance with the below recommendations.

As a result of these conclusions, Urbis recommends the following:

- 1. Once the detailed design and physical impacts from the proposal have been finalised at Stage 2 of the SSDA, the impact assessment, archaeological potential mapping and recommendations should be refined and reconsidered, and this report updated.
- 2. At Stage 2 SSDA an Archaeological Research Design (ARD) should be prepared by a suitably qualified archaeologist to develop a methodology for the investigation and management of potential locally significant relics across the subject site. This should include methodologies for monitoring and test excavation, as well as salvage excavation should that be deemed necessary.
- 3. In the unlikely event that human remains are uncovered during any site works, the following must be undertaken:
 - (a) All works within the vicinity of the find immediately stop.
 - (b) Site supervisor or other nominated manager must notify the NSW Police and the Department of Premier and Cabinet (DPC).
 - (c) The find must be assessed by the NSW Police, and may include the assistance of a qualified forensic anthropologist.
 - (d) Management recommendations are to be formulated by the Police, DPC and site representatives.
 - (e) Works are not to recommence until the find has been appropriately managed.

1. INTRODUCTION

1.1. BACKGROUND

Urbis has been engaged by Alexandria Property Development Pty Ltd (the Proponent) to prepare the following Historical Archaeological Impact Assessment (HAIA) for proposed redevelopment of a hospital and medical centre uses at 28-32 Bourke Road, Alexandria, NSW, on the traditional lands of the Gadigal (the subject site). This land is legally referred to as Lot 1-3 in DP324707.

1.2. SITE LOCATION

The subject site is located is located on a rectangular lot fronting Bourke Road to the north, at 28-32 Bourke Road, Alexandria, NSW, Lots 1-3 DP324707. The subject site encompasses approximately 2965 m². The site is approximately 4.3 km south-south-west of the Sydney CBD, within the City of Sydney Local Government Area (Sydney LGA). The subject site is located on the traditional lands of the Gadigal and within the catchment of the Metropolitan Local Aboriginal Land Council (MLALC) (Figure 1 and Figure 2). The subject site is currently occupied by commercial warehouse development.

To the west, east and south of the lot are further commercial lots. The area is zoned BY- Business Park.



Figure 1 – Regional location.



Figure 2 – Subject site location.

1.3. PROPOSED WORKS

Development consent is sought for a concept proposal for the 'Alexandria Health Centre' comprising medical centre uses and anchored by a mental health hospital. Specifically, the application seeks concept approval for:

- In principle arrangements for the demolition of existing structures on the site and excavation to accommodate a single level of basement car parking (partially below ground level).
- A building envelope to a maximum height of 45 m (RL 53.41) (including architectural roof features and building plant). The podium will have a maximum height of RL 28.41.
- A maximum gross floor area of 11,442.20 sqm, which equates to a maximum FSR of 3.85:1. The total FSR will comprise a base FSR of 2:1, a community infrastructure bonus FSR of 1.5:1 and a 10% design excellence bonus FSR (subject to a competitive design alternatives process).
- Indicative use of the building as follows:
 - Mental health hospital at levels 5-7.
 - Medical centre uses at levels 1-4.
 - Ground level reception/lobby and pharmacy.
- Principles for future vehicular ingress and egress from Bourke Road along the site's western frontage.
- Subject to agreement on a public benefit offer submitted with this application, the proposal includes the indicative dedication of the following land to Council as envisaged by the Draft Sydney Development Control Plan 2012 – Southern Enterprise Area Amendment (Draft DCP):
 - A 2.4m wide strip of land along the site's frontage to Bourke Road for the purpose of footpath widening.
 - A 3m wide lane along the site's western boundary contributing towards a 6m wide lane (it is noted that the concept proposal will allocate an additional 3 m strip of land within the site along the western boundary to enable two-way vehicle movement into and out of the site).
 - A 3m wide lane along the site's southern boundary, contributing towards a 9m wide lane.

Stage 1 of the SSDA is for the concept envelope (Figure 3 and Figure 4) of the building, which will be followed by a design competition for the design of the building. No physical works are proposed under the Stage 1 SSDA. Figure 3 and Figure 4 outlines the concept design that is subject to a design competition.



Figure 3 – Site plan showing proposed elevations of the new development. *Source: NBRS, 2022*



Figure 4 – Site plan showing concept design of the basement level that is subject to a design competition and Stage 2 detailed SSD.

Source: NBRS, 2022

1.4. AUTHORSHIP

The present report has been prepared by Wade Goldwyer (Urbis Consultant Archaeologist) and Meggan Walker (Urbis Senior Consultant Archaeologist) with review and quality control undertaken by Balazs Hansel (Urbis Director, Archaeology).

Unless otherwise stated, all drawings, illustrations and photographs are the work of Urbis.

1.5. **RESPONSE TO SEARS**

The HAIA is guided by the Secretary's Environmental Assessment Requirements (SEARs) for the State Significant Development (SSD 38600121). Identifies the relevant SEARs and the corresponding sections of this ACHAR.

Table 1 – SEARs and relevant report sections

SEARs Item	Report Section
18. Where there is potential for direct or indirect impacts as a result of the concept development on the heritage significance of items of environmental heritage, provide a Statement of Heritage Impact and Archaeological Assessment (if potential impacts to archaeological resources are identified) prepared in accordance with the relevant guidelines, which assesses any impacts and outlines measures to ensure they are minimised and mitigated.	 This HAIA has been prepared in accordance with the guidelines as set out in the following publications: Assessing Significance for Historical Archaeological Sites and 'Relics' (2009) <i>Historical Archaeological Code of Practice</i> (2006) This HAIA has identified both the archaeological potential (Section 6) and archaeological significance (Section 7) to inform the assessment of impact from the proposal on the non-Indigenous archaeological values of the subject site included in Section 8.

1.6. METHODOLOGY

This HAIA has been prepared with reference to the following guidelines and documents:

- Assessing Significance for Historical Archaeological Sites and 'Relics' (NSW Office of Environment and Heritage (OEH) (2009).
- Assessing Heritage Significance (NSW Heritage Manual 2) (NSW Heritage Office 2001).
- Historical Archaeology Code of Practice (Heritage Office of the Department of Planning NSW 2006).
- The philosophy and process adopted is that guided by the Australia ICOMOS Burra Charter 2013.

1.7. LIMITATIONS

The HAIA was limited to historical archaeological resources and does not consider Aboriginal archaeological remains or built heritage items, which are addressed in separate reports under different covers. As the entire subject site is covered by hard stand and existing structures restricting ground visibility to zero, it was not possible to inspect the site for any physical signs of archaeological resources.

Assessment of Aboriginal archaeological potential is provided in the separate Aboriginal Cultural Assessment Report prepared by Urbis (in prep, 2022).

2. STATUTORY CONTEXT

2.1. NATIONAL LEGISLATION

2.1.1. Environment Protection and Biodiversity Conservation Act 1999

In 2004, a new Commonwealth heritage management system was introduced under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The National Heritage List (NHL) was established to protect places that have outstanding value to the nation. The Commonwealth Heritage List (CHL) was established to protect items and places owned or managed by Commonwealth agencies. The Australian Government Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) is responsible for the implementation of national policy, programs and legislation to protect and conserve Australia's environment and heritage and to promote Australian arts and culture. Approval from the Minister is required for controlled actions which will have a significant impact on items and places included on the NHL or CHL.

Commonwealth Heritage List

The (CHL) was established by the EPBC Act to protect Indigenous, historic, and natural heritage places owned or controlled by the Australian Government. The CHL and EPBC Act contain provisions for the management and protection of listed places under Commonwealth ownership or control. There are no items on the Commonwealth Heritage List within the study area. As such, the heritage provisions of this act do not apply, and project works for the Proposal would not require referral to the Minister.

The subject site does not contain, nor is it located within proximity of, any sites which are listed on the CHL.

National Heritage List

The National Heritage List (NHL) was established by the EPBC Act to protect places of significant natural or cultural heritage value at a National level. The EPBC Act requires NHL places to be managed in accordance with the National Heritage Management Principles. Under sections 15B and 15C of the EPBC Act, a referral must be made to the Department of the Environment and Energy for actions that are likely to have a significant impact on National Heritage listed properties. There are no items listed on the National Heritage List within the study area. As such, the heritage provisions of this act do not apply, and project works for the Proposal would not require referral to the Minister.

The subject site does not contain, nor is it located within proximity of, any sites which are listed on the NHL.

2.2. STATE LEGISLATION

2.2.1. NSW Heritage Act 1977

The NSW Heritage Act 1977 (the Heritage Act) provides protection to items of environmental heritage in NSW. This includes places, buildings, works, relics, moveable objects and precincts identified as significant based on historical, social, aesthetic, scientific, archaeological, architectural, cultural or natural values. State significant items are listed on the NSW State Heritage Register (SHR) and are given automatic protection under the Heritage Act against any activities that may damage an item or affect its heritage significance.

Under Section 57(1) of the Heritage Act Heritage Council approval is required to move, damage, or destroy a relic listed in the State Heritage Register, or to excavate or disturb land which is listed on the SHR and there is reasonable knowledge or likelihood of relics being disturbed.

The Act defines a 'relic' 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 local or state significance.

Under section 139 of the *Heritage Act*, an excavation permit is required to disturb or excavate land *"knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed".*

This section of the Heritage Act identifies provisions for items /relics outside of those on the State Heritage Register or subject to an Interim Heritage Order (IHO).

State Heritage Register

The Heritage Act is administered by the Office of Environment and Heritage. The purpose of the Heritage Act 1977 is to ensure cultural heritage in NSW is adequately identified and conserved. Items of significance to the State of NSW are listed on the NSW State Heritage Register (SHR) under Section 60 of the Act.

A search of the SHR was undertaken on 3rd March 2022. The subject site does not contain, nor is it located within proximity of, any sites which are listed on the SHR.

Section 170 Heritage and Conservation Register

The Heritage Act also requires government agencies to identify and manage heritage assets in their ownership and control. Under Section 170 of the Heritage Act, Government agencies must keep a register which includes all local and State listed items or items which may be subject to an interim heritage order that are owned, occupied or managed by that Government body. Under Section 170A of the Heritage Act all government agencies must also ensure that items entered on its register are maintained with due diligence in accordance with State Owned Heritage Management Principles.

2.2.2. Environmental Planning and Assessment Act 1979

Local Environmental Plans (LEPs) are made under the Environmental Planning and Assessment Act 1979 (EP&A Act). The Syndey LEP 2012 is applicable to the subject site. The Syndey LEP 2012 addresses heritage in Section 5.10, with a list of identified and protected heritage items provided under Schedule 5 of the LEP.

Under Section 5.10, Clause 2 of the LEP, development consent is required when:

(a) 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)—

(i) a heritage item,

(ii) an Aboriginal object,

(iii) a building, work, relic or tree within a heritage conservation area,

(b) 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,

(c) 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,

(d) disturbing or excavating an Aboriginal place of heritage significance,

(e) erecting a building on land—

(i) on which a heritage item is located or that is within a heritage conservation area, or

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,

(f) subdividing land—

(i) on which a heritage item is located or that is within a heritage conservation area, or

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

As such, under these requirements, development consent is required for future proposed works which will disturb or excavate the ground surface.

A search of Schedule 5 of the Sydney LEP 2012 identified that there are no locally listed heritage items within the subject site. However, the subject site is in close proximity to a number of locally listed items, as listed below in Table 2 and shown in Figure 5.

Heritage Item	Description
C4	Hillview Estate, which is located approximately 190m south-south-east from the subject site.
C72	Hansard Street, which is located approximately 420m south-east from the subject site.
C74	North Alexandria Industrial, which is located approximately 286m north from the subject site.
19	Industrial building "Eclipse House" including interior, which is located approximately 364m north-west from the subject site.
136	Cottage including interiors, which is located approximately 254m south-east from the subject site.
12071	Waterloo Public School group buildings including interiors, landscaping and retaining wall, which is located approximately 329m north-east from the subject site.
12235	Former Standard Telephones & Cables industrial building including interiors, which is located approximately 264m north-east from the subject site.

Table 2 – Listed heritage items in proximity to the subject site.



Project No: P0037375 Project Manager: Sam Richards

🗖 Subject Area 🔜 Hydrology 💋 Conservation Area - General 🥅 Item - General

Contours

Figure 5 – Heritage items and constraints.

2.3. HERITAGE CONTEXT

The heritage context of the subject site is summarised as follows:

- There are no items registered on the State Heritage Register within, or in close proximity to, the subject site.
- There are no locally listed items registered on the Sydney LEP 2012 within, or in close proximity to, the subject site.
- There are no archaeological listings applicable to the subject site. However, this does not reduce archaeological potential or the significance of potential resources, as archaeological listings are generally rare in a local government context and only occur when there is a site of known archaeological significance gazetted on Schedule 5 of the LEP. Due to the rarity in LEP updates and the frequency of impact to archaeological sites, this does not occur often.
- Under the requirements of *The Heritage Act*, should relics of State significance be proposed for impact, an approval under Section 60 of the Heritage Act will likely be required. Should relics of Local significance be proposed for impact, an approved permit under Section 140 of the Heritage Act will likely be required. This assessment is prepared to assess the likelihood for relics.

3. HISTORICAL OVERVIEW

3.1. ALEXANDRIA SITE HISTORY

Hutchinson Estate, c.1810-c.1870s

Prior to European settlement and the establishment of Alexandria, the landscape primarily consisted of swamplands. The suburb of Alexandria was named after Princess Alexandra, who married Edward, Prince of Wales (later King Edward VII) in 1863. By the 1820s the area was supporting a number of industrial operations, including the Waterloo Flour Mills owned by William Hutchinson, Daniel Cooper and others. The area around the mill remained crown land until it was granted to William Hutchinson in 1823 as a grant of 1,400 acres. Hutchinson was a superintendent of convicts and public works at Waterloo Farm and held his land for two years before selling it to Daniel Cooper and Solomon Levey.¹ By 1828, the partnership of Levey & Cooper resulted in their status as amongst the largest owners of stock in the colony, with large amounts of land across Waterloo, Alexandria, Redfern, Randwick and within the Liverpool region, upon which they operated farms and water mills.² Mapping (Figure 6) demonstrates that at Alexandria, the mills were operational to the north of the Hutchinson Estate, to the north of the subject site.

Figure 6 shows that by 1843, the subject site consisted of vacant swampland that has a dirt track running in a north-east to south-west direction. Additionally, there is a fence structure in proximity to the north of the subject site. The fence structure is likely associated with the industrial operations of the Waterloo Flour Mill, stock grazing and agistment or Chinese market gardens.

¹ Pollon, F 1996, *The book of Sydney suburbs*, Cornstalk, Sydney.

² G.F.J. Bergman, 1964. Australian Dictionary of Biography- Solomon Levey, 1794-1833. <u>https://adb.anu.edu.au/biography/levey-solomon-2353</u>



Figure 6 – Historical map from 1843, showing the William Hutchinson Estate with associated roads and swamplands. The red outline shows the approximate location of the subject site. Note that the subject site is on vacant land and is intercepted by a dirt track. The white arrow indicates north.

Source: HLRV, Parish of Alexandria, County of Cumberland

In the early days of European settlement, the parish of Alexandria was mainly known for its Chinese market gardens arranged around the alluvial flats of Shea's Creek. Figure 7 is an undated map which shows the Chinese market gardens, which are primarily situated along the western side of Bourke Road. The eastern side consists of the Waterloo Estate owned by Sir D. Cooper. Based on the historical mapping and lack of historical evidence, the subject site was not used as a market garden as it is located on the eastern side of Bourke Road, within the Waterloo Estate.

Sheas Creek was originally a tidal inlet off Botany Bay, but in the years 1887 to 1900 it was excavated to form the navigable Alexandra Canal to the west of Botany Road. These works were completed using unemployed relief work labour during the depression of the 1890s.



Figure 7 – Undated (assumed circa-1820s). Waterloo properties with owners and occupiers – Bourke Road, Gardeners Road. The subject site is not shown on this map as it is located a further 1.8 km north-east from the corner of Bourke Road and Gardeners Road (direction of red arrow). The Waterloo Estate is outlined in blue. The Chinese market garden properties are outlined in pink along Bourke Road. The green arrow indicated north.

Source: State Library of NSW (095-Z/SP/A2/92)

Agricultural Subdivision, c.1880s-c.1928

By the late 19th century Alexandria underwent further subdivision and residential development. Historical surveys from 1881 demonstrate the establishment of residential dwellings within former sections associated with the Waterloo Estate, primarily along Botany Bay Road, following subdivision of the Estate in c.1890s. By 1882, the establishment of the Tram service along Botany Road had increased the popularity of the area.

In the late 19th Century, the Cooper family continued to own and operate the property. Historical records suggest the Cooper family held the property well into the 20th century, being in the ownership of William Cooper until 1913. The property was then transferred to Tom Raine in September 1913.³ Contemporary maps (Figure 8- Figure 9) demonstrate that Bourke Road was established by the late 19th Century, along with dwellings and structures fronting the road, including within the subject site (Figure 10). Given the Cooper's retained the property and were a largely agricultural family, it can be assumed that the property was utilised for agricultural pursuits at this time. Bourke Road was known at the time for being a place of both Chinese market gardens and European agriculture, which had continued from the early 19th century.

Figure 10 shows that by 1891, the subject site consists part of a larger agricultural property, as indicated by the small structures and surrounding open land with fencing.

³ Conveyance, 1915. Book 1062, No. 663



Figure 8 – Atlas of the Suburbs of Sydney, 1885-1890 – Alexandria. Approximate location of subject site indicated by blue circle. The green arrow indicates north.

Source: City of Sydney Historical Atlas.



Figure 9 – Map of the country around Sydney, 1881 from Reconnaissance by Lieut. Parrott, Volr. Engineers. The approximate location of the subject site is circled in red. The green arrow indicates north.

Source: NLA MAP RM 903



Figure 10 – Historical survey of the subject site (outlined in red), dated 1891, showing the subject site is part of a larger property, likely used for agriculture. Property boundaries (fences) and small structures are visible. The red square shows the location of the subject site. Note that watermains have been installed. The green arrow indicates north.

Source: SydneyWater, PWDS1544-S950

The subject site was used for agricultural purposes for most of the early 20th century. Survey plans from 1925 show the subject site consisting of outhouses/sheds with the eastern section comprising of a vegetable garden. Most of the land surrounding the subject site is primarily also being used for agricultural purposes as there is little development that has taken place. There are also vegetable gardens and Chinese market gardens in the surrounding area (Figure 11).



Figure 11 – Survey taken in 1925 along Bourke Road showing small structures within the subject site (outlined in red). A vegetable garden is visible on the eastern side of the subject site. The green arrow indicates north.

Source: SydneyWater, DTS649

Early Industrial Land Use, c.1929-c.1969

By the beginning of the twentieth century, Alexandria began to develop as an industrial centre. This development was encouraged by the five times mayor of Alexandria, John Harris, who termed the phrase the 'Birmingham of Australia' to describe the municipal area after the British Midlands industrial hub.⁴.

Early newspaper articles demonstrate the establishment of factories along Bourke Road at the beginning of the 20th century.

"The fire that broke out at 1:30 this morning in the margarine factory of Kitchen & Sons, Ltd., Bourke Road, Alexandria, was discovered by the watchman at the adjoining works of the Co-Operative Wholesale Society."⁵

Throughout the Inter-War period Sydney's industry expanded to the south, occupying the former swampy areas around Waterloo and Alexandria. The land here was cheap, provided good access to water supplies, and importantly removed noxious industries from the inner city.⁶ The subdivision of the Cooper-Levey Estate freed up much of the land in South Sydney and led to the rapid development of the area in the Inter-War period, with large expanses of land converted into industrial sites.

Land title records from 1929 indicate that the subject site was originally contained within 'Lot C' of an earlier subdivision of the area.⁷ In the same year, the original purchaser, Norman Rigg Smith, subdivided the

⁴ Whittaker, Anne-Marie Pictorial History: South Sydney. Alexandria, NSW Kingsclear Books 2002:121

 $^{^{\}scriptscriptstyle 5}$ The Sun, 29 July 1913, "BURNT OUT", p. 2.

⁶ City Plan Heritage, 2014. City of Sydney Industrial & Warehouse Buildings Heritage Study, 26.

⁷ NSW Land Registry Services, Vol Fol 4250 104

allotment to create the three separate allotments contained within the subject site.⁸ The subdivision of the subject site is shown in Figure 12. Lots 1 and 3 were sold to investor, Aubin Rene Lhuede, and Lot 2 was sold to engineer, Norman William Parsons. In 1935, it appears Parsons teamed up with associates, Harold Frederick Charles Roberts and Ernest William Paul, to create Paul Roberts Parsons Ltd.⁹ In 1938, Paul Roberts Parsons Ltd purchased Lot 1 to expand their area. It appears that their company specialised in fine metal engineering work. Lot 3 was purchased by metal merchant, James Booth in 1932, and in 1937 was transferred to F H Booth and Son Pty. Ltd.¹⁰ Figure 13 shows the subject site under the ownership of F.H. Booth & Co Pty Ltd and Paul, Roberts & Parsons Pty Ltd in the mid-20th century.



Figure 12 – Land title records, c.1929, showing the three separate allotments contained within the subject site (outlined in red). The green arrow indicates north.

Source: NSW Land Registry Services, Vol Fol 4352 106

⁸ Ibid.

⁹ NSW Land Registry Services, Vol Fol 4352 106

¹⁰ NSW Land Registry Services, Vol Fol 4359 123



Figure 13 – City of Sydney - Building Surveyor's Detail Sheets, 1949-1972. Subject site indicated in red (green arrow indicating north). Note the subject site is occupied by two companies, namely F.H. Booth & Co Pty Ltd (eastern side) and Paul, Roberts & Parsons Pty Ltd (western side).

Source: City of Sydney Archives, A-00880200

Later Industrial Land Use, c.1969-Present

Industrial designer and manufacturing company, Gilkon Pty Ltd purchased Lots, 1, 2 & 3 off Paul Roberts Parsons Ltd and F H Booth and Son Pty. Ltd 1969.¹¹ Mooney Properties Pty Ltd, purchased the site in 1989.¹²

The existing buildings appear to date to the Inter-War period, owing to the visible presence of construction materials and techniques that were characteristic of that period. Despite some modifications over time, as demonstrated in the historical aerials below (namely, changes to roof cladding, and the introduction and removal of smaller ancillary structures), changes to the site have remained relatively minor. Recent modifications to the site and the building include:

- Connection between buildings nos. 30-32 and no. 28, resulting in large opening in existing walls, c.1984¹³.
- Rear building erected, alterations to façade and internal layout between (as shown in Figure 14 and Figure 15) 1986-1991¹⁴.

¹¹ Ibid.

¹² EP RISK, 2022, p. 11.

¹³ Bourke Rd (28-32), Alexandria. 3- proposed openings through existing brick walls. (01/01/1984 - 31/12/1984), [A-00557146]. City of Sydney Archives, accessed 04 May 2022, https://archives.cityofsydney.nsw.gov.au/nodes/view/1432849

¹⁴ Bourke Rd (28,30,32,) Alexandria. Extension to warehouse. Tsang & Lee, Architects. (01/01/1987 - 31/12/1987), [A-00570044]. City of Sydney Archives, accessed 04 May 2022, https://archives.cityofsydney.nsw.gov.au/nodes/view/1437489

- New roof 1987¹⁵.
- In 1996 a Development Application was lodged by BBC Hardware with the former South Sydney Council (City of Sydney) for the construction of the existing hardware building.
- Replacement of roof sheeting to front building and awning over breezeway, between 1998-2004 (possibly following 1999 hailstorm).
- In 2001, Bunnings purchased the BBC Hardware network of stores and opened their operations on the subject site. The development was consistent with the branding and typology for the chain of warehouse stores.

	FACE BRICK FACADE	CEMENT D	NDER & PAINT		
442	THE DICK THENDE	CEREVIL RE	NUER & PAINT	·	
\sim		T1	······································		_
	A AND	_ <u>_</u>		- 1	
F					
1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -			· · · · · · · · · · · · · · · · · · ·	line (17 i	
	EXISTING	FACADE			
		· · · · · · · · · · · · · · · · · · ·			······································
					12 Sun In
					9 1/1:
1 . Tay					
	CEMENT RENDER & PAINT TO EXI	STING BRICKWORK	PAINT EXISTING FACADE		
			METAL SHEET CLADUIN	IG IMCADE	00000
			\$© \$%		
REMOVE EXISTING BAN CONBRL					
	PROPOSED	AMENDED FACADE	NEW	ND - OPENING FOR ROLLI ROLLER SHUTTER	R SHUTTER

Figure 14 – Detail from 1987 plans showing alterations to façade of subject site. Source: *City of Sydney Archives, A-00235781*

¹⁵ 28, 30-32 Bourke Rd Alexandria. Erect new roof on warehouse. Tsang & Lee Architects (04/05/1987 - 22/05/1987), [A-00236596]. City of Sydney Archives, accessed 04 May 2022, https://archives.cityofsydney.nsw.gov.au/nodes/view/862979



Figure 15 – Detail from 1987 plans showing alterations to interior of subject site. The green arrow indicates north. Source: *City of Sydney Archives, A-00235781*

Aerial imagery from 1943,1951, 1978 and 2022 for the subject site has been obtained and analysed to identify how the subject site has changed over time. Historic aerial imagery is a valuable source of identifying disturbance and archaeological potential. Analysis of the historical aerials is included below with the aerial images provided in Figure 16 to Figure 19.

In 1943 the subject site has since been cleared of all potential agricultural/residential development and replaced with industrial development. The majority of the subject site is developed and disturbed with minor open space around the three smaller buildings on the eastern and southern section (Figure 16). The surrounding landscape has also been developed with industry, with the exception to the open space to the south-east of the subject site.



Figure 16 – Aerial imagery from 1943 showing a large warehouse structure on the western section of subject site (outlined in red). Note the eastern and southern section of the subject site containing smaller warehouse structures with open space around them. The green arrow indicates north.

Source: NSW Spatial Services, SIX Maps, with Urbis overlay

The subject site has remained relatively the same in 1951 with some minor additional, such as small structures along the eastern boundary of the subject site and the extension to the south regarding the large industrial building on the western section of the subject site (Figure 17). The open space of land to the southeast of the subject site has since been cleared and developed for industrial use.



Figure 17 – Aerial imagery from 1951 showing an extension of the large western warehouse structure within the subject site (outlined in red). Note the eastern section of the subject site remains relatively unchanged with the exception of an additional small structure to the southern section of the subject site. The green arrow indicates north.

Source: NSW Spatial Services, SIX Maps, with Urbis overlay

In the 1978 aerial, there has been minor changes to the subject site (Figure 18). The large western industrial building remains the same while minor building extensions are added to the smaller buildings on the eastern side of the subject site.



Figure 18 – Aerial imagery from 1978 showing minor building extensions to the smaller buildings on the eastern section of the subject site (outlined in red). The green arrow indicates north. Source: *NSW Spatial Services, SIX Maps, with Urbis overlay*

Figure 19 shows that by 2022, the eastern half of the subject site has undergone further building extensions.



Figure 19 – Aerial imagery from 2022 showing further warehouse extensions to the eastern section of subject site (outlined in red). Note the small rectangular open space along the central eastern boundary of the subject site. The green arrow indicates north.

Source: NSW Spatial Services, SIX Maps, with Urbis overlay

The historical aerials show the development of the subject site over the past 79 years. The industrial development of the subject site has likely resulted in the disturbance and likely removal of shallow archaeological deposits associated with the potential residential/pastoral occupation of the site. The use of the subject site for commercial purposes in the late 19th and 20th centuries has the potential to result in archaeological deposits.

4. SITE INSPECTION

An inspection of the subject site was undertaken on 27 April 2022 by Sam Richards (Urbis Senior Archaeologist) and Kirsten Downey (Urbis Consultant Archaeologist) in attendance and client representatives, namely Adam Thomas and Barnaby Goodman.

This site inspection was conducted for the HAIA as well as Aboriginal Cultural Heritage Assessment (ACHA) which also included an additional Registered Aboriginal Party (RAP) group, namely Peter Markovic (Freeman & Marx).

The site inspection included a walk over of all areas (see Figure 20-Figure 25). Ground surface visibility (GSV) was approximately 0%, with no areas of exposure. The entire subject site was covered over with concrete flooring. While no historical artefacts were observed on the surface, the geotechnical investigation confirmed the presence of construction debris in subsurface deposits, such as brick fragments, concrete fragments and gravel.


Figure 20- Front of the subject site from Bourke Road.



Figure 22- Interior view of the subject site.



Figure 21- Inside view of the subject site showing concrete floor.



Figure 23- Interior view of the subject site showing concrete floor and brick walls.



Figure 24- Outside area showing concrete is present. Figure 25- Interior view of the subject site.



5. ARCHAEOLOGICAL CONTEXT

There are few archaeological assessments which have been undertaken for the subject site and areas surrounding, or for sites of similar and comparable use. This section considers these assessments with a view to understanding the archaeological context of the site, which can inform understandings of significance including research potential.

5.1. PREVIOUS ASSESSMENTS OF THE SUBJECT SITE

The following assessment is relevant to the current subject site, having been undertaken at the site.

Fortify Geotech, 2022. Proposed Commercial Development: 28-32 Bourke Road, Alexandria, NSW.¹⁶

A geotechnical investigation of the subject site was undertaken by Fortify Geotech on behalf of EP Risk Management to determine the subsurface conditions of the subject site.

Due to the commercial and industrial history, the soil within the subject site was found to be highly contaminated with concentrations of lead, asbestos, arsenic, chromium, zinc and other chemicals, such as Benzo(a)Pyrene (B(a)P) Toxic Equivalence Quotient (TEQ). There was a total of eight (8) boreholes (BH) excavated at various depths with the deepest borehole extending down to 8.5 m. Table 3 provides a summary of the soil profile encountered in the subject site. Figure 26 shows the locations of the boreholes within the subject site. Contamination of the site will have implications for any archaeological excavation, should this be identified as required.

Ground disturbance has been recorded a depth of 0.6m/1.9m below the existing ground surface with fill layers identified. There is potential that archaeological deposits including artefactual deposits, structural remains and other deposits could be retained in fill layers, which will reflect the historic use of the site.

The fill deposit across the subject site was found to contain remnants of construction debris likely associated with earlier phases of industrial development. The remnant debris found includes ceramic fragments (bricks), concrete fragments, gravels, and metal shavings. BH04, had an additional concrete layer at depth if 40-60cm. The subsurface concrete layer may suggest earlier concrete flooring associated with earlier industrial developments and affirms that archaeological deposits may be identified associated with earlier use.

Inferred Unit	Encountered Depth to Top of Unit (m)	Description
Concrete/Fill	0 - 0.6m/1.9m	Concrete, sandy gravel, silty gravelly sand, silty sandy gravel, silty clayey sand, sand, gravelly sandy clay, silty sand, fine to medium sand, fine to coarse sand, low plasticity clay, medium plasticity clay, angular gravels to 15mm size, sub-angular gravels
		to 50mm size, black, dark grey, dark brown, brown, grey, dry to moist, moist, moist to wet, loose, loose to medium dense, medium dense.
Alluvial/Residual Soils	0.6/1.9m to 7.3m/8.5m	Sandy, clayey sand, sandy clay, clay, sandy gravelly clay, silty sand, clayey sand gravel; fine sand, fine to medium sand, fine to coarse sand, low plasticity clay, low to medium plasticity clay, medium plasticity clay, sub-angular gravels to 30mm size, dark grey, dark brown, pale brown, pale grey, mottled orange/red, dark red, grey, black, yellow-brown, ironstone gravels, dry, dry to moist, moist, moist to wet, wet, loose to medium dense, medium dense, medium dense to dense, dense, dense to very dense, firm to stiff, stiff, stiff to very stiff, very stiff, very stiff to hard, hard.

Table 3 – Geotechnical borehole findings.

¹⁶ Fortify Geotech, 2022. Proposed Commercial Development: 28-32 Bourke Road, Alexandria, NSW

Inferred Unit	Encountered Depth to Top of Unit (m)	Description
Bedrock A	Below 7.3m/8.5m	Sandstone; extremely weathered (XW) at the bedrock surface, quickly becoming slightly weathered (SW) and high strength fresh (FR), medium to coarse grained, grey, pale grey, red, dry, wet



Figure 26 – Location of geotechnical boreholes within subject site. The red arrow indicates north. *Source: Urbis, 2022*

5.2. PREVIOUS ASSESSMENTS IN PROXIMITY

The following assessments have been undertaken in proximity to the subject site and provide a comparative sample in order to inform assessments of significance including rarity, representativeness and research potential. These assessments are considered comparative given their proximity to the site and similar history of use.

Extent Heritage, 2017. Alexandria Park Community School: Historical Archaeological Assessment. Report prepared for TKD Architects.¹⁷

This Historical Archaeological Assessment (HAA) was prepared for the redevelopment at Alexandria Park Community School (APCS), which is located approximately 600m north-east from the subject site.

During the early 19th century, the study area was used as a market garden. In the late 19th and early 20th century, drainage works were undertaken from the construction of the Alexandra Canal. Industrial development followed, from c.1910, and the study area was occupied by two principal organisations: namely Murray Bros and the Federal Match Company. The study area was redeveloped as a school in 1977.

The HAA determined there to be high potential for archaeological resources relating to the industrial land use of the study area in the 20th century. This phase of the history of the study area is of local significance, as it relates to the development of the economy of the area, and to the lives of the employees, who are likely to have lived locally. However, the archaeological evidence is unlikely to provide substantial historical information that cannot be obtained from other sources, and the overall research potential was considered to be low.

The following recommendations are intended to ensure that more substantial heritage impact does not inadvertently result from the works:

- The assessment of the potential historical archaeological impact of the proposed development should be reviewed once details of the proposed earthworks are available.
- The works program and/or construction environmental management plan should include a stop work procedure, to be implemented in the event of discovery of unexpected historical
- archaeological remains. Work in the vicinity of the find should cease, while advice is sought from the Heritage Division.

The potential for the proposed works to result in impact to the heritage values of the stormwater drain associated with the Alexandra Canal should be assessed.

Cultural Resources Management, 2013. 2-20 Botany Road, Alexandria – Archaeological Assessment Historic Period.¹⁸

This is a preliminary assessment for historical archaeological potential for an industrial site at 2-20 Botany Road, Alexandria, which is located approximately 1.23 km north from the subject site. Prior to this preliminary assessment, the industrial sites within Alexandria had not undergone any archaeological work.

The background research from this assessment confirms the early agricultural use of Hutchinson's land, which was leased prior c.1850s. The areas where agriculture was practice was primarily located in proximity to streams that created alluvial soils. The subject site is within proximity to Sheas Creek and sitting on top of alluvial soil and therefore has the potential to contain evidence associated with the early agricultural phase.

The archaeological profile of the study area was assessed to have the potential to contain evidence from the 1880s onwards with low potential for archaeological resources associated with earlier phases of development, such as the pre-1850s agricultural phase.

The assessment determined that the area contained archaeological potential for relics of Local significance.

Based on the moderate levels of historical disturbances, the anticipated archaeological resources were determined to have survived with low spatial and physical integrity. There is limited evidence to determine intactness and it is anticipated that certain areas have undergone moderate levels of disturbance.

¹⁷ Extent Heritage, 2017. Alexandria Park Community School: Historical Archaeological Assessment.

¹⁸ Cultural Resources Management, 2013. 2-20 Botany Road, Alexandria – Archaeological Assessment Historic Period.

This preliminary assessment recommended that further investigation be undertaken, under a Section 140 permit and inclusive of excavation due to the potential for relics of Local significance.

Thorp, W., 2000. Archaeological Report: Excavations at the First Stage Chubb Factory, Waterloo.¹⁹

This report presents the findings of the historical archaeological excavations carried out at the former Chubb Factory, Waterloo, which is located approximately 71m north-east from the subject site.

The site was unoccupied until 1914 onwards, when it was used as a stonemasons' yard. The site later became later used for the Chubb factory from 1932 onwards. The historical archaeological excavations carried out on the site found evidence of early industrial land use, such as fill comprising of industrial wastes. The industrial waste included large quantities of Starkey Bros stoneware bottles, leather cut-offs, quantities of off-cut and worked stone.

5.3. SUMMARY OF ARCHAEOLOGICAL CONTEXT

The archaeological context can be summarised as follows:

- The industrialization of Alexandria has likely impacted earlier phases of development. The areas where agriculture was practice was primarily located in proximity to streams that created alluvial soils. The subject site is within proximity to Sheas Creek and sitting on top of alluvial soil and therefore has the potential to contain evidence associated with the early agricultural phase.
- Industrial activities across Alexandria and, more specifically, the subject site have resulted in high levels of contamination. Any further, invasive archaeological investigation of the subject site should consider the high level of contamination which will reduce the ability to conduct excavations,
- The geotechnical investigations carried out at the subject site have determined the subject site to be moderately disturbed across the ground surface to a depth of approximately 0.6m/1.9m. Although there were no relics found within the alluvial sand body, there is still potential that archaeological features/relics may still be retained. Any subsurface archaeological feature/relic found in the alluvial sand body is likely to be associated with earlier phases of development prior to the industrialization of the subject site, such as the during the 19th century. Additionally, there is potential that archaeological deposits including artefactual deposits, structural remains and other deposits could be retained in fill layers, which will reflect the historic use of the site.
- Previous archaeological assessments conducted in Alexandria suggest that the subject site is likely to have high potential for archaeological resources associated with the industrial phase during the 20th century. The historical finds gathered from the geotechnical investigations confirms this finding as construction debris was encountered. However, there is also potential that this debris could relate to earlier phases of development, such as during the 19th century. Should relics be found associated with developments from the 19th century, then they would be retained with low spatial and physical integrity.
- Previous archaeological excavations conducted in proximity to the subject site have confirmed the presence of archaeological resources associated with earlier phases of development, in particular the early industrial land use phase in the early-mid 20th century.

¹⁹ Thorp, W., 2000. Archaeological Report: Excavations at the First Stage Chubb Factory, Waterloo.

6. ARCHAEOLOGICAL POTENTIAL

Historical archaeological potential is defined as:

The degree of physical evidence present on an archaeological site, usually assessed on the basis of physical evaluation and historical research (Heritage Office and Department of Urban Affairs and Planning 1996).

Archaeological research potential of a site is the extent to which further study of relics likely to be found is expected to contribute to improved knowledge about NSW history which is not demonstrated by other sites, archaeological resources or available historical evidence. The potential for archaeological relics to survive in a particular place is significantly affected by later activities that may have caused ground disturbance. These processes include the physical development of the site (for example, phases of building construction) and the activities that occurred there. The archaeological potential of the subject site is assessed based on the background information presented in Section 3, and graded as per:

- **Nil Potential**: the land use history demonstrates that high levels of ground disturbance have occurred that would have completely destroyed any archaeological remains. Alternatively, archaeological excavation has already occurred, and removed any potential resource;
- Low Potential: the land use history suggests limited development or use, or there is likely to be quite high impacts in these areas, however deeper sub-surface features such as wells, cesspits and their artefact bearing deposits may survive;
- **Moderate Potential**: the land use history suggests limited phases of low to moderate development intensity, or that there are impacts in the area. A variety of archaeological remains is likely to survive, including building footings and shallower remains, as well as deeper sub-surface features;

High Potential: substantially intact archaeological deposits could survive in these areas.

The potential for archaeological remains or 'relics' to survive in a particular place is significantly affected by land use activities that may have caused ground disturbance. These processes include the physical development of the site (for example, phases of building construction) and the activities that occurred there. The following definitions are used to consider the levels of disturbance:

- Low Disturbance: the area or feature has been subject to activities that may have had a minor effect on the integrity and survival of archaeological remains;
- **Moderate Disturbance**: the area or feature has been subject to activities that may have affected the integrity and survival of archaeological remains. Archaeological evidence may be present, however it may be disturbed;
- **High Disturbance**: the area or feature has been subject to activities that would have had a major effect on the integrity and survival or archaeological remains. Archaeological evidence may be greatly disturbed or destroyed.

6.1. ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

The below table presents a summary of potential archaeological resource and condition of remains within the subject site.

Table 4 – Assessment of Archaeological Potential.

Phase	Potential Archaeological Resource	Integrity of archaeological resource	Potential
Hutchinson Estate, c.1810-c.1870s	Evidence of land modification, early agricultural equipment, ephemeral evidence, general discard	Prior to the establishment of Alexandria, the subject site consisted of swamplands and as such there is likely to have been extensive land modification including reclamation undertaken to establish the site as it stands today. This may have included the importation of fill materials containing historic items, which would be of low spatial and physical integrity. It is likely that it would be difficult to attribute fill layers to this particular phase. The subject site was utilised likely for agricultural pursuits in this period, and evidence of this agriculture may be retained in the form of ephemeral evidence such as post holes or crop marks. Given the long history of agricultural use of the site it is unlikely that such evidence could be associated with this phase. Subsequent disturbance may also have removed this evidence.	Low
Agricultural Subdivision, c.1880s-c.1900s	General discard items, ephemeral evidence	Following the subdivision of the Hutchinson Estate, the subject site continued to be in the ownership of the Cooper family and remained in use for agricultural purposes. Evidence of this use could be retained in the form of ephemeral evidence such as post holes and crop marks, and general discard items reflective of agricultural activity such as discarded tools. While structures did occur on the site, these are likely temporary agricultural sheds and constructed of timber and metal, materials unlikely to survive archaeological due to their propensity to degrade. Should these structures have had substantial footings or slabs, they may occur in a subsurface capacity, preserved below subsequent hard stand. Given the long history of agricultural use of the site it is unlikely that such evidence could be associated with this phase. Subsequent	Low

Phase	Potential Archaeological Resource	Integrity of archaeological resource	Potential
		disturbance associated with the industrial use of the site may also have removed this evidence due to the ephemeral nature.	
Early Industrial Land Use, c.1900s- c.1943	Structural remains, general discard items, rubbish dumps	During the early 20th century, the subject site became industrialised, likely operating as an engineering workshop under the ownership of Norman William Parsons. By the mid-1930s the site was under the ownership of Paul Roberts Parson Ltd, who operated a metal engineering workshop, with F.H. Booth & Co Pty Ltd operating as a metal merchant on the north-eastern lot. There is potential that archaeological evidence of this ownership could be retained in the form of general discard items and rubbish dumps, with the likelihood that caches of metal waste materials will be identified across the site. The site was connected to the water supply at this time, and it is therefore unlikely that cesspits or other such features would be present. It is uncertain whether the extant buildings date to the mid-1930s period of development at the site. Should these buildings be those that were originally occupied by Paul Roberts Parson and F.H. Booth & Co, this would reduce the potential for structural remains, although they may still occur associated with ancillary workshop structures.	Moderate
Later Industrial Land Use, c.1943- Present	General discard items	There is limited potential for archaeological resources associated with this phase to occur, due to the nature of the site having been developed with the extant structures present from pre-1943. The covering of the site with hard stand by this time, as evident in historic aerials, further reduces the archaeological potential for artefactual deposits or discard items, as there would be limited depositional opportunity.	Low

6.2. STATEMENT OF ARCHAEOLOGICAL POTENTIAL

There is generally **low potential** for archaeological resources associated with early agricultural development to occur at the subject site. These archaeological resources include ephemeral evidence in the form of post holes and crop marks, general discard items and agricultural equipment that are likely to be deep below fill levels or otherwise truncated and disturbed by subsequent construction. Due to the long history of agricultural land use within the subject site, these archaeological resources would likely be disturbed and unable to be easily attributable to any particular phase. The above-mentioned resources are unlikely to have survived with high spatial or physical integrity.

There is **moderate** potential for resources associated with the early industrial land use phase (c.1900sc.1943), including structural remains of ancillary workshops and general discard items from industrial waste. Archaeological resources which may occur are unlikely to be retained with a high degree of integrity or intactness due to the moderate levels of disturbance across the site.

7. ARCHAEOLOGICAL SIGNIFICANCE

7.1. TERMS AND DEFINITIONS

The concept of archaeological significance is independent of archaeological potential. For example, there may be 'low potential' for certain relics to survive, but if they do, they may be assessed as being of 'high (State) significance'.

Archaeological significance has long been accepted as linked directly to archaeological (or scientific) research potential: a site or resource is said to be scientifically significant when its further study may be expected to help answer questions. Whilst the research potential of an archaeological site is an essential consideration, it is one of a number of potential heritage values which a site or 'relic' may possess. Recent changes to the Heritage Act 1977 (Section 33(3) (a)) reflect this broader understanding of what constitutes archaeological significance by making it imperative that more than one criterion be considered.

The below assessment of archaeological significance considers the criteria, as outlined in the NSW Heritage Branch publication *Assessing Significance for Historical Archaeological Sites and 'Relics'*. Sections which are extracted verbatim from this document are italicized.

For the purposes of this assessment, significance is ranked as follows:

- **No Significance –** it is unlikely that any archaeological resources recovered will be attributed significance in accordance with the assessment criteria on a state or local level.
- Local Significance it is likely that archaeological resources recovered will be significant on a local level in accordance with one or more of the assessment criteria.
- **State Significance –** it is likely that archaeological resources recovered will be significant on a state level in accordance with one or more of the assessment criteria.

The following Criteria are used to assess archaeological significance (from Assessing Significance for *Historical Archaeological Sites and 'Relics'*, Heritage Branch NSW).

Criterion Letter	Criterion	Definition
A	Historical Significance	An item is important in the course or pattern of the local area's cultural or natural history.
В	Associative Significance	An item has strong or special associations with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history.
С	Aesthetic or technical significance	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.
D	Social Significance	An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons.
E	Research Potential	An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.
F	Rarity	An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history.

Table 5-6 Significance Criteria

Criterion Letter	Criterion	Definition
G	Representativeness	An item is important in demonstrating the principal characteristics of a class of NSWs (or the local area's):
		 cultural or natural places; or
		 cultural or natural environments

7.2. ASSESSMENT OF ARCHAEOLOGICAL SIGNIFICANCE

The following table assesses the significance of potential archaeological resources across the site in accordance with the definitions in Table 5 above.

Criterion	Discussion
A - Historical Significance	There is generally low potential for archaeological resources to occur at the site associated with early phases of use, including European land modification and agricultural pursuits.
	Evidence of land modification may be present in the form of fill layers which may contain artefacts. This would likely be at substantial depth below later fill layers and may be difficult to definitively attribute to this phase in the absence of diagnostic artefacts.
	Evidence of agricultural pursuits may include ephemeral evidence, general discard, and structural remains of temporary farm buildings. It is anticipated that this evidence would be low in physical and spatial integrity due to subsequent development and the ephemeral nature of evidence, the long period of agricultural use, and the high degradation of materials anticipated to have been used including timber and iron.
	There is moderate potential for archaeological resources associated with the industrialisation of the site, which represents a key phase in the development of Alexandria. This evidence would provide a tangible connection to the industrialisation of the area.
	Evidence of the industrialisation of the site, should it survive, would therefore be of Local significance for its association with the development of industry in the region.
B - Associative Significance	The subject site was historically under the ownership of Cooper & Levey, two key figures in the development of agriculture in New South Wales. Cooper & Levey had large landholdings across the State and were significant in the development of milling and agriculture. There is, however, low potential for archaeological resources associated with this phase of the sites development to occur, due to the ephemeral nature of evidence and subsequent developments. Subsequent phases of occupation at the site do not demonstrate any association with key figures in the development of the region or State.
	Therefore, it is not anticipated that archaeological resources would occur at the site which would satisfy this criterion on a Local or State level.
C - Aesthetic or technical significance	There is generally low potential for archaeological resources associated with the earliest agricultural phases of use of the site to occur, with moderate potential for resources associated with the early 20 th century industrial activities at the site. It is unlikely that the anticipated resources (including structural remains of former outbuildings and potential workshops, or general discard items) would satisfy the threshold for significance against this criterion on a Local or State level.
	There is also low potential for archaeological resources to occur which provide evidence for land modification in the early-mid 19 th century, turning the former swamplands into lands capable of sustaining agriculture. Should evidence of this

Table 7 Assessment of Archaeological Significance.

Criterion	Discussion
	land modification occur, it could be considered of aesthetic significance at a Local level for its ability to demonstrate land modification techniques. However, it is unlikely that should this evidence occur, it would do so with sufficient integrity and diagnostic capability to be definitively attributed to this phase.
	Therefore, it is not anticipated that archaeological resources would occur at the site which would satisfy this criterion on a Local or State level.
D - Social Significance	There is no evidence that the anticipated archaeological resources would hold a special association with a particular community or cultural group. The subject site has not been identified as having historically held special association with community groups, being utilised for agriculture until the early 20 th century when it became utilised for industrial purposes.
	It is therefore unlikely that archaeological resources would occur at the site which would satisfy this criterion on a Local or State level.
E - Research Potential	There is little information available regarding the early industrial development of the subject site from the historic record, including the location of buildings and outbuildings. Archaeological resources which may occur associated with this phase could hold research potential for their ability to provide more information regarding this early industrial use, including whether the extant buildings were constructed for the original metalworks, or whether they were of later construction. Archaeological resources such as rubbish dumps or discard items would also provide information regarding the process of metal working in the early 20 th century through analysis of the materials discarded. Archaeological assemblages indicative of industrial use could also provide a comparative sample against which other industrial assemblages could be compared to answer research questions regarding the development of industry in the area and the impact this had socially. Archaeological evidence of early land modification efforts in the form of artefact rich levelling fills would likely hold research potential despite the lack of spatial and physical integrity of fill, due to the ability to provide information on the process of land modification in the area.
F - Rarity	There is generally low potential for archaeological resources associated with the earliest agricultural phases of use of the site to occur, with moderate potential for resources associated with the early 20 th century industrial activities at the site. Given the high level of industrial development within the region at this time, associated industrial archaeological evidence cannot be considered rare. Other sites across the Alexandria area and Sydney region more broadly have provided archaeological assemblages which attest to the industrial development of the area, and which are likely to be more substantially intact. It is therefore unlikely that archaeological resources would occur at the site which would satisfy this criterion on a Local or State level.

Criterion	Discussion
G - Representativeness	There is generally low potential for archaeological resources associated with the earliest agricultural phases of use of the site to occur, with moderate potential for resources associated with the early 20 th century industrial activities at the site. While these resources would represent the historic use of the site and industrialisation of the local area, they are unlikely to demonstrate the principal characteristics of a class of cultural or natural places or environments. It is unlikely that other archaeological resources which may occur would be considered representative beyond their general ability to represent past occupation of the subject site through material remains, which can be said of any archaeological deposits. It is therefore unlikely that archaeological resources would occur at the site which would satisfy this criterion on a Local or State level.

7.3. STATEMENT OF ARCHAEOLOGICAL SIGNIFICANCE

The archaeological resources anticipated to occur at the subject site are considered to meet the threshold for significance at a Local level in accordance with a number of the identified criteria, namely criteria A and E.

There is generally low potential for archaeological resources associated with the early agricultural phases of occupation at the subject site. This low potential is due to subsequent disturbances as well as the nature of the use of the site, evidence of which would be ephemeral or constructed from materials with high susceptibility to degradation. However, potential archaeological resources associated with the early industrial phase could be considered of historic significance on a **Local level** for their ability to demonstrate a key phase in the development of the Alexandria area, being the industrialisation of the area in the 20th century.

Archaeological resources associated with the early industrial phase may also be significant on a **Local level** for their research potential and ability to provide information regarding this early industrial use, including whether the extant buildings were constructed for the original metalworks, or whether they were of later construction. The analysis of general discard items and rubbish dumps could have the potential to provide information regarding metal working processing during the 20th century. Additionally, archaeological resources indicative of industrial use could be compared to other similar archaeological sites and assemblages to answer research questions regarding the industrialisation of Alexandria.

8. IMPACT ASSESSMENT

The current assessment is prepared to accompany the SSDA for the concept design of a multistorey development at the site with basement levels. The detailed design will be subject to a further SSDA process at a later staged. Due to the nature of the approval sought, there are no impacts currently proposed to occur at the site. However, this impact assessment has considered the likelihood that impacts would occur at the site on the basis of the concept design.

The subject site has been identified as holding moderate potential for Locally significant archaeological relics related to the historic industrial use of the site. As the concept design involves basement excavation across the whole of the site, this is likely to remove all previously accumulated archaeological deposits and result in a total impact to any relics of Local significance which may occur.

As a result, further investigation in the form of a Research Design and test excavation is recommended following the Stage 2 Application, in order to identify if relics are present and record these deposits.

9. CONCLUSIONS AND RECOMMENDATIONS

This assessment has identified the following:

- In general, there is Low potential for historical archaeological resources to occur in conjunction with the early agricultural phases at the subject site, with moderate potential associated with the early industrial land use phase (c.1900s-c.1943).
- Archaeological resources which may occur at the subject site, including general discard items, rubbish dumps and structural remains of industrial workshops, are anticipated to meet the threshold for significance on a Local level, specifically for their historic value and research potential. Relics of Local significance will be primarily associated with the early industrial land use phase, with earlier relics not anticipated be to be retained with sufficient integrity.
- The detailed design will be subject to a further SSDA process at a later stage. Due to the nature of the approval sought, there are no impacts currently proposed to occur at the site. However, this impact assessment has considered the likelihood that impacts would occur at the site on the basis of the concept design. As the concept design involves a 1-1.5m basement excavation across the whole of the site, this is likely to remove all previously accumulated archaeological deposits and result in a total impact to any relics of Local significance which may occur. As such, mitigation measures should be implemented at demolition and construction phase. This should be in accordance with the below recommendations.

As a result of these conclusions, Urbis recommends the following:

- 1. Once the detailed design and physical impacts from the proposal have been finalised at Stage 2 of the SSDA, the impact assessment, archaeological potential mapping and recommendations should be refined and reconsidered, and this report updated.
- 2. At Stage 2 an Archaeological Research Design (ARD) should be prepared by a suitably qualified archaeologist to develop a methodology for the investigation and management of potential locally significant relics across the subject site. This should include methodologies for monitoring and test excavation, as well as salvage excavation should that be deemed necessary.
- 3. In the unlikely event that human remains are uncovered during any site works, the following must be undertaken:
 - (a) All works within the vicinity of the find immediately stop.
 - (b) Site supervisor or other nominated manager must notify the NSW Police and DPC.
 - (c) The find must be assessed by the NSW Police, and may include the assistance of a qualified forensic anthropologist.
 - (d) Management recommendations are to be formulated by the Police, DPC and site representatives.
 - (e) Works are not to recommence until the find has been appropriately managed.

10. BIBLIOGRAPHY AND REFERENCES

City Plan Heritage, 2014. City of Sydney Industrial & Warehouse Buildings Heritage Study, pp. 26.

Conveyance, 1915. Book 1062, No. 663

Cultural Resources Management, 2013. 2-20 Botany Road, Alexandria – Archaeological Assessment Historic Period.

Extent Heritage, 2017. Alexandria Park Community School: HAIA. Report prepared for TKD Architects.

Extent Heritage, 2019. 75-83 Wyndham Street, Alexandria – HAIA. Report prepared for Decon Investments Pty Ltd.

EP Risk Management, 2022. Detailed Site Investigation: 28-32 Bourke Road, Alexandria, NSW, 2015.

Fortify Geotech, 2022. Proposed Commercial Development: 28-32 Bourke Road, Alexandria, NSW.

G.F.J. Bergman, 1964. *Australian Dictionary of Biography- Solomon Levey, 1794-1833.* <u>https://adb.anu.edu.au/biography/levey-solomon-2353</u>

NSW Land Registry Services, Vol Fol 4250 104

NSW Land Registry Services, Vol Fol 4352 106

NSW Land Registry Services, Vol Fol 4359 123

Pollon, F., 1996. The book of Sydney suburbs, Cornstalk, Sydney.

Syndey Local Environment Plan (LEP), 2012.

Thorp, W., 2000. Archaeological Report: Excavations at the First Stage Chubb Factory, Waterloo.

Whittaker, A., 2002. Pictorial History: South Sydney. Alexandria, NSW Kingsclear Books, pp. 121

DISCLAIMER

This report is dated 10 June 2022 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Alexandria Property Development Pty Ltd **(Instructing Party)** for the purpose of an historical archaeological impact assessment **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.



URBIS.COM.AU