

HISTORICAL ARCHAEOLOGICAL ASSESSMENT

Newcastle East End Project Stages 3 and 4

FINAL

May 2023

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FINAL

Prepared by

Umwelt (Australia) Pty Limited

on behalf of

East End Stage 3 Pty Ltd & East End Stage 4 Pty Ltd

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QMS Certification Services

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1.0 Introduction

This historical archaeological assessment has been prepared on behalf East End Stage 3 Pty Ltd and East End Stage 4 Pty Ltd as part of documentation for Stages 3 and 4 of the Newcastle East End Project.

This report has been prepared with the aim of providing supporting documentation for a Section 140 excavation permit under the *Heritage Act 1977* (NSW) to investigate subsurface areas of the site as part of the proposed development; in order to identify and record any archaeological remains that may be present.

1.1 Newcastle East End Project

The Newcastle East End Project comprises the majority of four (4) city blocks located between Perkins, Hunter, Newcomen and King Streets at the east end of the Newcastle City Centre. The Project area is the subject of a Staged concept approval, issued by the Joint Regional Planning Panel (JRPP) on 21 December 2017 (Reference 2017/00701). The staged approval covers all four (4) street blocks within the Newcastle East Project area. The Newcastle East End Project comprises four (4) stages; each stage being subject to separate DA applications. Stage 3 and 4 are being undertaken as one project.

Historical archaeological assessment, as supporting documentation for a Section 140 excavation permit relating to Stages 1 and 2 of the Newcastle East End Project, has previously been prepared, submitted and approved by Heritage NSW (then Heritage Division Office of Environment and Heritage). Relevant section 140 application numbers are:

Stage 1: Application number 2017/S140/33

Stage 2: Application number 2021/s140/003.

As discussed, this report comprises supporting documentation for a Section 140 excavation permit relating to Stages 3 to 4 of the Newcastle East End Project.

1.2 The Project

The Project comprises a mixed-use development of Stages 3 to 4 of the Newcastle East End Project incorporating retail uses, residential apartments, basement car parking and associated works. Utility upgrades in the surrounding streets will also be undertaken as part of the Project. As such the Project area for Stages 3 to 4 of the Newcastle East End Project extends into the surrounding streets (refer to **Figure 1.1**).

As a result of the majority of the potential archaeological resource of the Project area being located within the individual Stage 3 and 4 areas and to better enable discussion of the specific development of the Project area, the individual city blocks comprising the Stage 3 and 4 areas (as shown in **Figure 1.2**) and the whole Project area extending into the streets surrounding the Stage 3 and 4 areas will be referred to throughout this report.

The Stage 3 area comprises the city block bound by Hunter, Morgan, Laing and Thorn Streets; incorporating:

113-121 Hunter Street

123-141 Hunter Street.

Noting that the area of the former City of Newcastle carpark bound by Laing, Morgan, King and Thorn Streets is excluded from the Project area (refer to **Figure 1.2**).

The Stage 4 area comprises the city block bound by Hunter, Newcomen, King and Morgan Streets: incorporating:

111 Hunter Street;

109 Hunter Street;

105 Hunter Street;

3 Morgan Street;

22 Newcomen Street;

66-74 King Street and 1 Morgan Street (located within the same Lot and DP) (refer to **Figure 1.2**).

Noting that the extant buildings at the corner of Hunter and Newcomen Streets are excluded from the Project area; incorporating:

103 Hunter Street (the Grand Floor Café)

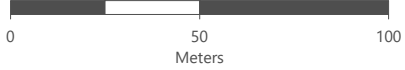
16-18 Newcomen Street (Newcomen Apartments) (refer to **Figure 1.2**).



FIGURE 1.1
Project Area

Legend

 Project Area



Scale 1:2,000 at A4
GDA2020 MGA Zone 56

FIGURE 1.2

Stage 1, 2, 3 and 4 of East End Project Works

Legend

 Project Area

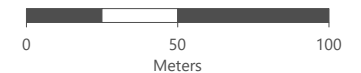
East End Project Works

 Stage 1

 Stage 2

 Stage 3

 Stage 4



Scale 1:2,500 at A4
GDA2020 MGA Zone 56

2.0 Statutory Context

The *Heritage Act 1977* (NSW) (the Heritage Act) and the *Environmental Planning and Assessment Act 1979* (EP&A Act) are the primary statutory controls protecting historical heritage within New South Wales.

2.1 Heritage Act 1977 (NSW)

The Heritage Act affords automatic statutory protection to ‘relics’ which form part of archaeological deposits (except where these provisions are suspended by other prevailing legislation). The Heritage Act defines a ‘relic’ as any deposit, object or material evidence 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.

Sections 139 to 145 of the Heritage Act prevent the excavation of a relic (on non-State Heritage Register listed (SHR) land), except in accordance with a gazetted exception or an excavation permit issued by the Heritage Council of NSW.

Section 139 of the Heritage Act requires that:

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

As all ‘relics’ are protected under the Heritage Act, an Excavation Permit under Section 140 of the Act needs to be obtained prior to any works that would disturb or destroy them. However, if the proposed works are only minor in nature and will have minimal impact on the heritage significance of the place, they may be excepted from the provisions of Section 139.

The Project area has potential to contain subsurface deposits and features that would be considered relics under the Heritage Act (refer to **Section 4.6** for discussion of the potential archaeological remains within the Project area). This report has been produced to support a Section 140 Application for an Excavation Permit to disturb these relics.

The Heritage Council of NSW and delegate offices of Heritage NSW are the approval authorities for issuing Excavation Permits and considering exceptions under Sections 139 and 140 of the Heritage Act.

2.2 Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act (EP&A Act) 1979 enables responsibility for heritage (both Aboriginal and Non-Aboriginal) to be shared by state and local government agencies. The Act provides local government with the power to protect items and places of heritage significance in the local area through local environmental plans (LEPs) and development control plans.

The EP&A Act requires consideration be given to environmental impact – including heritage – as part of the land use planning process, and the provisions of the EP&A Act allow for the implementation of LEPs which provide the statutory framework for heritage conservation within a particular local government area (LGA).

The Project area is within the City of Newcastle LGA requiring consideration of the Newcastle LEP 2012.

2.2.1 Newcastle LEP 2012 Part 5 Clause 5.10

Part 5 Clause 5.10 of the Newcastle LEP 2012 provides the statutory framework for heritage conservation. The objectives of Clause 5.10 are as follows:

- to conserve the environmental heritage of Newcastle
- to conserve heritage significance of heritage items and heritage conservation areas
- to conserve archaeological sites and
- to conserve Aboriginal objects and Aboriginal places of heritage significance.

2.3 Heritage and Archaeological Listings

Statutory and non-statutory heritage listings have been considered in detail as part of previous reports including *Newcastle East End Project Staged Development Application Statement of Heritage Impact* (TKD Architects 2014) and as part of the *Conservation Management Plan Newcastle East End Blocks 3 & 4 Newcomen, Hunter, Thorn, Laing and King Streets* (City Plan Services 2022). As such, apart from relevant archaeological listings, heritage listed items and any associated impact assessment are not considered in detail in this report.

2.3.1 State Heritage Register

There are no State Heritage Register (SHR) listed items within the Project area.

Refer to City Plan Services 2022 for heritage items within proximity to the Project area.

It is noted that one state listed item is located immediately to the south of the Project area:

Christ Church Cathedral, Movable Collections, Cemetery and Park (Listing no. 01858).

The statement of significance for Christ Church Cathedral includes:

Christ Church Cathedral with its moveable collection, park and cemetery is historically significant because of its origins in early convict history and the establishment of the Anglican Church in New South Wales.

The rest park was one of the earliest European burial grounds established in New South Wales, pre-dating Christ Church. It is the site of convict burials and provides significant evidence of changing burial customs during the nineteenth century. Sections of footings from the original Christ Church beneath the Cathedral's floor, were recorded and left undisturbed during the restoration works of 1995-97, to facilitate further investigation.

The Cathedral grounds and former cemetery have retained the same basic size and shape set out in Henry Dangar's original 1823 town plan, providing evidence of early town planning (NSW State Heritage Inventory).

Criteria e (research significance) concludes:

There is also excellent archaeological potential in the park and cemetery for evidence of early burials (NSW State Heritage Inventory).

2.3.2 Local Government and State Agency Listings

Heritage Items

There is one locally listed heritage items within the Project area:

Municipal Building, 121 Hunter Street (Item I403).

Refer to City Plan Services 2022 for heritage items within proximity to the Project area.

It is noted that two locally listed archaeological sites are located immediately to the south and southwest of the Project area:

Newcastle Cathedral Park and Cemetery (Item A6). This listing also forms part of the state heritage registered Christ Church Cathedral, Movable Collections, Cemetery and Park (Listing no. 01858).

Former Mulimbah House Site (Item A16).

Heritage Conservation Areas

The Project area is located within the Newcastle City Centre Heritage Conservation Area (C4), as listed in Schedule 5, Part 2 Heritage conservation areas of the LEP 2012. The Newcastle City Centre Heritage Conservation Area is of heritage significance:

...on many levels. The assemblage of commercial and civic buildings is a powerful reminder of the city's rich history and its many phases of development. The number of historic buildings surviving is quite remarkable for a city of this size, with a number of pre-1840s buildings surviving ...All of these are associated with the city's penal heritage. It is also known to be a city with a rich archaeological record of national significance, for its potential to yield information about the early convict settlement and early industrial activities. The city area is known to have been a place of contact between colonists and the indigenous population, who owned the land on the southern shores of the Hunter River. This evidence is available in historical accounts and in the archaeological record surviving beneath the modern city. The high numbers of commercial and civic buildings of the 19th and 20th centuries gives the city a historic character which is notable and allows an understanding of the importance of the city as a place of commerce, governance and city building. The historical foundation of the city was the discovery and exploitation of coal with good shipping access via a safe and navigable harbour. The town's layout by Surveyor General Henry Dangar in 1828 is still visible in the city's streets, and is an element of historical value (NSW Heritage Inventory).

2.4 Newcastle Archaeological Management Plan

2.4.1 Newcastle Archaeological Management Plan 1997

The Newcastle Archaeological Management Plan (AMP – Suters Architects 1997) was prepared to give an indication of the nature and extent of historical archaeological resources in central Newcastle and to provide a framework to ensure historical archaeological resources are recognised and integrated into the urban planning framework. Although non-statutory, the AMP 1997 is a planning tool that provides an overview of areas that require the consideration of archaeological issues in conjunction with any development applications.

The AMP 1997 identified nine archaeological precincts within Newcastle that define areas ‘in which a common pattern of development has occurred, and may be expected to contain an archaeological resource of some cohesive characteristic’ (Suters 1997:40). The Project area is located within Precinct 2 – Convict Settlement 1804:

Precinct 2 – Convict Settlement 1804 is described as the area of the original convict settlement covering all the land between Wolfe and Pacific Streets from Church Street down to the original foreshore (approximately Scott Street)).

Twelve indicative archaeological sites are located within the Project area (refer to **Table 2.1** and **Figure 2.1**). Detail of AMP 1997 plan showing location of indicative archaeological sites.

Table 2.1 Newcastle Archaeological Management Plan indicative archaeological sites

Item	Address	Occupation History	Potential	Period
0113 Gillman Allotment	103-105 Newcomen Street	1845-1854 allotments	Potential Archaeological Site (moderate disturbance)	Government town 1823 to 1853
0114 Page Allotment	18 Newcomen Street	1845-1854 allotments 1854 building	Potential Archaeological Site (low disturbance)	Government town 1823 to 1853
0115	22 Newcomen Street	1845-1854 allotments	Potential Archaeological Site (low disturbance)	Government town 1823 to 1853
0116 Wilton Allotment	26 Newcomen Street	1830s buildings 1845 allotment 1854 allotment + buildings	Potential Archaeological Site (low disturbance)	Government town 1823 to 1853
0117 Daquid Allotment	28 King Street	1845 allotment 1854 allotment + buildings	Potential Archaeological Site (low disturbance)	Government town 1823 to 1853
0132 Nash Allotment	1 Morgan Street	1845-1854 allotments	Potential Archaeological Site (low disturbance)	Government town 1823 to 1853
0133 Wilton Allotment	3 Morgan Street	1845 allotment 1854 allotment + buildings	Potential Archaeological Site (low disturbance)	Government town 1823 to 1853

Item	Address	Occupation History	Potential	Period
0134 Earl Allotment	109-111 Hunter Street	1845 allotment 1854 allotment + buildings	Potential Archaeological Site (low disturbance)	Government town 1823 to 1853
0135 Coal Pit / Shaft	Laing Street	1830 coal pit 1854 coal shaft	Potential Archaeological Site (moderate disturbance)	Government town 1823 to 1853
1138 Hunt Club Hotel	Newcomen Street	Hotel	Potential Archaeological Site (moderate disturbance)	-
1139	Morgan Street	Hotel	-	-
1146 Old Government Coal Pit	Laing Street	1840 coal pit Graves possible in vicinity	Potential Archaeological Site (moderate disturbance)	-

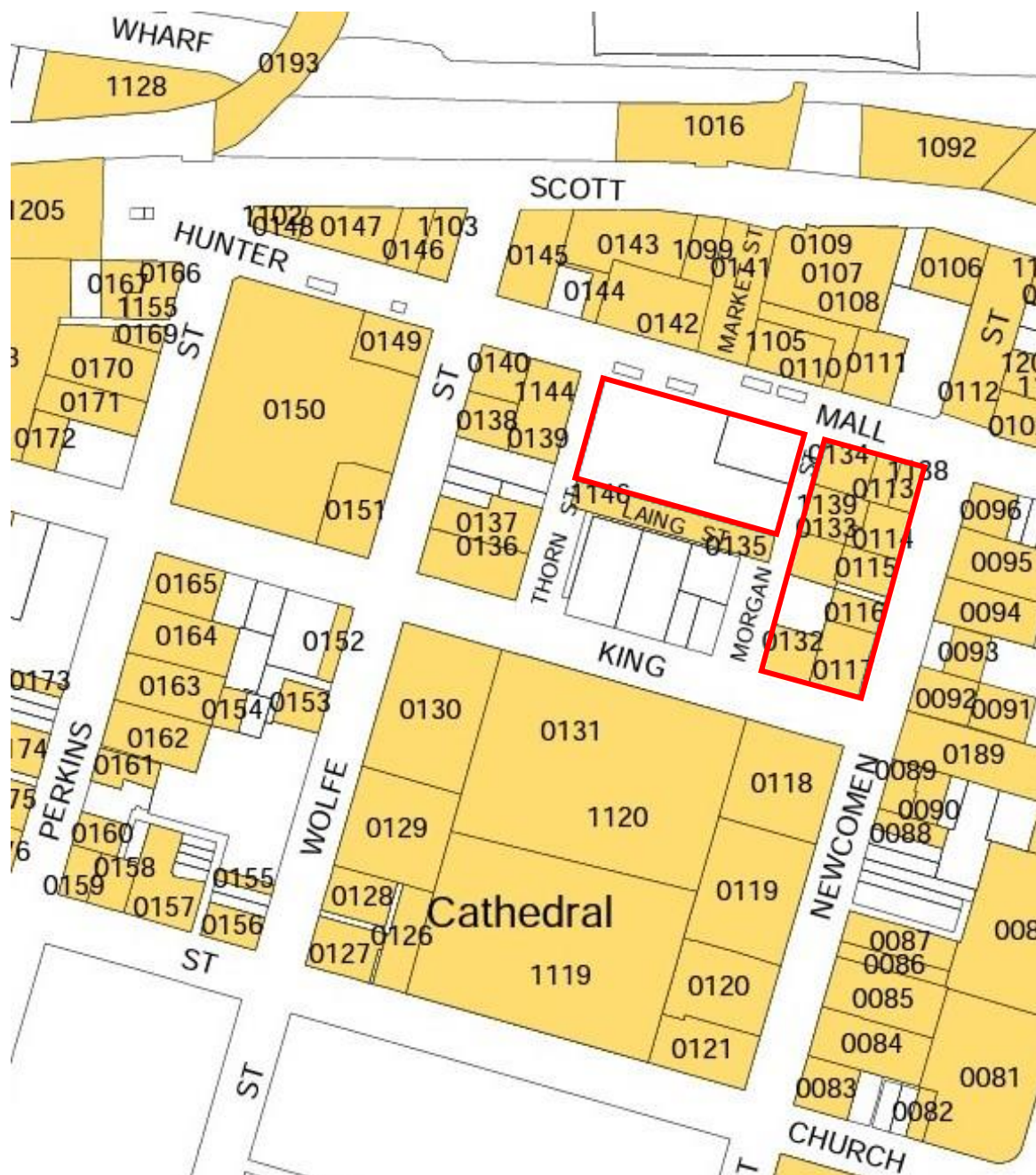


Figure 2.1 Detail of AMP 1997 plan showing location of indicative archaeological sites

Approximate location of Stage 3 and 4 areas outlined in red

Source: Newcastle City Council 2008 / Suturs 1997

2.4.2 Draft Newcastle Archaeological Management Plan Review 2013

The AMP 1997 is currently being reviewed. At present the AMP Review is a draft working document, however, as stated by Council (2015) the AMP 1997 and the Review 2013 should both be utilised and are both identified as the current operative documents. The 2013 Review has been reviewed to identify whether there are any additional considerations relevant to the Project area.

The Project area falls entirely within AMP Review Inventory No. 2176213 and partially within a number of surrounding inventory numbers. **Table 2.2** and **Figure 2.2** to **Figure 2.4** summarise the AMP Review assessment of the potential archaeological resource of the relevant inventory numbers.

Table 2.2 AMP Review Inventory Numbers

Inventory and Location	Penal Settlement (1801-1821)	Town Development (1820s-1853)	Urban Development (from 1853)
2176212. Block bounded by Hunter, Newcomen, King, and Morgan Streets, including parts of adjacent streets (Hunter and Morgan Streets).	Block is at the western edge of the penal settlement and may include the sites of a number of convict huts. State significance.	Block is located in the centre of the town, as surveyed and laid out by Henry Dangar between 1822 and 1826. The 'Present Gov[ernmen]t Coal Pit' was located on the northern end of this block indicating either mining by government or by the Australian Agricultural Company. State significance	Representative of the development of the larger coastal cities and other regional urban centres in New South Wales. The block is located in the central business area of the city. Local significance.
286 Former Tramlines, including parts of Scott Street, Shortland Esplanade, Telford Street, Hunter Street, Darby Street, Union Street, (Tudor Street), Bellevue Street, (crossing Honeysuckle Drive) and Hannell Street, including some adjacent land.	--		-
2176208 Block bounded by Hunter, Bolton, King and Newcomen Streets, including parts of adjacent streets (Bolton and King Streets).	This block was within the boundaries of the penal settlement and is likely to include the sites of a number of convict huts. State significance	This block was located in the centre of the town, as surveyed and laid out by Henry Dangar between 1822 and 1826. State significance	Representative of the development of the larger coastal cities and other regional urban centres in New South Wales. The block is located in the central business area of the city. Local significance

Inventory and Location	Penal Settlement (1801-1821)	Town Development (1820s-1853)	Urban Development (from 1853)
2176225 Extent of Convict Huts within the Newcastle Penal Settlement. Streets including parts of Bond, Scott, Hunter, King, Church, Pacific, Watt, Bolton, Newcomen, Morgan, Market, Thorn and Keightley Streets.	<p>The distribution of convict huts, tents or campsites and associated relics in the penal settlement is of State significance.</p> <p>Archaeological evidence will make a substantial contribution to our understanding of the living conditions of the convict population of Newcastle.</p> <p>State Significance</p>	-	-

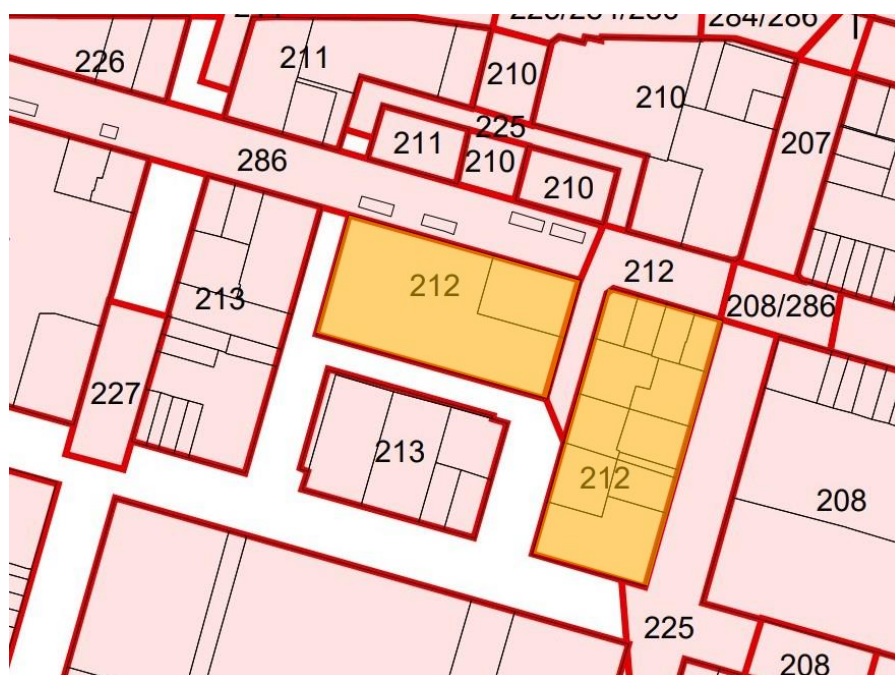


Figure 2.2 Detail of AMP Review Map of Archaeological Sites

Approximate location of Stage 3 and 4 areas shaded yellow

Source: Edward Higginbotham & Associates 2013

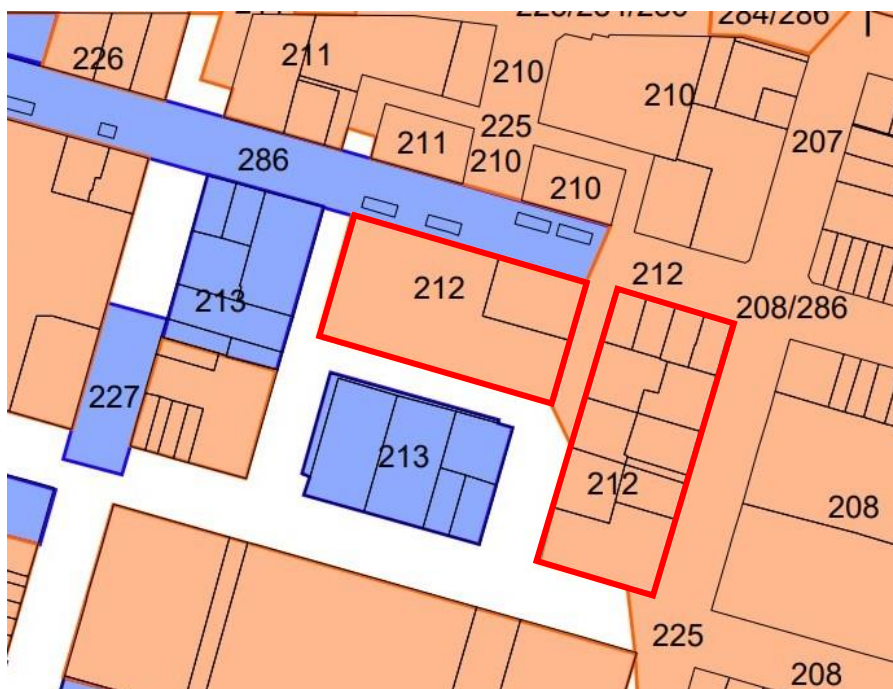


Figure 2.3 Detail of AMP Review Significance of Archaeological Sites Map

Approximate location of Stage 3 and 4 areas outlined in red. Blue shading indicates local significance. Yellow shading indicates state significance.

Source: Edward Higginbotham & Associates 2013

2.4.2.1 Extent of Convict Huts

The northeast portion of the Project area is located within the AMP Review:

Archaeological Unit 225 - Extent of Convict Huts within the Newcastle Penal Settlement (Streets including parts of Bond, Scott, Hunter, King, Church, Pacific, Watt, Bolton, Newcomen, Morgan, Market, Thorn and Keightley Streets).

Figure 2.4 shows the area of possible distribution of convict huts and associated relics as identified in the AMP Review.

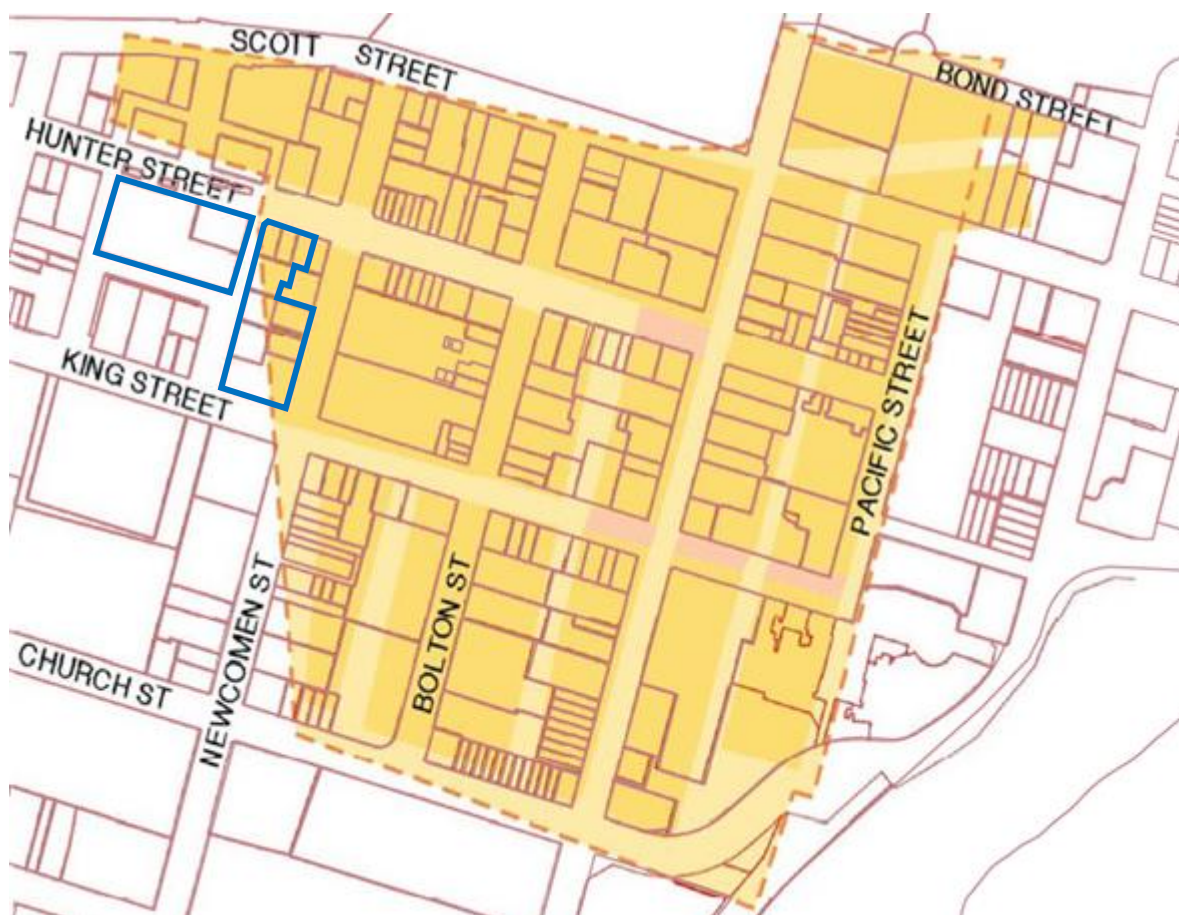


Figure 2.4 Possible Distribution of Convict Huts

Stage 3 and 4 areas outlined in blue.

Source: Edward Higginbotham & Associates 2013

2.5 Newcastle Archaeological Management Strategy

The Newcastle Archaeological Management Strategy was adopted by Council in August 2015 and was developed in order to provide a 'framework for managing the non-Aboriginal archaeological resources in the Newcastle inner suburbs'. The strategy was informed by the 1997 AMP and the later 2013 AMP Review. The strategy outlines broad parameters for assessing significance and potential for various phases of historic development across the inner city suburbs of Newcastle. The strategy is supported by the outcomes and conclusions of the 1997 AMP and the 2013 Review.

2.6 The Burra Charter: The Australian ICOMOS Charter for Places of Cultural Significance (2013)

The *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999* (The Burra Charter) (Australia ICOMOS 2013) was written to explain the basic principles and procedures to be followed in looking after important places. As such it comprises a set of best practice principles and procedures for heritage conservation. The Burra Charter defines cultural significance as meaning 'aesthetic, historic, scientific or social value for past, present or future generations' (Article 1.2).

Cultural significance is defined as being present in the ‘fabric, setting, use, associations, meanings, records, related places and related objects’. The fabric of a place refers to its physical material and can include built elements, sub surface remains and natural material (Australia ICOMOS 2013).

Although the Burra Charter is not cited within heritage legislation and has no legal force, it guides the policies and guidelines of the Heritage Council of NSW and Heritage NSW.

2.7 Aboriginal Cultural Heritage

The Project area forms part of Registered Site 38-4-1084 which consists of a potential archaeological deposit located in the city blocks bound by Newcomen, King, Hunter and Perkins Street (refer to **Plate 2.5**).

A separate Aboriginal Cultural Heritage and Archaeological Assessment has been prepared for the Project (Umwelt 2023).



Figure 2.5 **Extent of AHIMS Registered Site 38-4-1084**

AHIMS Site 38-4-1084 indicated with red outline. Approximate location of Stage 3 and 4 areas shaded yellow

Source: Nearmaps 2023

3.0 Historical Summary

As part of NSW heritage assessment procedures, it is essential to have a full understanding of a site based on its historical context in order to determine the site's potential to have a physical surviving archaeological resource. This section of the report provides a historical context for the broader historical development of Newcastle (**Sections 3.1 to 3.5**) followed by a discussion of the Project area itself (**Sections 3.6 to 3.7**) to provide an understanding of the potential for an archaeological resource and its potential significance.

3.1 Ethnohistoric Context

The wider area forms part of a landscape that was used by the traditional Aboriginal owners, the Awabakal, for many thousands of years prior to European contact and continues to be highly valued by Aboriginal people today. The occupation of the Newcastle area by Aboriginal people is demonstrated by the presence of a range of archaeological sites that include evidence of varying levels of occupation and utilisation of different landscapes and resources within the Newcastle area. Following non-Aboriginal settlement there are records of Aboriginal people interacting with the non-Aboriginal population in the early period of settlement, but subsequent records are relatively rare until the modern period (Umwelt 2014). The Newcastle CBD was known by the Awabakal as Mulubinba. Mulubinba is a significant place in the Awabakal cultural landscape, reflected through both the tangible evidence of Aboriginal history (archaeological sites) and the intangible and continuing connection to country (cultural and spiritual attachment).

Prior to European contact, the shorelines of the Hunter River estuary and coast would have provided a range of reliable and easily accessible resources for Awabakal people, such as fresh water from the estuary and springs in the immediate area (such as near the corner of Wolfe and King Streets), a range of aquatic fauna and migratory birds from the estuary and coast lines, and rhyolitic tuff for stone tool manufacture from Nobbys Island (Whibayganba).

Intensive occupation of the Newcastle CBD by Aboriginal people over many generations created large midden sites along the Hunter River foreshore, the deep sands of which were also known to have been used for burials. It is noted that the occupation of Australia by Aboriginal people represents by far the lengthiest human use of the continent and that, by comparison, the occupation of Australia by non-Aboriginal people has been of short duration albeit associated with significant impacts.

With the arrival of European settlers in the 1770s, traditional patterns of Aboriginal life throughout New South Wales were quickly and dramatically altered, through disease, displacement, forced movement and assimilation. Newcastle, one of the earliest European settlements in Australia, was no exception to this; but its history is also characterised by the development of unique relationships between Awabakal people and early European settlers.

Perhaps the single-most important source of ethnohistoric information for the Awabakal people was the missionary, Lancelot Threlkeld, who established a mission at Belmont and subsequently at Toronto on Lake Macquarie and collected extensive information about the Awabakal people and their language in the period 1825-1841. While records also exist of corroborees or ceremonial events being undertaken in the Newcastle area, there are very few other records of the spiritual beliefs and practices of the Awabakal people, with the notable exception of the recording of two locations (Nobbys Head and Newcastle Beach) associated with spiritual beliefs that featured in the worldview of the Awabakal (Umwelt 2009).

However, whilst they may be briefer than those provided by Threlkeld, from the very early period of exploration and settlement of Newcastle there are records of interactions between the Awabakal and the newly arrived non-Aboriginal people. These include descriptions of encounters with Aboriginal people during Lieutenant Grant's expedition to the Hunter River in 1801, at which time the quantity of oyster shell built up in middens along the Hunter River was remarked upon. More extensive interactions logically followed the establishment of the second penal settlement in 1804, including records of Awabakal people returning escaped convicts to settlement officials, possibly in retribution for the manner in which escaped convicts attacked Awabakal families. Records exist of Awabakal people receiving gifts of blankets, tobacco and other supplies in thanks for their involvement (Roberts 2003).

Accounts from 1819 and 1820 record the punishment of non-Aboriginal men for the mistreatment of Aboriginal men, including the execution of John Kirby (refer to Umwelt 2009). In addition, early artworks from the period by T.R. Browne, Joseph Lycett, Walter Preson and Joseph Cross all show Aboriginal camps bordering the developing settlement between 1812 and 1828. This does not in any way imply that the ongoing development of Newcastle was positive for the Awabakal people. Rather as Newcastle expanded following the closure of the penal settlement in 1823, the Awabakal were increasingly struggling to access their land and resources within the settlement itself. This is demonstrated by the records of violent clashes between the Awabakal and non-Aboriginal people in the 1830s in the Lake Macquarie area (Umwelt 2009).

A newspaper account in 1830 (Turner 1997:12) indicated that the number of Aboriginal people within the Newcastle settlement at the time was equal too (if not greater than) the non-Aboriginal population and that Aboriginal people provided services to the 'lowest classes' such as carrying wood and water and received 'small pieces of tobacco or a cob of corn' in return. Blanket distribution records from 1833 list 117 Aboriginal people in Newcastle, but only 29 Aboriginal people were listed on a blanket return from 1846 (Umwelt 2009), indicating a significant downturn in population although these records may not be directly comparable.

In reviewing the numbers of Aboriginal people living within his mission, Threlkeld indicated that the number of Aboriginal people occupying the Belmont, and subsequently Toronto missions, significantly decreased as a result of both the effects of disease and the ongoing attraction of employment in Newcastle. On the latter topic, Threlkeld (Umwelt 2009) stated that Aboriginal people were 'employed' in the Newcastle settlement as fishermen, water carriers, messengers, servants and on ships. He also noted that while Aboriginal people were living in camps at Newcastle, it was 'being sold out from under their feet, and only the sea-beach, one hundred feet from the high-water mark, is the place on which they may rest their heads beneath burning sun or pitiless storm' (Umwelt 2009). This demonstrates the ongoing presence of Aboriginal people within proximity to the Newcastle CBD. However, subsequent records of Aboriginal people living or working within the Newcastle CBD are relatively rare until the modern period. This does not demonstrate the absence of Awabakal people or Aboriginal people more broadly from the area but is probably symptomatic of the increasing marginalisation of Aboriginal people resulting from the expansion of the settlement.

The experience of Aboriginal people in NSW since European contact has also been one of movement, forced or otherwise, which has seen Aboriginal people from other traditional countries come to the area and develop their own attachments to Newcastle. The history of the Newcastle CBD (Mulubinba) therefore spans the traditional and ongoing Awabakal connection to country, the attachment to place experienced by other Aboriginal people, European settlers and other migrant peoples since 1788 and the shared history of all.

3.2 European Exploration

In 1770, Captain James Cook sailed past Stockton Bight in 1770, noting only Nobby's Island (Whibayganba) and Port Stephens. The first knowledge of the Hunter region and its coal reserves came in 1791 through tales told by escaped convicts. In March 1791 William Bryant with his wife Mary, their two children and seven other convicts escaped from Port Jackson in the governor's cutter and sailed for east Timor. They arrived in Koepang 69 days later. They observed coal during the early stages of their voyage after running their cutter into 'a small creek', thought to have been Glenrock Lagoon to the south of Newcastle (Turner 1997:4). Mary Bryant and four of the other convicts eventually reached England, but William and their children died. The Hunter River was also visited in 1796 by a party of fishermen, who brought samples of coal back to Sydney. In 1797 Lieutenant John Shortland entered the estuary and came ashore along Stockton Bight, Nobby's Head and along the Hunter River foreshore during a search for escaped convicts. He observed the coal resources responsible for much of the later European settlement in the wider Hunter region and reported he found 'considerable quantities of coal lying so near to the waterside as to be conveniently shipped'. Shortland made the first chart of the area and collected samples of coal. In a letter to his father he predicted his discovery of the coal would prove to be 'a great acquisition to the settlement' (McMartin 1967). Officially the river at this time was named after John Hunter, the colony's governor and Shortland's superior naval officer, but to many it was known simply as Coal River.

Miners and merchants seeking timber soon followed Shortland's observations. Besides coal, vast cedar forests covered a huge area up the Hunter River, providing a source of urgently needed building timber for the infant Sydney colony. Governor King decided to make a more systematic exploration of the area and its natural resources and sent an expedition in HMS Lady Nelson, commanded by Lieut. James Grant to survey these resources and explore the Hunter. On board were Lieut. Col. Paterson, Ensign Barallier, J.W. Lewin, a mining expert, five sawyers, and a crew of nearly 60. The Lady Nelson, accompanied by the schooner Francis arrived off the mouth of the Hunter River on 14 June 1801, and Col. Paterson named the island at the river mouth Coal Island (now Nobby's). Paterson prepared a detailed report on the resources of the area, commenting on the potential of coal, salt, lime, fish and pasture. He proposed a permanent settlement at the mouth of the Hunter River (Turner 1997:7).

Impressed by Paterson's report of the rich resources of the area and the already successful coal mining being undertaken, King decided to establish a permanent settlement in the area in 1801. The settlement proved to be unsuccessful. The venture failed within six months and the convicts and their overseers were evacuated back to Sydney Cove. The estuary of the Hunter River was not attractive to agriculturalists and the extent of the swamps and sand dunes in the area ensured that Newcastle would have to depend on its coal and port for its future development.

3.3 Early Settlement (1804-1823)

It was not until 1804 that Newcastle was resettled as a penal colony. Although Governor King planned Newcastle to be more than a penal outpost, the majority of people arriving were sent to serve colonial sentences and formed a large part of the workforce available for the exploitation of the resources of the region, which included coal, timber, salt and lime. The convicts were engaged in exploiting these natural resources to supply Sydney with much needed building and heating supplies – the cedar forests and shell middens (most the result of past Aboriginal activity) produced building timber and lime respectively, and coal heated the houses and forges.

The penal colony was founded under the administration of Lieutenant Charles Menzies with 34 Irish prisoners, exiled by Governor King for their role in the Battle of Vinegar Hill of 1804. Menzies had commanded the detachment of marines who quelled the Vinegar Hill convict rebellion.

The expedition to found the new colony left Sydney on 28 March 1804 in the Lady Nelson, Francis and Resource. Menzies was accompanied by Dr James Mileham (surgeon), Isaac Knight (superintendent of convicts), John Tucker (store-keeper), Ferdinand Bauer (artist), George Caley (botanist), eleven military guards and thirty-four convicts. Among the convicts were three miners, three sawyers/timber cutters, two carpenters, a gardener and a salt bailer (to make salt from salt water for both the new settlement and Sydney). They arrived on 30 March 1804. Menzies named the new settlement Kingstown, but Governor King's own choice, Newcastle, prevailed. Menzies' instructions were to use the convicts in 'getting as many coals as possible', cutting cedar, clearing ground for cultivation and 'to enforce a due observance of religion and good order'.

During his term as commandant Menzies had huts constructed for the military guard and the convicts, built a large stone wharf, established a coal beacon to assist navigation into the harbour, organised the cutting of cedar and the obtaining of salt from salt-pans at Collier's Point and reached satisfactory rates of production of coal (refer to **Figure 3.1** and **Figure 3.2**). In March 1805 Menzies submitted his resignation to King to 'return to England to my duty in the Royal Marines'. He left soon afterwards and returned to active service, later serving in the Napoleonic Wars (Flowers 1967).

In 1815, the Norfolk Island penal settlement closed and focus again turned to Sydney and Newcastle, with the British population of the latter dramatically increasing and reaching over 1,000 people by 1821 (Turner 1997:9, Turner and Blyton 1995:28). Under Captain James Wallis, commandant from 1815 to 1818, the convicts' conditions had improved and a building boom began. Wallis laid out the streets of the town, built the first church on the site of the present Anglican Cathedral, erected the old gaol on the seashore and began work on the breakwater which now joins Nobbys to the mainland (refer to **Figure 3.3** and **Figure 3.4**). The quality of these buildings was poor and only the (much reinforced and altered) breakwater survives. For these works, and for his humane rule in the convict colony, Wallis earned the personal commendation of Governor Macquarie.



Figure 3.1 Settlement of Newcastle near Sydney by Ferdinand Bauer

Image dates to between 1800 and 1809 and shows a small number of tents and huts along with a more substantial building (likely to Commandants House formerly located on the hill at the south end of present Watt Street) and the Flagstaff.

Source: State Library of NSW/Higginbotham 2013

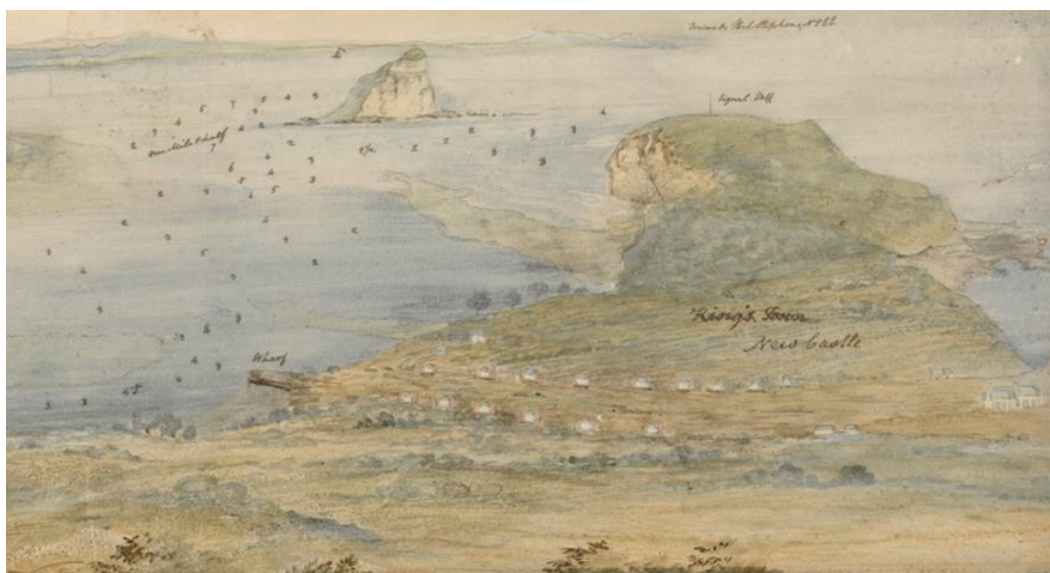


Figure 3.2 The Coal River or Port of Newcastle, attributed to William Lewin

1808 dated image shows the huts lining the main street which leads from the wharf to the Commandant's House

© State Library of NSW / Higginbotham 2013

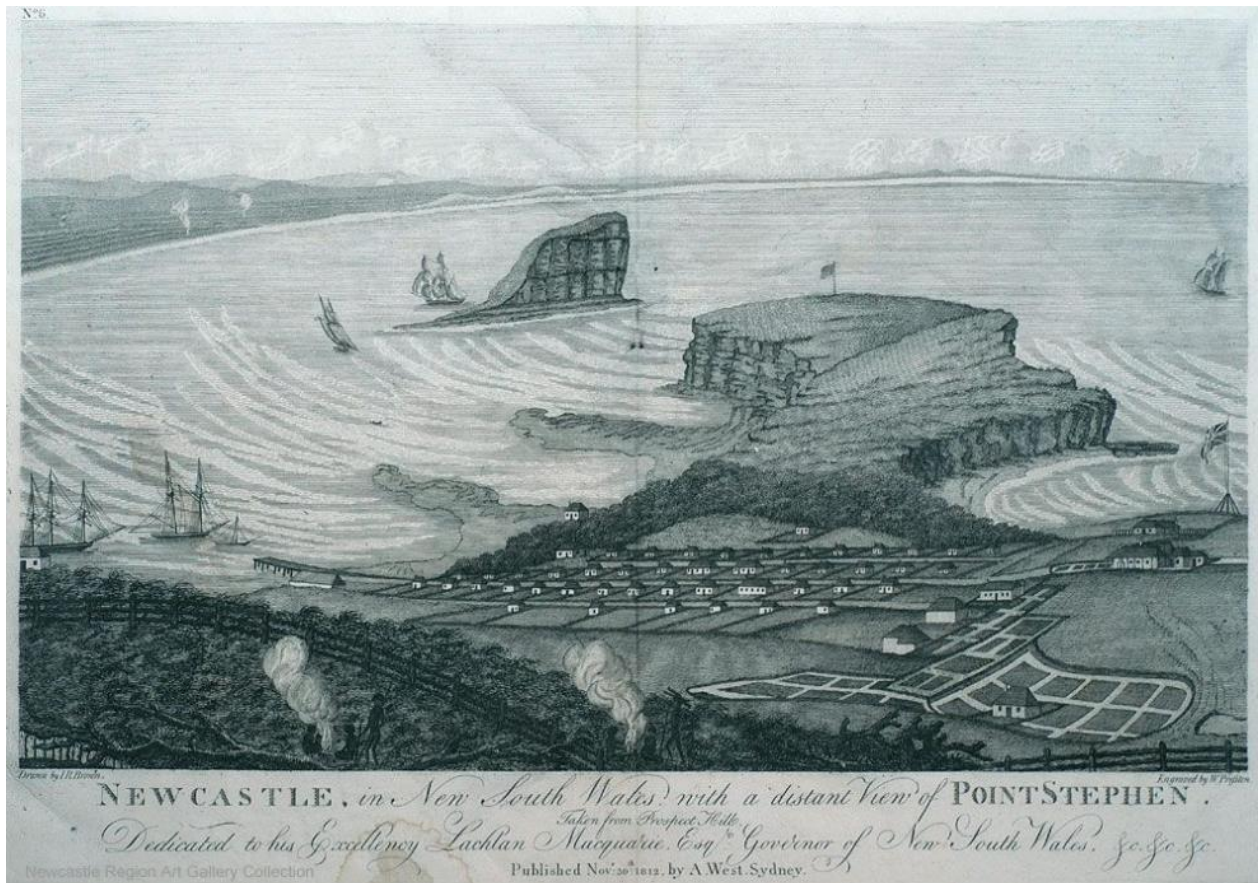


Figure 3.3 Newcastle, in New South Wales, with Distant View of Point Stephen

1812 Engraving by T.R. Brown

Source: Newcastle Region Art Gallery / University of Newcastle Cultural Collections

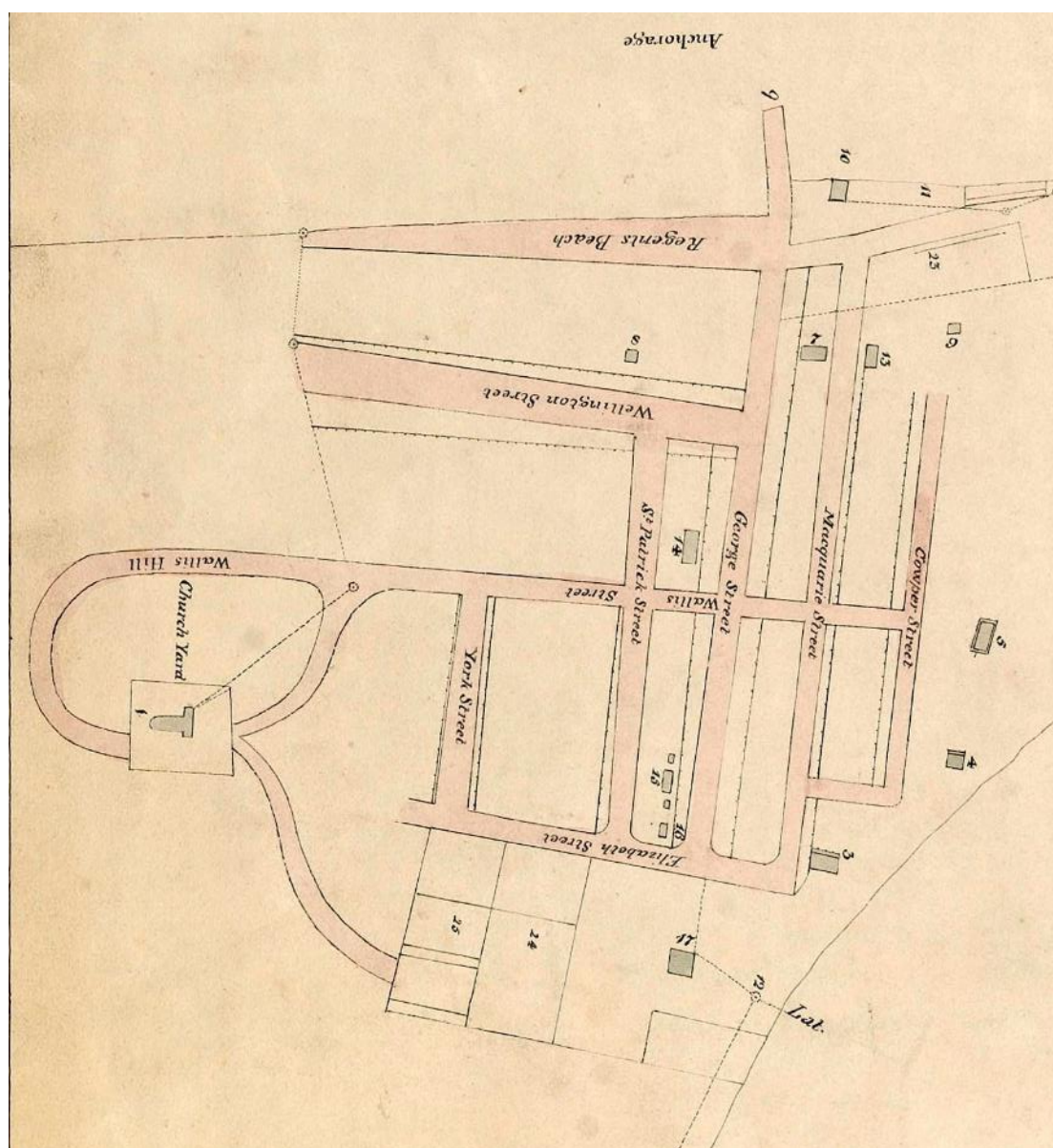


Figure 3.4 1818 Plan of Newcastle by James Meehan

Showing the main street of George Street (present Watt Street) leading to the wharf; prior to the current Newcastle town plan being established. The Project area is located to the north of the 'Church Yard' in proximity to the western boundary of the 1818 shown town.

Source: State Records SR Item 83/Higginbotham 2013

At its peak in 1821 the convict population of Newcastle had risen to approximately 1050. The penal settlement was located on a basin of low-lying land (in the area of present day Watt Street) to the east of the Project area. In the last years of convict use, the settlement comprised 71 convict huts, 12 government buildings, with the foci of church (Christ Church) and state (the Commandant's house) on the elevated land at the western and southern boundaries of the settlement, and industry (timber yard, mineshafts, wharf and breakwater) on the low-lying land along and behind the foreshore. **Table 3.1** details the numbers of convicts in Newcastle between 1804 and 1812.

Table 3.1 Convict numbers in Newcastle between 1804 and 1812

Year	Adult Male	Adult Female	Total Convict
1804	80	14	94
1805	73	18	91
1806	50	22	72
1807	63	21	84
1810	69	-	69
1811	73	-	73
1812	100	34	134
1813	123	31	154
1814	149	39	188
1815	215	39	254
1816	245	42	287
1817	394	46	440
1819	696	86	782
1820	-	-	954
1821	1001	50	1051

Source: Higginbotham 2013 Volume2:17

However, in Governor Macquarie's opinion the Newcastle prison colony was too close to Sydney and the proper exploitation of the land was not practicable with prison labour. In 1823, military rule in Newcastle ended and the penal settlement closed in favour of a penal colony at Port Macquarie (Turner 1997:14). The number of prisoners was reduced to 100 (most of these were employed on the building of the breakwater), and the remaining 900 were sent to Port Macquarie. Although the penal settlement was closed in 1823 convicts continued to toil in Newcastle on public works projects such as the breakwater and in private assignment into the 1840s. In the 1830s the majority of the population of the town were still convicts; a total of 60 percent in 1836 (Turner 1997:14).

Most of the buildings during the penal settlement period of Newcastle are likely to have been of timber; with the convicts living in private timber constructed huts with bark or shingle roofs. By 1820, when there were 71 of these timber huts in Newcastle, the convicts were transferred to the purposely built barracks building (Higginbotham 2013 Volume 3:17).

3.3.1 Macquarie Pier

Macquarie Pier was constructed to link Nobbys Head to the mainland. The pier was conceived by Captain James Wallis, when he was Commandant of Newcastle, and its construction agreed upon by Governor Lachlan Macquarie in 1818. Surveyor James Meehan drew up the plans showing the lines of the intended pier and its construction commenced in 1818 (refer to **Plate 3.5**). A quarry was opened in the area of present Fort Scratchley to provide stone for the pier and other construction projects. By 1822 it was reported that approximately 625 yards of the proposed 930 yard pier had been completed (Turner 1994:2-5). However, when Newcastle ceased to be a penal settlement in 1823 works on the pier were discontinued.



Figure 3.5 Detail of Nobby's Island and Pier 23 January 1820

Image shows Nobby's Island, Signal mast on Fort Scratchley and Macquarie Pier under construction. Note the early shoreline prior to any reclamation.

Source: State Library of NSW and Coal River Working Party

3.3.2 Pioneer Industries

There were a number of successful industrial ventures during the early period of settlement in Newcastle.

Coal Mining

Throughout Newcastle's period as a penal settlement, coal production remained on a small scale. Mine labour was scarce and often utilised in other tasks. While some coal was needed for ironworking and small scale export, timber could be used in the place of coal for most other purposes.

During the original settlement of 1801 three miners are reported as digging nine tonnes per day at Colliers' Point. Plans to increase output by employing more miners and providing improvements such as a slab path for carrying the coal from the mine, a properly constructed wharf and candles for use underground never eventuated before the original settlement was abandoned. With the establishment of the new penal settlement in 1804 Lieutenant Menzies opened a new mine in order to most likely utilise the Dudley Seam. The mine was located on the corner of the present day Brown and Church Streets to the south of the Project area and was opened so that it could be developed and expanded in the future. The accumulation of water and occurrence of faults created problems for the early mines.

The following account of the coal mines located in Newcastle at this time was given by John Platt (a coal miner) in 1805:

The Coal mines on the sea-side of Government House Newcastle are 3½ feet thick, solid coal and resemble those at Bushy Park, between Warrington and Prescott. The same mine is also in Lord Derby's Park, near Prescott, called Nozeley Park. These coals are of the best quality and are used for furnaces, malt houses, &c. being free from Sulphur.

Those at the Harbour by the Salt Pan called the New Discovery, from its being like a Delf in Weston near Prescott in Lancashire, are of a bad quality, having as much dirt as coal, and fit for burning bricks, fire engines...(Sydney Gazette 1805).

Until 1817 most of the coal produced would have come from the accessible Dudley and Nobby's seams. The original tunnels used to mine the Dudley Seam beneath the site of Fort Scratchley were kept in use until 1817. Following 1817 the Yard seam was tapped from a mine shaft in the vicinity of the Royal Newcastle Hospital in Watt Street. It took three years to sink the shaft to the Yard Seam. The seam was only three feet thick, but the coal was of better quality than any previously mined at Newcastle (Turner 1997:9). It was not until the middle of the 1800s that the borehole seam was discovered, and with it a quality of coal far superior to anything else being mined in Newcastle (Hickey 2004).

Improvements such as the construction of a slab pathway and wharf and the use of barrows and carts increased production however, the shortage of miners and oxen to pull the carts and the general scarcity of tools in the settlement continued to hinder coal production in the early settlement (Suters Architects 1997, 14).

A government coal mine shaft dating to the early nineteenth century is known to have been located in the Project area in the vicinity of the former market reserve. The exact location of the shaft is unclear as a result of differences with the early maps, however it may have been located in the vicinity of Laing Street. The coal shaft is likely to have been used until 1830 when government mine works ended in the city centre (refer to **Figure 3.6** and **Section 3.6.2** for further discussion).

The city centre area is known to be underlain by three coal seams; now referred to as the Dudley, Yard and Borehole Seams. Mapped abandoned mine workings within the Borehole Seam are known to extend beneath the Project area (refer to **Figure 3.7**). There is also the potential for workings of the Dudley Seam to be present beneath the Project area. However, it is considered unlikely that Yard Seam workings are present. Notes from the Royal Commission into Mine Subsidence 1908 suggested that the mine shaft likely located in the area of the former market reserve was associated with the Yard Seam workings. However, based on current available information the early shaft is more likely to provide access to the Dudley Seam workings and may not extend any deeper (Douglas Partners 2008 and 2018).

The top of the Dudley Seam is understood to range in elevation in the city centre area from approximately -6 metres AHD in the east to approximately -15 metres AHD in the west. The seam ranges from approximately 1.28 to 1.33 metres thick. The Yard Seam underlies the Dudley Seam by approximately 10 metres. The top of the Yard Seam ranges in elevation from approximately -16 metres AHD to -25 metres AHD. The seam is approximately 900 millimetres thick. Workings associated with the Borehole Seam are known to extend beneath the Project area (refer to **Figure 3.7**). The seam is located beneath the Yard Seam approximately 80 metres beneath ground surface (Douglas Partners 2008).

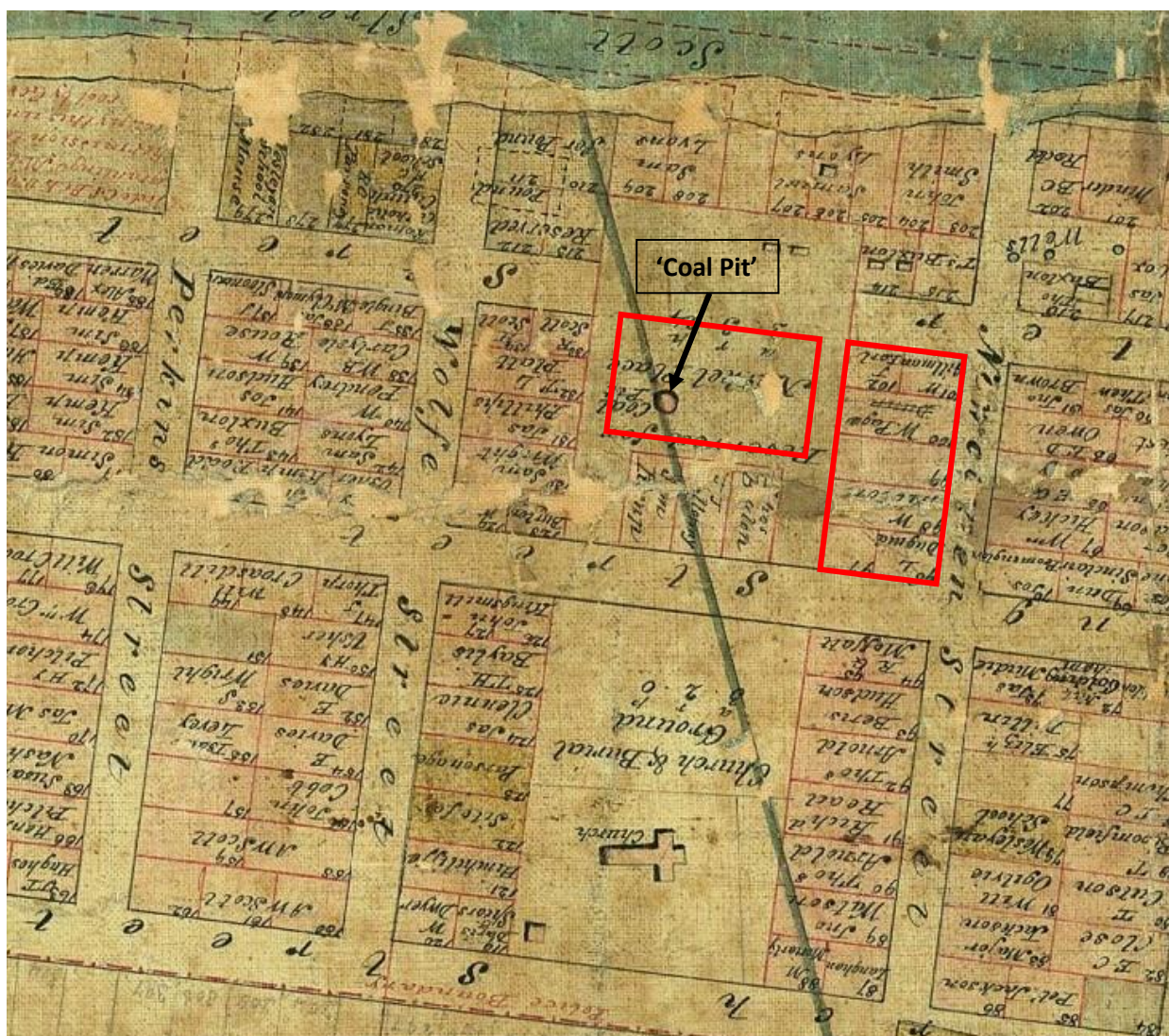


Figure 3.6 Detail of 1845/1846 Plan of the City of Newcastle

Detail shows the Government coal mine shaft in the area reserved for a market place. Thorn, Morgan and Laing Streets are still not established. Approximate Stage 3 and 4 areas outlined in red. Original shoreline shown along the approximate alignment of current Scott Street.

Source: Newcastle Region Library Local Studies Section LHMB 333.3/16

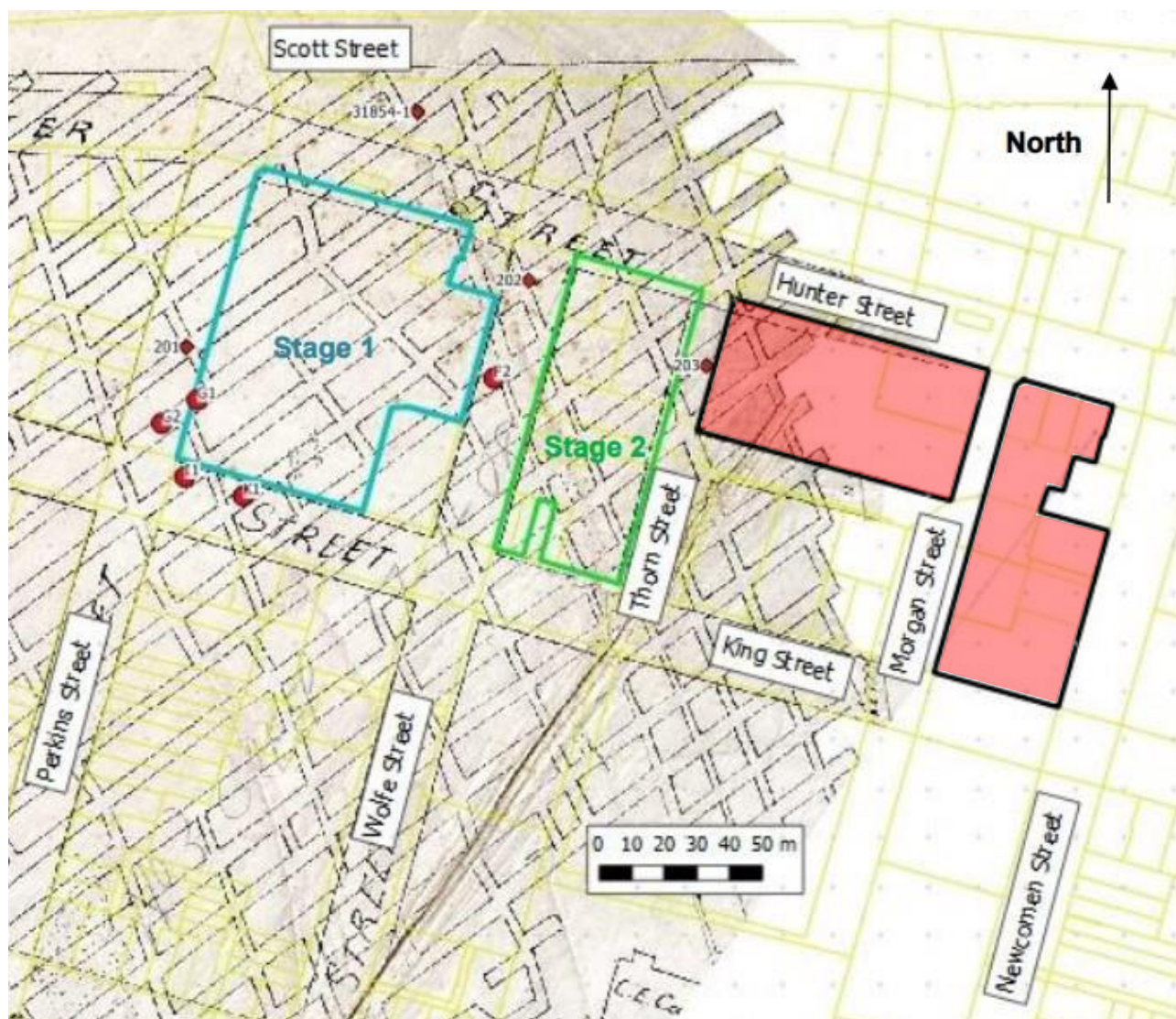


Figure 3.7 Location of Borehole Seam Workings

Stage 3 and 4 areas shaded red.

Source: Douglas Partners 2018

Timber and Merchants

The getting and processing of timber is likely to have been the most successful of the pioneer industries in the Hunter Valley area (Suters Architects 1997:13).

Timber was used for building in Sydney with the extensive stands of Cedar throughout the Hunter Valley exploited to provide for the high demand of the Sydney market. Cedar was the most sought after timber (particularly for use in house fittings). Brush Cypress (floorings), several species of gum (roof timbers, carts and handles for agricultural implements and in shipbuilding) and Rosewood (carpentry) were also exploited in addition to various other timbers used for industrial purposes (Suters Architects 1997:13).

Following the relocation of the penal settlement to Port Macquarie, the timber getting and processing ceased to be one of the principal industries in the Newcastle area. Early plans of Newcastle indicate the broader area of central Newcastle had been cleared of trees by 1830, likely soon after the arrival of Lieutenant Menzies in 1804. Logs cut from up the Hunter River as far as Maitland were floated down to the early settlement. A sawmill had been erected in the location of present day Newcastle Railway station and a timber mill is reported to have stood on the site of Market Square to the east of the Project area from where early merchants Simeon Lord and James Underwood may have drawn supplies as early as 1799.

Salt Making

The proximity of the coal mines and salt water was capitalised on with attempts at salt production. A salt pan, exported from England was finally erected in Newcastle in 1804. The first salt from the Newcastle works arrived in Sydney in February 1805. Output from the works increased until 1807 but the works were abandoned in 1808 (Suters Architects 1997, 15).

Limeburning

Extensive deposits of shell had been noted along the Hunter estuary foreshore and coastal beaches of Newcastle during the early expeditions to the area, the majority of which were probably Aboriginal midden sites (high density shell deposits) that remained from past resource utilisation (Umwelt 2009). However it wasn't until 1808 that systematic lime burning commenced in the Newcastle region. Shell deposits in the Stockton area and along Fullerton Cove (originally known as Limeburners Bay) were exploited for the production of lime for cement (Suters Architects, 1997). Convicts would gather shells from Stockton's beaches for transportation to Newcastle where the shells were burned in brick kilns. The production of lime continued throughout the convict period in the vicinity of the wharf and lumberyard (to the northeast of the Project area) where kilns, sheds and screens were located.

Shipbuilding

Although the construction of boats and barges had always been important during the convict period, it wasn't until 1818 that shipbuilding was attempted. During a visit to Newcastle in 1818 Governor Macquarie ordered the construction of the southern breakwater and the building of a ship. The Princess Charlotte was built soon after and reached Sydney in October 1819 for final fitting out. At least one other vessel was built at Newcastle before the penal settlement closed; a government barque (a sailing ship with 3 or 4 masts) named the Newcastle. Although the closure of the penal settlement meant the closure of the government shipbuilding, small shipbuilding remained a feature along the Hunter River (Suters Architects 1997, 16).

The Lumber Yard

The Lumber Yard, located on Scott Street to the northeast of the Project area was at the centre of the penal settlements industrial activity. The transformation of Newcastle from a penal settlement to a free town did not result in the closure of the Lumber Yard, as a number of convicts were retained in Newcastle. The Crown continued work using convict labour on the breakwater, mining works continued until 1831 and chain gangs working on the roads in the area required the maintenance of their tools, all undertaken from the Lumber Yard.

Building Work

The original settlement of 1804 was laid out in an irregular fashion around the axis of High and George Streets (present Watt Street area to the east of the Project area) which led from the wharf to the commandants house overlooking the settlement. Bricks were not made locally during the first decade of settlement and most of the buildings would have been constructed of timber. Captain James Wallis relieved Lieutenant Thompson as commandant at Newcastle in 1816 and immediately began to improve the settlement by constructing new public and government buildings. Initial buildings included the Christ Church, a barracks, a hospital and goal. Stone was quarried from the base of Signal hill (later Fort Scratchley) and bricks were being made locally.

The penal settlement was laid out in a similar fashion to a military encampment; comprising two lines of tents or huts along the main street (George Street – now Watt Street) from the wharf to the more substantially constructed Commandant's House. By 1813-1814 the layout of the settlement had expanded into an irregular grid of four or five parallel streets with cross streets and a number of administrative/institutional buildings built in positions separated from the irregular grid, including the Church, Flagstaff, Gaol, Hospital and Surgeon's House (Higginbotham 2013:28).

3.4 Newcastle's Government Town (1823 to 1853)

In 1823 assistant surveyor Henry Dangar laid out the Newcastle town plan, the core of which makes up the current Newcastle central business district and includes the Project area. Dangar imposed a regular grid plan on the disorganised settlement of 1804 to 1822 and the natural topography of the headland. Dangar made provision for a town of 190 allotments with a church and market reserve at its centre. Existing streets were realigned and renamed. Three new principal streets were established aligned east to west along the ridgelines and named after governors Hunter and King, and the existing Christ Church. The intersecting cross streets were named after engineers contributing to the discovery of steam: James Watt, Matthew Bolton, Thomas Newcomen, James Wolfe, and Thomas Perkin. Bolton Street replaced St Patrick Street with Newcomen Street replacing York Street: both on slightly different alignments. In laying out the town plan the intention was to prepare the town for its role as a port to service the rapidly developing Hunter Valley (Turner 1997 12 and Higginbotham 2013 Volume 3:46).

Following the relocation of the penal colony to Port Macquarie, Newcastle did not develop as swiftly as expected. The private investment expected to bring growth to the town did not immediately eventuate and the town went into decline with the population remaining low. By 1825 the Reverend Lancelot Threlkeld described the town as having

...more the appearance of a deserted village than anything else and there are no more than thirty-four (free) persons resident in it (Turner 1997 12).

Throughout this period, the Awabakal were being pushed beyond the ever expanding limits of British settlement and struggled to retain rights over land, food and resources. However, the Awabakal population of Newcastle remained high throughout the 1820s. In 1827 a newspaper correspondent commented that

The Aboriginal population of Newcastle is as great, if not greater; than the whites, which cannot be said of any other place in the colony (Turner 1997 12).

The regularity of the grid laid down by Dangar was only broken at the market reserve (which forms part of the Project area), church and cemetery (to the south of the Project area) located at the centre of the grid. The church and church reserve (likely including the cemetery) now form the grounds of Christ Church Cathedral and predate Dangar's town plan. Dangar regularised the boundaries of the church ground with the establishment of King Street, and in doing so is likely to have reduced the area of the church reserve.

In 1827 Dangar noted that private houses in Newcastle numbered between 25 to 30, with about 200 inhabitants, apart from the government mining establishment. The residents included storekeepers or mercantile men, shopkeepers, innkeepers, carpenters, bricklayers, brickmakers and blacksmiths (Higginbotham 2013 Volume3:56).

Sir Edward Parry, a British naval officer and explorer accepted an offer from the Australian Agricultural Company (AA Co) in 1829 to travel to New South Wales as commissioner in charge of their enterprises. Parry first visited Newcastle in 1830 and commented that:

The town is so entirely in decline, that I shall be able, if necessary, to buy it all for \$500 (Turner 1997 13).

In contrast, the Sydney Gazette published a description of Newcastle on 29 October 1829; noting how the town had progressed. There were several new buildings, especially a brick house built by Mr Smith and a large brick inn built for Mr Huxham. There were about 50 inhabited houses, and 400 people apart from the military and convicts. There were eight inns or hotels. In addition, 1829 Newcastle is reported to have had three bakers, one permanent butcher and a few occasional ones. Three brick lined wells near the harbour supplied the town with water. The land around these wells was gazetted as a Water Reserve (Higginbotham 2013 Volume 3:56).

The town was confined on the south by steeply rising land (The Hill), on the north by the Hunter River and on the east by the sea. The only potential direction for its future growth of the town, the west, was closed off in 1828 when the newly formed English pastoral company trading as the AA Co. was granted 2000 acres to the west of present day Brown Street (to the west of the Project area) for exploiting the coal reserves. As a result, the town's growth was restricted to land east of Brown Street until the AA Co. could release areas of its grant in the 1850s. However, this did not restrict the growth of the new town greatly as there was little construction going on at this time.

Watt Street was the centre of Newcastle's commercial and residential development during the 1820s to 1840s with little known development occurring west of Newcomen Street. Several Hotels were opened and the first stores were built around Watt Street, however overall growth of the town was slow. During the United States Exploring Expedition of 1838-42, the American explorer Charles Wilkes described Newcastle in 1839 as:

A small village of seventy or eighty houses, built on the side of a hill: it contains two taverns and several grog shops, a jail, convict stockyard, hospital, court-house, and a venerable old-looking church. On one of the neighbouring hills is a flagstaff, and on the other a windmill. The business of a coal-mine and that of the building of a breakwater for the protection of the harbour, give the place an air of life and animation (Wilkes 1845).

Newcastle grew slowly in the 1830s with much of the land in the town still held under lease. It was not until the 1840s that many of the town lots were granted. By 1841, with the expansion of AA Company activities, there was a more active building industry. The 1841 Census shows there were 100 dwelling houses of which 61 were stone or brick and the other 39 were of timber. Another stimulus to development was the increasing rate at which town allotments became available as freehold; following the conversion of town leases to grants through purchase or payment of quit rent. On 5 March 1850, the boundaries of Newcastle were gazetted (Higginbotham 2013 Volume3:61-62).

An important source from this period is John Armstrong's 1830s Plan of the Town of Newcastle in New South Wales. Armstrong was a surveyor who produced a highly detailed map of Newcastle stretching across the new government town to the AA Co. grant. The map provides precise detail of all extant buildings and streets in the town at the time, including the 'original sandy shoreline' and 'high water mark' just north of current Bond Street and Stevenson Street (refer to **Figure 3.8**). The 1830s plan is described as being a

Plan of the Town of Newcastle in New South Wales, showing its present State with part of the adjoining County and The Coal Works of The Australian Agricultural Company, from a Careful Survey in 1830, by Jn. Armstrong

The plan shows the location of the 'Present Govt Coal Pit' and what is likely a residential building indicated at the southern end of the Stage 4 area (refer to **Figure 3.8**).

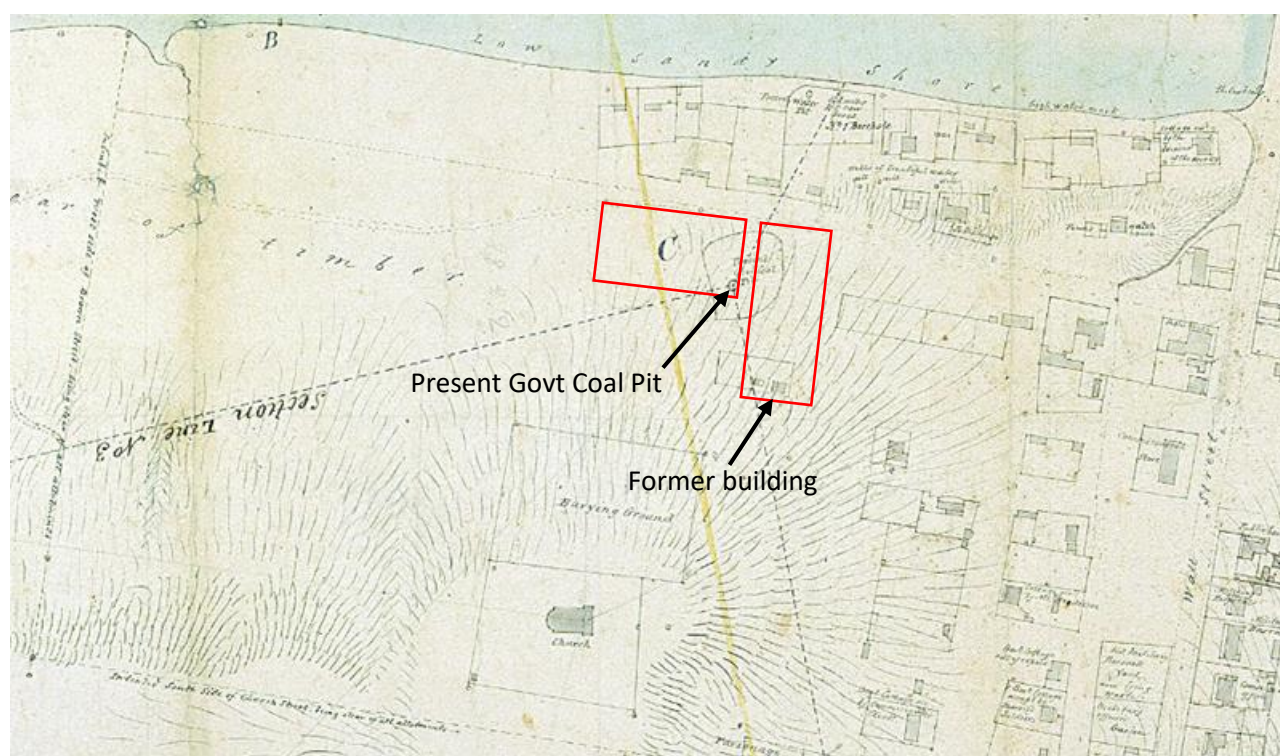


Figure 3.8 Detail of Armstrong's 1830s Plan of Newcastle in NSW

Detail illustrates the nature of development at the time from Watt Street in the east to what became Brown Street in the west – effectively the limit of the town. Approximate location of Stage 3 and 4 areas outlined in red. Note the location of the 'Present Govt Coal Pit' and what is likely a residential building indicated at the southern end of the Stage 4 area.

Source: National Library of New Zealand

3.4.1 The AA Co. and early industry

The arrival of the AA Co. and the development of steam navigation for Newcastle had a significant role in Newcastle developing both commercially and residentially.

The AA Co. was established in 1824 by an Act of the British Parliament and brought stability and efficiency to Newcastle's coal industry. Although the Company was granted one million acres with the primary purpose of producing wool, the AA Co also entered the coal industry with the intention of exporting coal to India for use by the steamers of the east India Company. Steam ships had created the first significant commercial demand for coal. After 1830 government mine works ended in the city and by 1831 convicts and free labour were working for the AA Co., which had a monopoly over the mining industry until 1847. The British Government had allowed the company to select 2000 acres of land in NSW for coal mining. The AA Co. selected the land on the western boundary of Newcastle, the eastern boundary being near Brown Street, using land set aside for the future expansion of the town. William Croasdill, the Manager of the AA Co. purchased several allotments, in the 1850s, close to the AA Co's land including lot 137 on the corner of Hunter and Perkins Street. The company's extensive Crown grants included lands close to Newcastle that have since been developed into the present day suburbs of Bar Beach, Cooks Hill, Hamilton, Broadmeadow, and parts of the Newcastle CBD and The Hill. It was only after 1853 that the AA Co. commenced to subdivide and release these areas of its grant.

The early pioneer industries of the penal settlement were slow to reappear after the relocation of the settlement to Port Macquarie in 1823. The AA Co. also attempted to manufacture salt in Newcastle in order to utilise small coal considered unsaleable. These saltworks failed.

The AA Co also established an engineering workshop at the eastern end of its Newcastle grant to service its collieries. In addition, the development and increased use of steam navigation not only had a positive impact on the coal mining industry but also on fishing and dairy farming. Gregory Blaxland, who had a well-established salt manufacture on his Newington Estate on the Parramatta River, also attempted to establish a new salt works close to the early government mines on Signal Hill in Newcastle. These works were abandoned soon after coming into production.

In 1848 the Dangar Brothers opened possibly the first successful meat canning factory in Australia at Honeysuckle Point to improve the returns on their pastoral estates. The factory successfully produced canned meat for export to the United Kingdom for use by the Royal Navy until around 1853 (Turner 1997:17).

3.5 Development and Expansion (1853 - 1900s)

3.5.1 AA Co. Land

The population of Newcastle remained very low until the 1850s, with the industrial development of the area hampered by inefficient land transport and being hemmed in by the AA Co. grant (Suters 1997:2/2 and Higginbotham 2013 Volume 3:119). In 1836 there were 704 people and 40 houses. The majority of the population were convicts housed in the barracks located at the eastern end of the old settlement. Assisted migration of miners supported by the AA Co. stimulated growth of the town and by 1841 there were 193 houses (Turner 1997 14). Ludwig Leichhardt, the German explorer and scientist, visited Newcastle at this time and commented that:

Houses are going up all over the place, and I've no doubt that the little settlement will soon be a thriving town (Turner 1997 16).

This view is in stark contrast with the view of Joseph Parry, who in the Newcastle Sun 10 June 1921 describes Newcastle in 1859 as being:

...a few scattered shops and a solitary wharf (Docherty 1983:13).

The AA Co.'s monopoly of coal mining in Newcastle continued until 1847 when the Company agreed to abandon its protected position in the coal industry in return for the right to sell its estates. It is from this time that considerable expansion of mining, mineral processing plants and manufacturing industries began. New coal mines opened on the Burwood estate south of Newcastle and at Minmi, Wallsend, Tomago, Lambton and Waratah and villages appeared in each of these locations. These mines began to ship coal through the Port of Newcastle, contributing to its development and further fostering commerce in Newcastle. The Gold Rush of the early 1850s soon followed and it is from this period that the permanent residential population of Newcastle increased markedly from around 1,500 in 1856 to 50,000 in 1891. The rise in population led to the growth of the retail industry, hotels, banks, churches, newspapers, schools and colleges, and associated infrastructure like water supply and sewerage. Municipal government came in 1859, although it was not until 1884 that purpose built chambers were completed in Watt Street (Tanners 2007:30).

3.5.2 Reclamation

While the Dangar town plan is the core of the present day Newcastle central business district, large scale reclamation schemes have altered the shape of the Port of Newcastle. The original foreshore in the vicinity of the CBD was closer to present Hunter Street; which in a 1938 Newcastle Sun article titled 'When Hunter Street was a Sand Bed' is noted as being '*nothing but a bed of sand*' in 1857 (City Plan Services 2018). Hunter Street was not stabilised until reclamation of the harbour commenced.

The original shoreline followed the south side of Scott Street, crossed the present Newcastle Station site and approximately followed the line of Bond Street and Stephenson Place (Suters 1997:20). An 1846 plan of the City of Newcastle indicates the original location of the shoreline along the edge of present Scott Street (refer to **Figure 3.6**). The continuation of Hunter Street west of Perkins Street, the railway line and the wharf area were created by reclamation. The foreshore reclamation did not commence until the late 1840s/early 1850s to create a boat harbour and level road to provide access to the emerging wharves. The necessity of bringing the railway into the town centre in 1858 and building of wharves parallel to the line completed the reclamation project.

3.5.3 The City of Newcastle

The densest concentration of buildings in the late 1850s was in the central Newcastle area bound by Newcomen, Scott, Pacific and King Streets to the immediate east of the Project area. The Municipality of Newcastle was established in 1859 under the provisions of the Municipalities Act, 1858. The first printed edition of the official town map dates from 1860. The municipality became the Borough of Newcastle in 1867, under the provisions of the Municipalities Act, 1867. Newcastle was proclaimed a city in 1885 (Higginbotham 2013 Volume 3:119-122).

By the 1870s building activity in the CBD evolved around the wharves, railway, commercial enterprises and residential development, aided by private and government investment in the town in the 1870s and 1880s. The Newcastle Morning Herald in 1875 noted that:

...within the last five years this city has advanced considerably in the character of its architecture, and fine banking houses, public buildings and handsome places of business now adorn the town (Turner 1997:40).

The area around the former market reserve between Hunter and King Streets was developed by private retailers and council uses from the late 1860s. In 1858 the government invested heavily in building the railway station, a customs house in 1876, post office in 1873 (rebuilt in 1903), and court house (1890). Scott Street backing onto the railway line and town wharves was developed for wholesalers' warehouses and bond stores. The area east of Newcomen Street on Hunter Street was consolidated as the insurance banking district in the inter-war period (Tanners 2007:27).

As a result of the increasing demand for coal by the railways, ships and manufacturing in the Pacific region, inner city Newcastle and its surrounding mining towns grew to create an urban district with a population of over 50,000 people by 1901. This growth was made possible by the development of an efficient transport system based on steam railways, shipping and the construction of a port capable of handling a huge increase in quantities of coal. The output of the Newcastle district collieries grew from 54,000 tons in 1850 to 3,492,000 tons in 1900. Newcastle developed into the second city of NSW and the largest coal port in the southern hemisphere (Turner 1997 23).

3.5.4 Port of Newcastle and the Breakwater

The port of Newcastle developed along the southern shore of the Hunter River estuary through the nineteenth century. The deep water located at Newcastle led to the first wharf (Queens Wharf) being constructed at the end of present day Watt Street during the convict settlement. The physical condition of the port improved when the breakwater to Nobbys was eventually completed in 1846 after being initiated by Governor Macquarie in 1818 as Macquarie Pier. Later dredging works and the construction of underwater training walls further improved conditions at the port.

In 1866 it was decided to reconstruct the Southern Breakwater (former Macquarie Pier) using stone from a quarry in Waratah. An embankment was built from the Great North Railway so the stone could be brought by rail to the edge of the breakwater. Nobbys Head Railway comprised the extension to the Great North Railway along the breakwater out to Nobbys Head. Nobbys Head railway was utilised from approximately 1869 to transport ballast and large stones that had been brought by rail from the Waratah Coal Company quarry to assist the construction and strengthening of the breakwater to Nobbys Head and then out to Big Ben Reef (Turner 1994:6-7). Between 1875 and 1883 the breakwater was extended beyond Nobbys using the rail line along the breakwater to transport the stone. In 1896 the breakwater was further extended when the railway line was re-laid to allow the movement of stones weighing up to 30 tons (Turner 1994:6-7).

3.5.5 Transport System

The construction of the Great Northern Railway began in 1854 and the first stage between Honeysuckle Point station at Newcastle and east Maitland was opened by Governor Sir William Denison on 30 March 1857. The railway gradually extended through the Hunter Valley and into Northern NSW, reaching Tamworth 25 years later. Newcastle could now serve as the port of a rapidly expanding region. Private railways facilitated the transport of coal to Newcastle and within a decade mines had opened at Minmi, Wallsend, Lambton and Waratah (Turner 1997:27). Over the middle decades of the nineteenth century greater Newcastle developed as a series of outlying colliery and manufacturing villages encircling the town centre, which essentially functioned as the port for the export of coal.

The development of the railway system brought agricultural produce from the Hunter Valley, in addition to coal. The new rail system would eventually bring an end to the old river port at Morpeth and secure the future of Newcastle as a coastal and international shipping port. When the main coal wharves were gradually relocated to Carrington from 1878 (under construction from 1862 and finally completed in 1890) the wharves at the town centre became associated with general cargoes. The completion of the rail line to Sydney in 1889 further developed Newcastle's role as a major regional port and the rail system was also soon transporting imported manufactured goods. The importing of manufactured goods for distribution in Newcastle and the increasingly prosperous Hunter Valley and Northern Tablelands necessitated construction of large warehouses in areas close to the wharf and railway such as Scott Street (Tanners 2007:33).

In addition to the rail systems (both government and colliery owned) linking the outlying townships a variety of private horse drawn vehicles were used for transport from 1860 (lasting until 1932 in some places) and from 1887 the steam trams of the NSW Tramway Department were established in the area with Newcastle as the central point (Turner 1997:42).

The improved transport links enabled people to visit Newcastle for the shopping and entertainment, which developed along Hunter Street. Hunter Street and the many licensed hotels in its vicinity also catered for the needs of visiting seamen making their way up from the nearby wharves (Suters 1997:32).

3.5.6 Industry and Business

With the Great Northern Railway now linking up with the port, timber yards, joineries, engineering works and foundries began to develop along the foreshore. In addition, the presence of the railway also necessitated the development of maintenance facilities at Honeysuckle Point. These were in operation by 1862 and as part of a large rail yard complex were an important source of employment and provided business to the growing number of Hunter Street shops. The 1901 Newcastle Federal Directory listed more than 80 mechanical engineers, the majority of whom worked in the Newcastle CBD (Suters 1997:20).

William Arnott's biscuit factory (originally in Hunter Street, later moving to Union Street) and the Wood Brothers Castlemaine brewery (on Hunter Street) were the only large scale food manufacturers in Newcastle in the nineteenth century. Wholesalers continued to develop in the CBD in the proximity of the port. By the 1880s Newcastle had taken on the appearance of a prosperous and busy port city. Gray and Milton's Business Directory Almanac Diary and Year Book for 1885, a list of all businesses operating in the CBD, illustrates that Hunter Street, King Street and their cross streets were largely given over to retailing and commercial enterprises. The Hunter and King Street portion of the Newcastle CBD had become the retail centre of the region (Suters 1997:21). By 1900 there were 27 drapers in Newcastle, in addition to jewellers, milliners, furniture emporiums, refreshment rooms and over 100 hotels (Turner 1997:42). The largest retail stores, including Winn's (established 1878), Scott's (established in 1890 at the corner of Hunter and Perkins Street and Mackie's (1896), in addition to professional firms such as lawyers and bankers, found success at the eastern end of Hunter Street. The western end of Hunter Street attracted businesses such as Light's furniture store (1894) and a branch of the Sydney department store Marcus Clark and Co (Suters 1997 33).

In 1912 The Broken Hill Proprietary Company Limited (BHP), the Broken Hill silver, lead and zinc mining company, began preparations to commence iron and steelmaking in Australia and selected Newcastle as its site. In June 1915 the steelworks at Port Waratah were opened. The NSW government opened a State dockyard on Walsh Island in 1914, close to where the steel works later opened. With the decline in the demand for Hunter Valley coal after World War I, new places of employment were needed and by 1919 the dockyard and steelworks had a combined labour force of 7,300 people, transforming Newcastle from a coal mining centre to a steel city (Turner 1997:69).

The movement of the inner city population out of the city to new outlying suburbs following World War II resulted in the development of outlying shopping centres, the first of which was Stockland's development at Jesmond in 1964. Although the immediate future of the retail industry was in the suburban centres, millions of pounds were invested in the Hunter Street area, with new buildings being erected, older stores modernised and the Council parking in King Street (immediately to the south of the Project area) being constructed in 1962. Despite these investments trading figures declined from the mid 1960s. In 1968 Hunter Street accounted for 36 per cent of total retail sales in the region but by 1979 this figure had fallen to 21 per cent. Hunter Street was malled in 1971 in an attempt to reverse this decline (Suters 2007:34).

3.5.7 Entertainment

Entertainment has always had an important role in the commercial and residential development of Newcastle. There have been numerous hotels, theatres, public halls and cinemas throughout the city. The traditional centres of entertainment were the licensed hotels, with over 100 being established in the region by the end of the nineteenth century, 57 of which were located in the city centre (Turner 1997:48). Most of the hotels in the area of Newcastle's port catered for itinerant seamen, present in the Newcastle CBD as a result of the ships brought to Newcastle as part of the foreign coal trade.

The traditional form of entertainment for working class men was the licensed hotel of which there were over 160 in the region by the early 1890s. Most of these pubs in the city's portside area catered for itinerant seamen, there being 57 in the city, ten inclusive of the Great Northern, the city's premier hotel, in Scott Street, the closest street to the wharves (Tanners 2007:35).

The Miner's Tavern (former Crooked Billet – constructed in 1827 or 1828) was formerly located at present 5 Morgan Street within the Project area and was the terminus of the Newcastle to Maitland coach service in the 1860s. The Crooked Billet and the Rouse Hotel (formerly located on Hunter Street to the west of the Project area) were the earliest hotels established within the wider East End area.

In the 1950s plays were performed in the hotels, or in public buildings such as the Court House. The first theatre, the Victoria, was opened in 1852 in Watt Street, to the east of the Project area followed by the Royal (also in Watt Street) in 1863. The second generation of theatres were sited further west in closer proximity to the Hunter Street retail hub; the second Victoria in Perkins Street opened in 1876, the neighbouring Lyric in Thorn Street in 1915 (to the west of the Project area fronting Wolfe Street), and the former Strand in Hunter Street within the Project area (Tanners 2007:35).

3.5.8 Service Utilities

Fresh water springs in the vicinity of Watt Street influenced the siting of the first settlement in Newcastle and throughout the nineteenth century water flowing from the higher ground to the south replenished the wells the town depended on throughout the nineteenth century. Public wells in the vicinity of the former market place, on the north side of Hunter Street, contributed to the siting of the market reserve in this area. Water reticulation occurred in Newcastle following the completion of the Walka Water Works, located near Maitland, in 1887.

In 1877 William Clark, an English hydraulic engineer had been commissioned to design the Walka water supply scheme. In 1879 the government resumed land at Oakhampton, West Maitland and authorised the construction of the scheme there. In 1885 water was first supplied to Newcastle from a temporary pumping station on the Hunter River at Oakhampton. In 1887 the Walka Waterworks were in operation and pipelines were extended to Maitland and the Newcastle municipalities. Newcastle received the first treated water in 1887. In 1888 Morpeth and East Maitland were also connected to the supply. Water could now be reticulated from reservoirs in Tyrell Street and near the Obelisk on the corner of Wolfe and Ordinance Streets.

In 1888 Newcastle City Council began construction of stormwater drain pipes. Sewerage was also disposed of via this system until 1907 when the Newcastle Sewerage Scheme commenced and parts of Newcastle were connected to the sewerage system. In 1910 the first sewerage pumping station was constructed near the intersection of Hunter and Brown Streets (Suters 1997:22). In 1865 the Newcastle Gas and Coke Company was formed. In 1869 the company purchased its site in Parry Street from the AA Co. The electric telegraph reached Newcastle in 1861 and was run from the newly constructed Electric Telegraph Office in Hunter Street. The telegraph contributed a major role to the running of the coal trade from Newcastle. In approximately 1890, when telephones were introduced, the switchboard was also located in the Telegraph Office (Suters 1997:23).

Lambton Municipal Council was the first to install an electrical generating plant in the Newcastle area. Newcastle Municipal Council constructed a power plant in Tyrrell Street and commenced supply in 1891; providing electricity for street lighting (Higginbotham 2013 Volume 3:125). The Railway Department also produced its own electricity, but it also supplied the city from the Zaara Street Power Station from 1915 to 1976.

3.5.9 Residents of Newcastle CBD

By the 1880s the majority of the miners employed in the wider area lived in the surrounding mining townships and not the Newcastle CBD. As a result, the residents of inner-city Newcastle are more likely to have comprised people engaged in the service industries of the large port city and their families. The more prosperous residents constructed houses on The Hill, Cooks Hill and in Newcastle East.

3.6 Development of the Project Area

3.6.1 Early Development

The Project area is located in proximity to the western boundary of the 1804 established penal settlement; close to the limits of Wellington Street (now Hunter) and north of Wallis Street (now King) (refer to **Figure 3.4**). The northeast portion of the Project area is within the area identified by the AMP Review as having potential for archaeological evidence associated with the penal period of settlement; including convict huts (Higginbotham 2013 Volume 2:75) (refer to **Figure 2.4**).

When Henry Dangar laid out the Newcastle town plan in 1823 he established three new principal streets aligned east to west along the ridgelines (Hunter, King and Church Streets) and a number of intersecting cross streets including Wolfe Street. As discussed in **Section 3.4** Armstrong's 1830 plan provides precise details of all extant buildings in the town. The plan shows the 'Present Govt Coal Pit' and a structure in the southern portion of the Stage 4 development area (refer to **Figure 3.8** showing Armstrong's 1830 plan). The broader area has been cleared of timber and a pathway is indicated crossing the northern boundary of the Project area (refer to **Figure 3.8**).

Hunter Street is shown on early plans as only extending as far as Brown Street (refer to **Figure 3.9** and **Figure 3.10**).

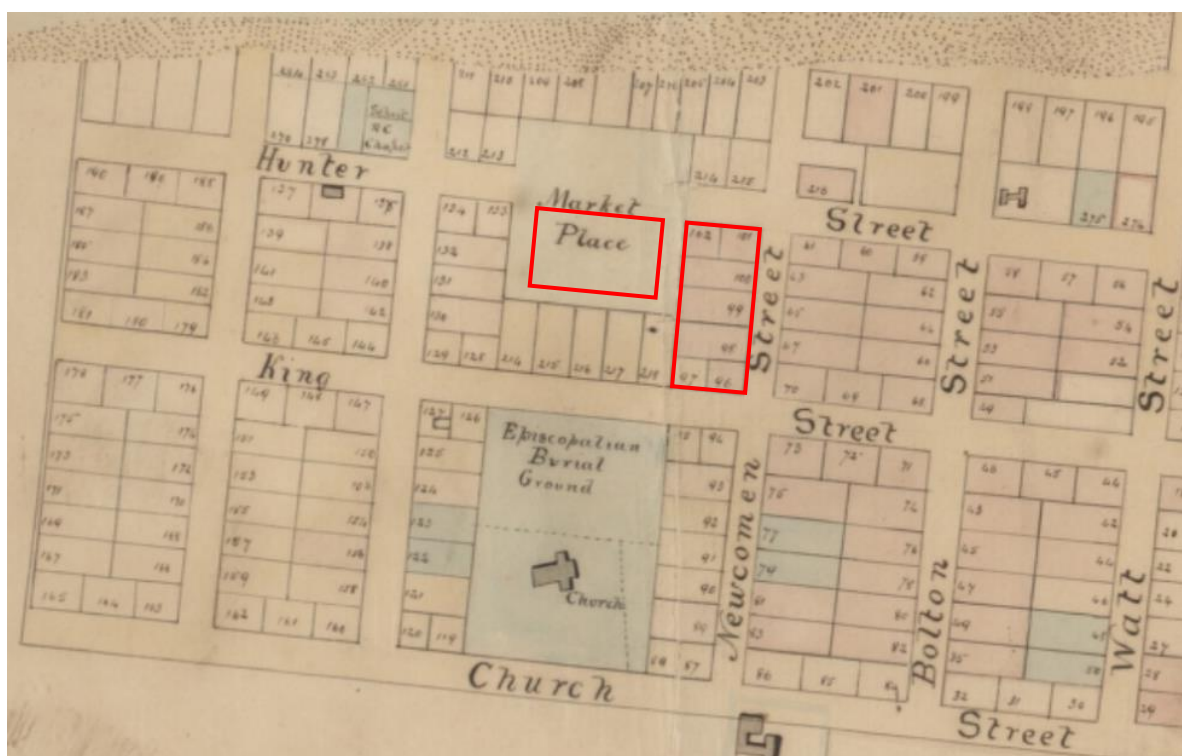


Figure 3.9 Detail of 1844 Plan of The Town of Newcastle and its Harbour

Approximate location of Stage 3 and 4 areas outlined in red.

Source: National Library of Australia. Map F 72



Figure 3.10 Detail of 1845/1846 Plan of the City of Newcastle

Approximate location of Stage 3 and 4 areas outlined in red. The majority of the allotments are indicated as having been granted, purchased or promised by this time but no structures are shown on this plan. Thorn, Morgan and Laing Streets are still not yet established. Note the location of the coal pit in the area reserved for a market place.

Source: Newcastle Region Library Local Studies Section LHMB 333.3/16

The proximity of Hunter Street to the harbour at this time, before the reclamation of the foreshore area, meant that it frequently flooded. A number of buildings constructed along the street are reported as having been built on stilts or pillars to avoid flooding. Hunter Street was likely much lower than it is today and several attempts were made to realign/re-level the street as a result of which some of the early shops were infilled to bring them up to new street levels (City Plan 2018). A butcher located near the corner of Hunter and Perkins Streets to the west of the Project area is reported to have

... got lower and lower as the street got higher and higher. In the end less than two metres of the shop front was showing above Hunter Street. The butcher installed steps to allow his customers to descend to the shop and he displayed his meat at pavement level and employed a young boy to keep the bush flies away from the carcasses (Barney 2013).

Following the establishment of Dangar's town plan all 190 allotments in the new town were numbered in a single running sequence with allotments 128 to 134 making up the Project area (refer to **Figure 3.9** and **Figure 3.10**).

Table 3.2 indicates the owners and tenants of the Project area up to the end of the twentieth century taken from the results of a historical title search which indicating the registered owners of the land from the original grantee.

Table 3.2 Owners and tenants of the Project area

Original Lot	Current Address and Lot/DP	Date of Purchase	Registered Owner and Occupation (where available)
96	66-74 King Street (3) Lot1 /819134	26.06.1841	William Wilton (Grantee)
		04.02.1850	Charles Bolton (Esquire)
		22.11.1854	Charles Bolton (Esquire)
		27.09.1915	John Browster (Admiralty Watchman)
		14.07.1958	Pearl Marie McCaffrey (Married Woman)
		30.04.1963	Christian James McCaffrey (Medical Superintendent)
		09.12.1972	Quasar Investments Pty Limited
		21.05.1976	Questar Securities Pty Limited
97	66-74 King Street (1) Lot 1/819134	16.04.1838	Susanna Nash (Grantee)
		20.12.1839	John Terry Hughes (Merchant)
		04.03.1847	Frederick Ebsworth (Merchant)
		31.12.1860	Thomas Adam (Land Holder)
		25.02.1867	Mortimer William Lewis
		27.02.1930	May Doody (Spinster)
		20.07.1964	Athena Marendy (Divorcee) Paul Marendy (Insurance Clerk)
		29.01.1991	Questar Securities Pty Limited
98	66-74 King Street (2) Lot 1/819134	26.06.1841	William Wilton (Grantee)
		04.02.1850	Charles Bolton (Esquire)
		22.11.1854	Charles Bolton (Esquire)
		02.09.1895	Sarah Rowell (Married Woman)
		15.05.1922	Thomas McLuckie & Norman McIndoe Morriss (Printer)
		15.06.1931	Charles Adam Charlton (Master Plumber)
		29.10.1973	Frederick Brabham Charlton (Retired Plumber)
		16.09.1976	Don Cosgrove & Associates Pty Limited
		31.05.1979	Questar Securities Pty Limited
	1 Morgan Street Lot 98/1098034	26.06.1841	William Wilton (Grantee)
		04.02.1850	Charles Bolton (Esquire)
		25.05.1916	George Eastham (Merchant)
		01.12.1920	Sidney Louis Cohen (Engineer)
		24.01.1958	Joseph Walsh (Clerk in Holy Orders)

Original Lot	Current Address and Lot/DP	Date of Purchase	Registered Owner and Occupation (where available)
	Newcomen Street Lot 96/109806822	26.03.1958	Trustees of the Roman Catholic Church for the Diocese of Maitland - Newcastle
		26.06.1841	William Wilton
		04.02.1850	Charles Bolton (Esquire)
		02.09.1895	Sarah Rowell (Married Woman)
		15.05.1922	Thomas McLuckie & Norman McIndoe Morriss (Printer)
		21.05.1951	Newcastle Morning Herald and Miners Advocate Pty Limited
		30.06.1958?	Joseph Walsh Clerk in Holy Orders
		26.03.1958	Trustees of the Roman Catholic Church for the Diocese of Maitland - Newcastle
99	3 Morgan Street 1/723967	05.08.1870	Charles Bolton (Esquire)
		23.04.1895	23.04.1895 Sidney Elizabeth Geary (now Bode) (Married Woman)
		21.12.1930	James Ruttley (Colliery Proprietor)
		07.04.1937	John Leslie Adam (Clerk) Henrietta Elizabeth Ruttley (Widow)
		14.02.1938	John Leslie Adam (Clerk)
		18.08.1947	Trustees of the Roman Catholic Church for the Diocese of Maitland - Newcastle
	22 Newcomen Street Lot 1/331535	05.08.1870	Charles Bolton (Grantee)
		23.04.1895	Sidney Elizabeth Geary (Married woman)
		02.09.1895	Sarah Rowell Charles Walter Rowell Elizabeth Annie Harris Stella Mary Rowell Alfred Ernest Rowell Minnie Lindsay Carpenter
		22.11.1926	Thomas McLuckie & Norman McIndoe Morriss (Printer)
		23.05.1935?	Norman McIndoe Morriss (Printer)
		20.05.1935?	The Adult Deaf and Dumb Society of New South Wales
		26.07.1984	Bruhhold Pty Limited
		12.05.1987	Seabloc Pty Limited
		15.12.1998	Toheba Pty Limited
		01.06.1998	Bryan Vincent (Newcastle) Pty Limited
	22 Newcomen Street Lot 2/33153522	05.08.1870	Charles Bolton (Grantee)
		23.04.1895	Sidney Elizabeth Geary (Married woman)

Original Lot	Current Address and Lot/DP	Date of Purchase	Registered Owner and Occupation (where available)
		02.09.1895	Sarah Rowell Charles Walter Rowell Elizabeth Annie Harris Stella Mary Rowell Alfred Ernest Rowell Minnie Lindsay Carpenter
		22.11.1926	Thomas McLuckie & Norman McIndoe Morriss (Printer)
		23.05.1935?	Norman McIndoe Morriss (Printer) John O'Toole (Secretary) Frederick James Cane (Accountant)
		27.05.1951	The Newcastle Morning Herald and Miners' Advocate Pty Limited
		30.06.1958	Joseph Walsh (Clerk in Holy Orders)
		20.10.1958	Trustees of the Roman Catholic Church for the Diocese of Maitland
100	7 Morgan Street Lot 100/1098095	30.01.1843	William Page (Grantee)
		26.01.1849	Charles Bolton
		15.02.1849	Elizabeth Bolton (Married Woman)
		21.12.1920	James Ruttlely
		18.08.1947	Trustees of the Roman Catholic Church for the Diocese of Maitland - Newcastle
	16 -18 Newcomen Street SP66170	30.01.1843	William Page (Grantee)
		26.01.1849	Charles Bolton
		15.02.1849	Elizabeth Bolton (Married Woman)
		02.09.1895	Sarah Rowell (Married Woman)
		15.05.1922	Thomas McLuckie & Norman McIndoe Morriss (Printer)
		19.10.1931	Norman McIndoe Morriss (part) (Printer)
		03.07.1935	Norman McIndoe Morriss (remaining part) (Printer)
		17.12.1986	Norman Morriss Pty Limited
		29.03.1993	Vicar No. 2 Pty Limited
		20.07.1999	Dowco Pty Limited Mariai Pty Limited Martin Smith Thomas Michael Almond Scott Oxley McKenzie
		16.08.2001	Proprietors of Strata Plan 66170
101	105-107 Hunter Street Lot 1/77846	30.09.1856	Simon Kemp (Grantee)
		6.01.1857	George Mitchell (Merchant)
		19.07.1876	Mary Ann Matilda Mitchell

Original Lot	Current Address and Lot/DP	Date of Purchase	Registered Owner and Occupation (where available)
		1909	1909 Emily Mitchell & Louisa Mitchell (Spinsters)
		23.12.1915	Louisa Mitchell (Spinster)
		06.07.1944	Arthur Alexander Sproull (Retired Chemist)
		16.10.1950	John Douglas Kelley (Clerk)
		30.09.1955	Gibb and Beeman Pty Limited
		28.08.1959	Chic Salon (N.S.W.) Pty Limited
		20.12.1965	Woolworths Properties Limited
		06.06.1969	Chic Properties Pty Limited
		31.05.1990	Michael John Rundle
		15.01.1991	Michael John Rundle Gary Anthony Rundle
	103 Hunter Steet SP67009	30.09.1856	Simon Kemp (Esquire)
		06.01.1857	Atkinson Alfred Patrick Tighe Store (Keeper)
		23.07.1860	Walter Henry Scully (Tailor)
		03.11.1873	Elijah Hart (Gentleman)
		13.01.1874	George Gardner (Gentleman)
		1894	Mary Webb Jane Gardner
		19.05.1913	Katherine (or Kate) Lloyd (Married Woman) Alice Jane Pedley (Married Woman)
		21.05.1914	Castlemaine Brewery and Wood Brothers and Company Newcastle
		19.11.1921	Tooth & Co Limited
		18.02.1925	Gerald John Levey Tobacco Merchant)
		16.10.1959	G.Levey Pty Limited
		13.02.1980	Leyeva Pty Limited
		26.07.2001	Menachem Mizrahi Gabrielle Mizrahi
		13.02.2002	The Owners – Strata Plan 67009
102	111 Hunter Street Lot A/388647	05.03.1855	Simon Kemp (Esquire)
		02.05.1860	Mary Ann Kemp
		13.08.1909	Mary Stella Storey Married (Woman) Elizabeth Frances Parnell (Spinster)
		16.08.1929	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) John Griffiths (Solicitor)
		15.02.1935	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) John Griffiths (Solicitor) Valentine Clifford Nash (Bank Manager)

Original Lot	Current Address and Lot/DP	Date of Purchase	Registered Owner and Occupation (where available)
		08.01.1936	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) Archibald Aloysius Rankin (Solicitor) Francis Stewart Storey (Insurance Agent)
		11.05.1943?	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) Francis Stewart Storey (Insurance Agent) Doris Margaret Hogan (Married Woman)
		01.04.1943?	The Newcastle Hospital Trustees of the Church Property for the Diocese of Newcastle Henry Sydney Parnell Storey (Insurance Manager) Francis Stewart Storey (Insurance Agent) Herbert Maxwell Storey Gentleman Austen Douglas Storey (Merchant) Sydney Bruce Storey (Grazier) Walter Alan Storey (Accountant)
		23.11.1954	William John Coote (Jeweller) Australasian Conference Association Limited
		25.09.1990	Edcroft Pty Ltd
		24.05.1993	Gunwan Kartawardana Kartika Ratnasari
	109 Hunter Street Lot B/388647	05.03.1855	Simon Kemp (Grantee)
		02.05.1860	Mary Ann Kemp
		13.08.1909	Mary Stella Storey Married (Woman) Elizabeth Frances Parnell (Spinster)
		16.08.1929	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) John Griffiths (Solicitor)
		15.02.1935	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) John Griffiths (Solicitor) Valentine Clifford Nash (Bank Manager)
		08.01.1936	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) Archibald Aloysius Rankin (Solicitor) Francis Stewart Storey (Insurance Agent)

Original Lot	Current Address and Lot/DP	Date of Purchase	Registered Owner and Occupation (where available)
		11.05.1943?	Henry Sydney Parnell Storey (Insurance Manager) Austen Douglas Storey (Merchant) Francis Stewart Storey (Insurance Agent) Doris Margaret Hogan (Married Woman) Walter Alan Storey (Accountant)
		23.11.1954	Mick Simmons Limited
		02.04.1962	Fletcher Jones (Central Coast) Pty Limited
275 (215)	92 King Street Lot 1/41290	Pre 1981	Formerly part of Laing and Thorn Streets
		20.02.1981	Newcastle City Council
	92 King Street Lot 275/59039	13.04.1841	Simon Kemp
		22.11.1841	Samuel Wright
		20.01.1842	Job Butler Hudson
		04.11.1909?	Arthur Ernest Hudson (Agent) Herbert Cecil Hudson (Gentleman)
		25.10.1909	Arthur Ernest Hudson (Agent) Walter Thomas Hudson (Gentleman)
		09.07.1920	Walter Thomas Hudson (Gentleman) Job Butler Hudson (Gentleman) Margaret Johanna Hudson (Widow)
		31.01.1930	Walter Thomas Hudson (Gentleman) Ernest Arthur Hudson (Motor Painter)
		22.02.1931	Council of the City of Newcastle
276 (216)	92 King Street Lot 276/1080615	08.03.1841	John James Galloway (Grantee)
		29.09.1842	William Croasdill (Esquire)
		16.11.1842	Martin Richardson (Builder)
		18.05.1931	Newcastle City Council
277 (217)	92 King Street Lot 277/1080614	13.04.1841	Thomas Buxton (Grantee)
		02.09.1861	Jane Ludlow
		23.08.1912	William Joseph Readwin (Sign Writer)
		30.11.1931	Newcastle City Council
	92 King Street Lot 27/1080612	13.04.1841	Thomas Buxton (Grantee)
		02.09.1861	Jane Ludlow
		23.09.1910	Laura Caroline Birrell (Married Woman)
		05.03.1920	Charles Edwin Church (Solicitor)
		18.10.1926	George Emil Sanderson (Master Stevedore)
		04.12.1931	Newcastle City Council
	92 King Street 77/1080613	13.04.1841	Thomas Buxton (Grantee)
		02.09.1861	Jane Ludlow
		23.09.1910	Laura Caroline Birrell (Married Woman)

Original Lot	Current Address and Lot/DP	Date of Purchase	Registered Owner and Occupation (where available)
		24.03.1921	William Henry Lane (Merchant) Christina Matilda Lane (Married Woman)
		22.08.1923	William Lievesley Nickson (Medical Practitioner)
		24.03.1960	Newcastle City Council
Market Reserve	121 Hunter Street Lot 31/864001	Pre 1866	Crown land dedicated for Markets
		1866	Council of the City of Newcastle
		06.04.1979	Newcastle City Council
		23.01.1990	Thelstono Pty Limited
		14.10.1993	Sarrun Pty Limited
		06.09.2007	Oyl Pty Limited
	137 Hunter Street Lot 32/864001	Pre 1866	Crown land dedicated for Markets
		1866	Council of the City of Newcastle
		06.04.1979	Newcastle City Council
		23.01.1990	Thelstono Pty Limited
		14.10.1993	Sarrun Pty Limited
		06.09.2007	Oyl Pty Limited

3.6.2 Government Coal Mine Shaft

A government coal mine shaft dating to the early nineteenth century is known to have been located in the Project area in the vicinity of the former market reserve to the east of Thorn Street. The mine shaft is shown on a number of early maps, however the exact location of the shaft is unclear as a result of differences with the early maps. The coal shaft is likely to have been used until 1830 when government mine works ended in the city centre. The coal mined from this pit may have first been discovered in 1797 during Lieutenant Shortland's search for escaped convicts. The 'Market Square Coals' are reported by Huntington, in an account prepared for a court appearance (noting that the account prepared by Huntington has numerous historical errors), to have been raised in 1801:

On June 14th 1801, she was loaded with 'Freshwater Bay coals', The mine being on what is now the Market Reserve (Huntington nd).

The 1997 AMP discusses:

Several maps indicate an old government coal mine shaft in the vicinity of the Market, but disagree about the exact location of the pit. The most likely position is just north of Laing Street, near Thorn Street, or (less likely) in Laing Street itself (Suters 1997).

The 2013 NAMP Review discusses:

The 'Present Gov[ernmen]t Coal Pit' was located on the northern end of this block indicating either mining by government or by the Australian Agricultural Company (Higginbotham 2013).

Figure 3.11 and **Figure 3.12** provide overlays of the 1830 Armstrong map and 1854 plan of Newcastle with an aerial image indicating the location of the former mine shaft according to the early mapping.

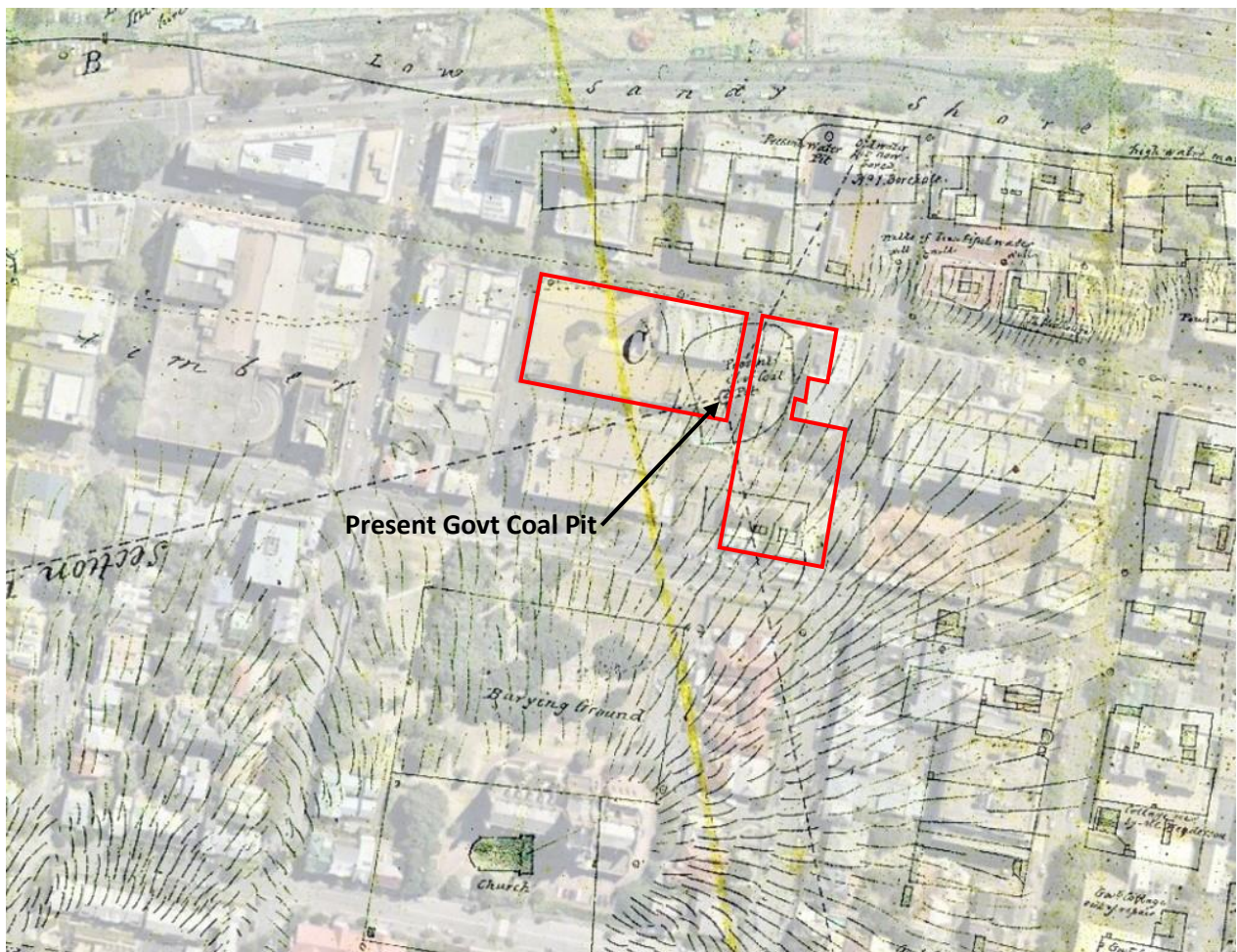


Figure 3.11 **Overlay of Armstrong's 1830 map**

Note 'Present Gov[ernmen]t Coal Pit'. Location of Stage 3 and 4 areas outlined in red.

Source: National Library of New Zealand



Figure 3.12 Over lay of 1854 Plan of the City of Newcastle
 Note Old Coal Pit. Location of Stage 3 and 4 areas outlined in red

Source: Newcastle Regional Library Local Studies Section

An 1850 date sketch of the City of Newcastle shows the area to the north of Christ Church Cathedral as being sparsely developed; with denser development concentrated around Watt Street to the east and along the harbour front (refer to **Figure 3.13**). The sketch shows the land to the north of the Cathedral as sloping steeply down to the harbour with no obvious development with the potential exception of disturbance in the area of the coal pit.



Figure 3.13 1859 Sketch of the City of Newcastle

The Cathedral is shown centre image. A large shaded area indicates the potential area of the coal pit/mine (indicated with red circle)

Source: Mitchell Library – Small Picture File – Newcastle

3.6.3 Town Development and Expansion from 1850s

By the mid nineteenth century this area of Newcastle formed part of the central business area of the city. A series of plans dating to the 1850s indicate that there was a substantial growth in the development of Newcastle by this time, with buildings shown on a number of the allotments in the Stage 4 portion of the Project area (refer to **Figure 3.14** and **Figure 3.15**). One of which is likely the former Crooked Billet; a hotel potentially constructed in 1827 or 1828 (refer to **Section 3.6.5**).

Note the buildings within the Stage 4 portion of the Project area; including what is likely The Crooked Billet. Approximate location of Stage 3 and 4 areas outlined in red.

Source: Crown Plans - Land and Property Information / Higginbotham 2013



Figure 3.15 Detail of 1854 Plan of the City of Newcastle

Note the buildings within the Stage 4 portion of the Project area; including The Crooked Billet. Approximate location of Stage 3 and 4 areas outlined in red.

Source: Newcastle Regional Library – Local Studies Section LHMB 333.3/90

An 1875 'aerial' lithograph of Newcastle and an approximately 1880s dated engraving of Newcastle illustrate the dense built nature of the Project area at this time (refer to **Figure 3.16** and **Figure 3.17**). The Market Place has been subdivided and built on with additional street alignments formed (Thorn and Morgan Streets); resulting in the creation of the city block. There are now buildings along all street frontages (including the Newcastle Borough Markets building), in addition to structures in the centre of the Project area behind the street front buildings.



Figure 3.16 Detail of 1875 dated lithographic view of Newcastle

Approximate Project area outlined red.

Source: State Library NSW V1B_Newc_1870_79_1 and Higginbotham 2013

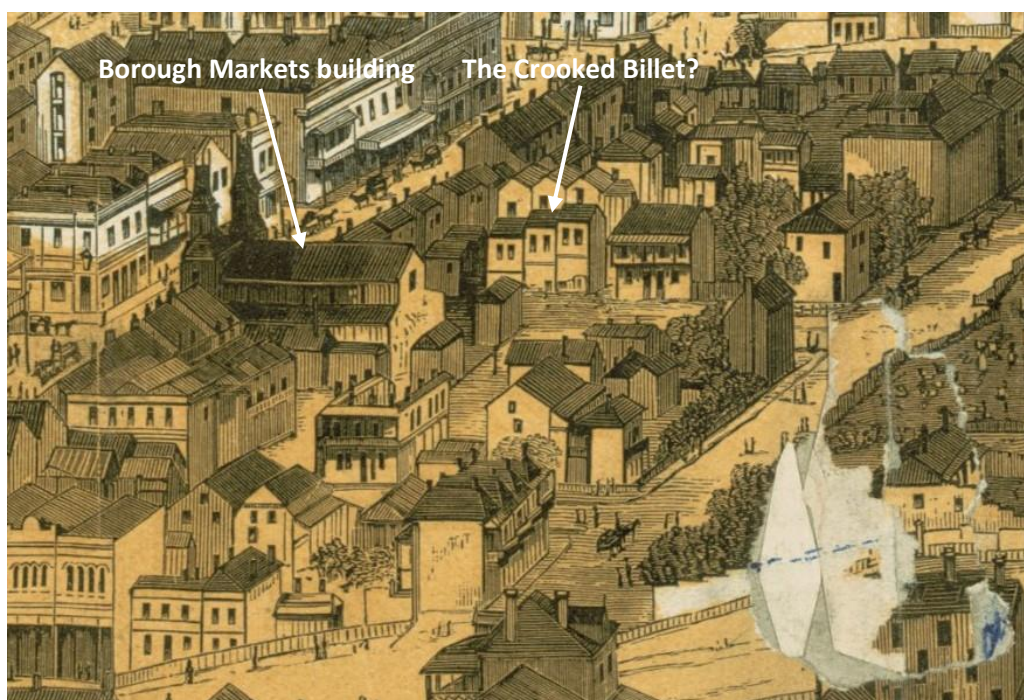


Figure 3.17 Detail of Gibbs Shallard & Co engraving of Newcastle, undated.

Approximately 1880s dated engraving showing the Project area.

Source: National Library of Australia nla <http://nla.gov.au/nla.obj-135857980>

1886 dated fire insurance plans of Newcastle by Mahlstedt & Gee (surveyors and draughtsmen) further show that area of the Project area was being well utilised following the commercial and industrial development of central Newcastle from the 1850s; within the confines of the town plan and system of streets established by Dangar. The 1886 plans include details of land owners and business proprietors named as at January 1886 (refer to **Figure 3.18**). The colour version of the 1886 plan indicates the number of storeys and construction material (the pink being brick or stone, yellow timber and green 'iron faced'), plus frontage measurement.



Figure 3.18 Detail of 1886 Mahlstedt & Gee colour plan of Newcastle

Pink shading indicates brick or stone construction, yellow timber and green 'iron faced'

Source: State Library of New South Wales

In 1890 the Survey Section of the Land Department was commissioned by the Hunter District Water Board to produce a series of large-scale plans of urban Newcastle (the 1890s Water Board plans), for planning purposes. The first plans were produced in 1894 and show detailed footprints of buildings present at the time (refer to **Figure 3.19**). Some of the plans were later revised to reflect an approximately 1920 footprint. The plans cover a large portion of Newcastle, from the east end as far west as Lambton, providing accurate information of all buildings (and other features such as wells and cisterns) present at the time (Russell Rigby 2019).

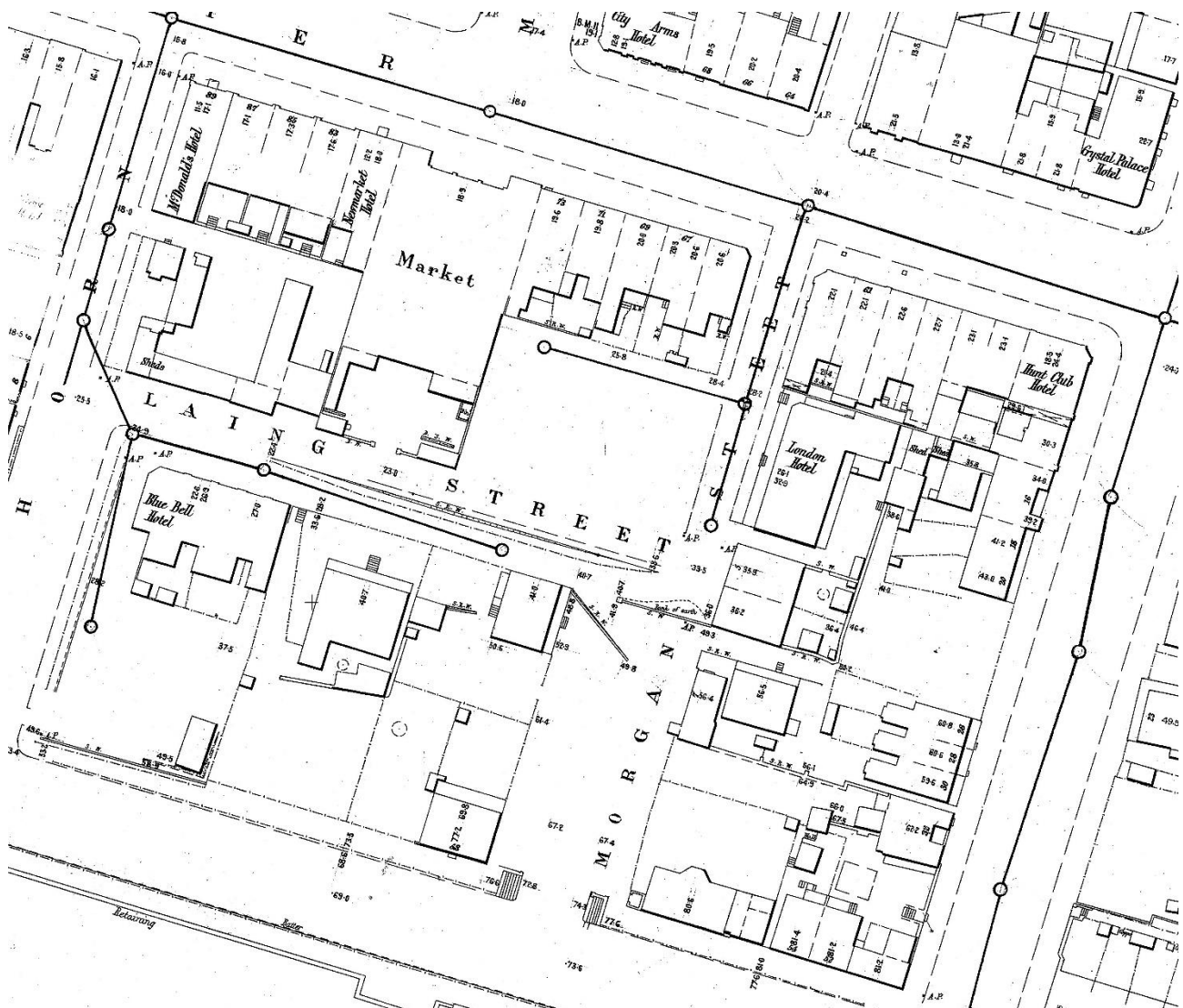


Figure 3.19 Detail of 1895-1896 Hunter District Water Board Plan Sheet 026

Detail shows all the buildings present within the Project area, including backyard cesspits (the smaller square structures and cisterns (circles). Alignments of utilities in the surrounding streets are also shown

Source: Cultural Collections, University of Newcastle

The Illustrated Sydney News, was a colonial newspaper that, during the nineteenth century, would provide news features and articles on the progress of various townships and cities across New South Wales. In some cases these features were accompanied with a spectacular engraving or lithograph; for example the Bird's-eye-view map originally published in the "Supplement to 'The Illustrated Sydney News,' June 27, 1889" (refer to **Figure 3.20**).

There are a number of photographs dating to the end of the nineteenth and early twentieth centuries that show Project area illustrating the commercial/retail focused nature of the area and the various buildings that were present (refer to **Figure 3.21** to **Figure 3.24**).

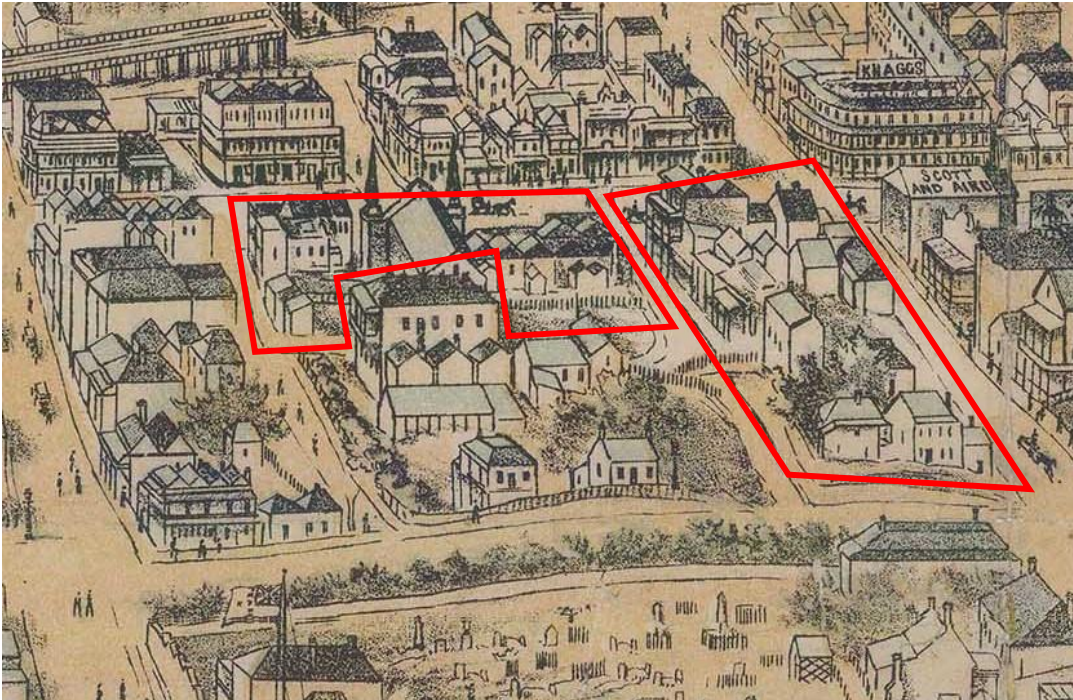


Figure 3.20 Detail of Newcastle in 1889

Source: Hunter Living Histories University of Newcastle. (Illustrated Sydney News 27 June 1889)



Figure 3.21 View up Newcomen Street from Hunter Street (approximately 1880s)

Source: University of Newcastle Cultural Collections

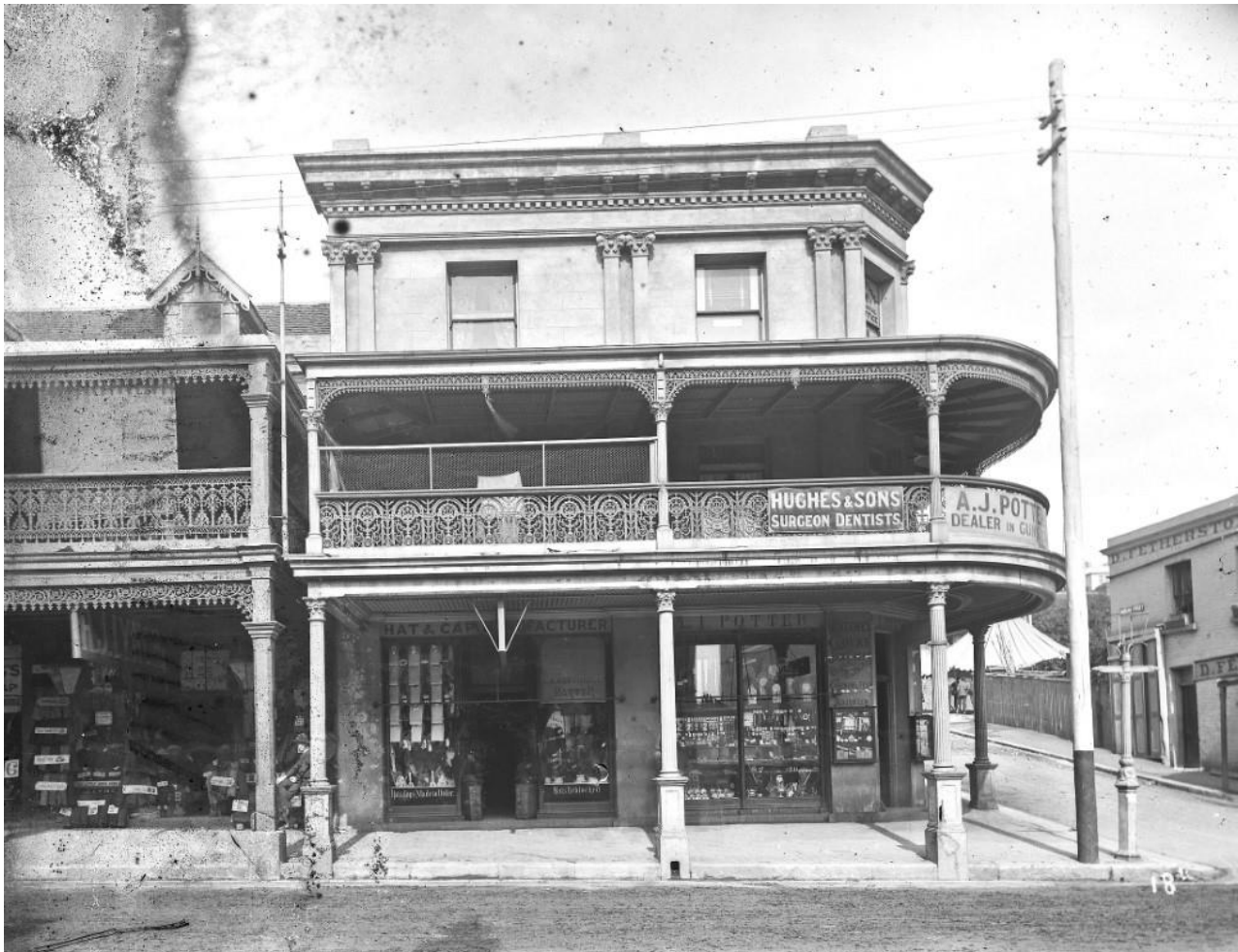


Figure 3.22 Potter's Jeweller, Hunter Street Newcastle, NSW (April 1891)

A Ralph Snowball photograph showing the building at 111 Hunter Street; at the corner of Hunter and Morgan Streets.

Source: University of Newcastle Cultural Collections



Figure 3.23 Scott's drapery store in Hunter Street, Newcastle
A 1897 dated Ralph Snowball photograph showing 109 Hunter Street.

Source: Hunter Photobank 001 002415



Figure 3.24 1938 Photograph showing 105 to 111 Hunter Street
Full title: *Jenifer Keyes, Ladies' Hairdresser, above Frances Ann Hunter St., Newcastle and Potter & Co., Watchmakers, Jewellers, and Opticians. 1938.*

Source: University of Newcastle Cultural Collections

3.6.4 Market Reserve

The Stage 3 portion of the Project area is directly related to the development of the Market Reserve and the Borough Markets (City Plan 2022). This portion of the Project area has been subject to substantial disturbance and development from the beginning of the nineteenth century.

The former market reserve, originally located between and including present Thorn and Morgan Streets, is likely to have remained a reserve until the early 1840s when three lots located between King and present Laing Streets were sold to S. Kemp, J.J. Holloway and T. Buxton (refer to **Figure 3.10** and **Figure 3.15**).

With the exception of the central lot, originally owned by Galloway which had a house on it by 1874, these three lots were not developed until the 1880s (note that these three lots are outside the Project area). In 1869 three blocks within the reserve (and within the Project area fronting Hunter Street) were granted to Newcastle Borough Council for markets and the remainder of reserve subdivided and sold. Thorn, Morgan and Laing Streets were established at this time, but not formally reserved until 1886.

The area reserved for a market place may have been used as part of a burial ground prior to the establishment of the town plan by Danger (refer to **Section 3.7**). Prior to the 1830s the coal pit was located there and until the late 1860s the area of the former market reserve appears to have been a waste ground. With the opening of the Borough Market in 1871 the Stage 3 portion of the Project area underwent numerous phases of use and construction (refer to **Figure 3.25** to **Figure 3.30**):

Pre-1820s - vacant land potentially utilised as part of a burial ground (refer to **Section 3.7**). Noting that, as discussed in **Section 3.6.2**, mining may have been being undertaken here as early as 1801.

Pre-1830s – coal pit.

1869 - granted to Newcastle Borough Council for markets.

1871 - Borough Markets opened with adjacent commercial buildings

1908 – Municipal buildings constructed alongside the Borough Markets building; replacing the earlier commercial buildings

1916 – Borough Markets demolished. Strand Theatre and adjacent constructed

1937 – Strand Theatre remodelled

1979 – Strand Theatre demolished and the current Market Square shopping arcade development constructed.



Figure 3.25 1859 Sketch of the City of Newcastle

The Cathedral is shown centre image. A large shaded area indicates the potential area and size of the coal pit/mine and any associated shaft top disturbances (indicated with red circle).

Source: Mitchell Library – Small Picture File – Newcastle



Figure 3.26 Borough Markets 75-77 Hunter Street, Newcastle, NSW (1887-1915)

A Ralph Snowball photograph of the 1871 Newcastle Borough Markets building.

Source: University of Newcastle Cultural Collections



Figure 3.27 Hunter Street, Newcastle, NSW, 21 January 1891

A Ralph Snowball photograph showing the Hunter Street frontage of the Stage 3 area (on right) with the central Borough Markets building.

Source: University of Newcastle Cultural Collections

The Strand – 1920s. (L R Tod Collection)



Figure 3.28 1920s Photograph of the former Strand Theatre

Source: Australian Theatre Historical Society.



Figure 3.29 The Strand Theatre, Hunter Street, Newcastle

1972 photograph of the later Strand Theatre.

Source: Hunter Photobank 047 000042



Figure 3.30 View of the corner of Hunter and Thorn Streets, Newcastle

1947 photograph showing the Strand Theatre and the former Municipal building on the corner of Hunter and Thorn Streets.

Source: Hunter Photobank 345 000076

3.6.4.1 Ralph Snowball

In 1887 Ralph Snowball established a photographic studio in the Newcastle Borough Market Building (refer to **Figure 3.31** to **Figure 3.32**). He likely vacated the premises prior to 1901 for a studio in New Lambton (Lachlan Wetherall).

Ralph Snowball was born in England and immigrated to Australia in 1879. He found work in mining but soon became a full time photographer. Snowball used glass negative photography to capture portraits, events and architecture. *'His work gives insight into Newcastle life in the late 1800s and early 1900s'* (Newcastle University Cultural Collections).

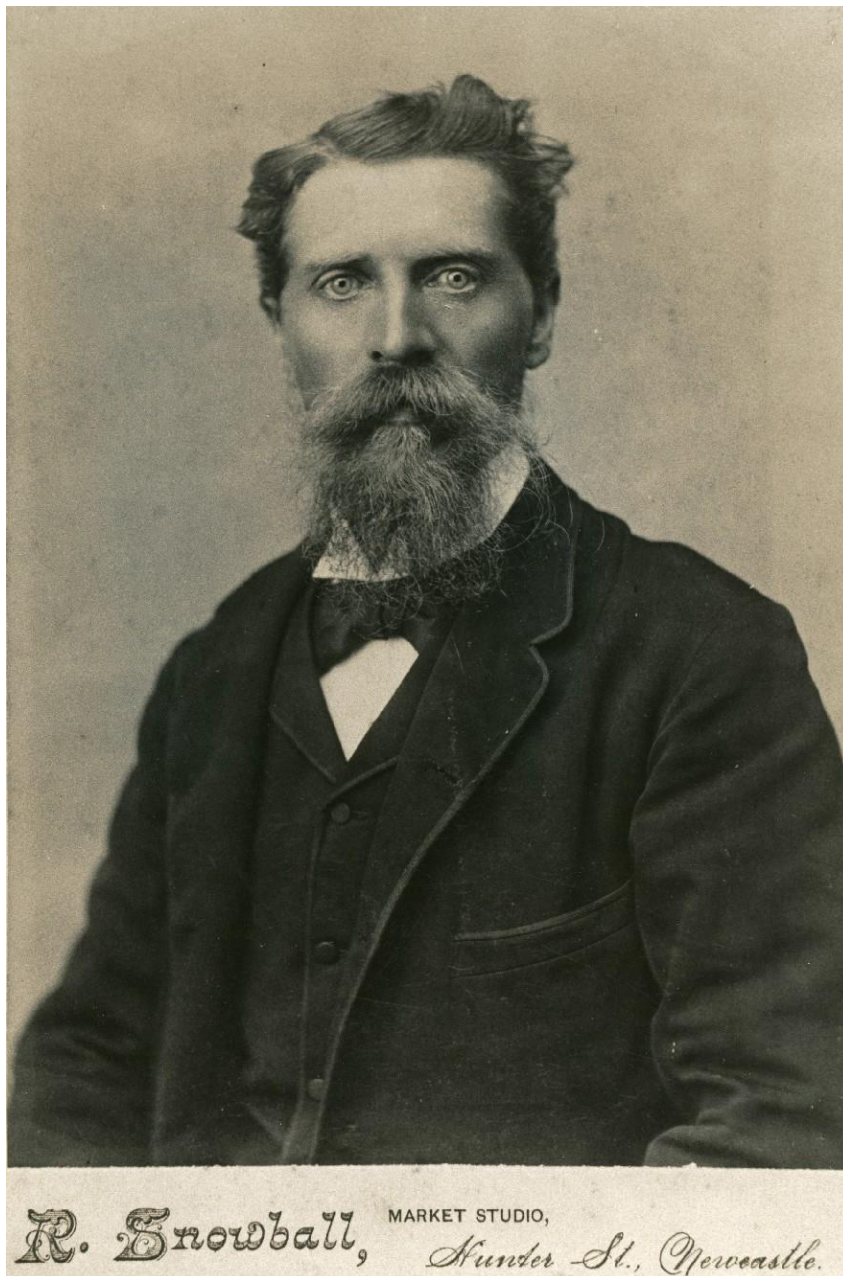


Figure 3.31 Ralph Snowball Portrait advertising the Market Studio

Source: Newcastle University Cultural Collections



Figure 3.32 Ralph Snowball with horse and wagon

Source: Newcastle University Cultural Collections

3.6.5 Hotels

The nineteenth century hotels within the Newcastle CBD area were popular with the early seafarers visiting the port of Newcastle and often ended up as boarding houses and hostels. Many had stables, outbuildings and yards with light industrial uses (for example blacksmith's shops) to the rear.

Table 3.3 summarises the names, dates and addresses of the hotels formerly within the Project area.

Table 3.3 Former Hotels

Hotel Name	Construction	Demolition	Original Lot	Address
The Crooked Billet (later Miners Arms/Shipwright's Tavern/London Tavern)	1827-1828	1960	100	5 Morgan Street
Northumberland Hotel	1869	1960s	11	143 Hunter Street (on corner of Thorn and Hunter Streets)
Newmarket Hotel	1869	1960s	13	133-135 Hunter Street

3.6.5.1 The Crooked Billet

The earliest hotel within the Project area appears to have been The Crooked Billet; likely formerly located in the current open courtyard to the north of St Marks Roman Chapel (5 Morgan Street). The hotel was later called The Miner's Tavern, The Shipwright's Arms, London Tavern Hotel and London Hotel.

The building may have been built in 1827 or 1828, however it does not appear on plan until the 1845/1846 Plan of the City of Newcastle within allotment 100 (refer to **Figure 3.33**). In the Sydney Gazette of 1829 there is a

...notice of a Sheriff's Sale of...that well frequented public house, the Crooked Billet' (Newcastle & Hunter District Historical Society 1950).

The Crooked Billet was initially operated as an inn by Frederick Dixon, however the building was also used as a temporary Customs House from 1837 into the early 1840s under the administration of Major Charles Bolton, Sub-collector of Customs. It wasn't until 1876 that a permanent customs house was constructed in Bond Street, to the northeast of the Project area. Henry Parkes, the noted nineteenth century premier of NSW, worked in the temporary customs house for a year in approximately 1840. Parkes worked as a tide-waiter in the Customs Department before setting up a business in Hunter Street for a short time as an ivory turner and importer of fancy goods, he later opened branches in Maitland and Geelong (Martin 1974).

In the mid 1840s the temporary customs house reverted back to an inn named The Miners' Arms operated by William Page and family. At this time the inn comprised a brick building with seven rooms and extensive stable. Although built back from Hunter Street (on present Morgan Street), there were no structures on this portion of Hunter Street at this time. In effect the inn fronted the main road of the time (Hunter Street). The inn was the terminus of the Newcastle and Maitland coach service, with Sam Smith's four horse coach (the Prince Albert) running four times a week from the Miner's Arms Hotel to the Northumberland Hotel in High Street, West Maitland. The coach also carried the Royal Mail (Newcastle & Hunter District Historical Society 1950:61).

The name of the inn changed again in the early 1860s to The Shipwright's Arms operated by Mrs Schmidt, who married Mr Peterson in 1869 and transferred the license of the Shipwright's Arms to a newly constructed building on Hunter Street. As a result, the old hotel in present Morgan Street reopened as The London Tavern operated by James Timmony. By the 1920s the building was being used as a boarding house trading variously as Northumberland House or The Burlington with about 30 people in residence. The building is reported to have had many historical associations with early Newcastle; it was here for example that the first meeting was held in 1861 to form the Newcastle School of Arts (Tanners 2007). In the 1950s it was thought to have been the oldest surviving building in Newcastle (Newcastle & Hunter District Historical Society 1950:61) (refer to **Figure 3.34** and **Figure 3.35**).

A 1953 article in the Newcastle Sun discusses The Crooked Billet as being:

...still occupied as a residential in Morgan St., Newcastle, associated with the early history of the city. Its last name as an inn was the London Tavern, but it began as The Crooked Billet in the 1820's. It is first mentioned in the records in 1829. In 1837 it temporarily became Newcastle's Customs House and the collector had in his employ a young clerk to become famous later as the Premier of N.S.W., Sir Henry Parkes, who in his career before attaining eminence had as many jobs as the late W. M. Hughes had in his day. The origin of the name can now only be surmised. Obviously 'The Crooked Billet' would not imply Indifferent accommodation, but the word 'billet' has many meanings, including a log of wood, and maybe in those days there was a dead tree stump in front of the inn, which was not then hemmed in by the buildings' of Hunter Street [From the Records of Mr. W. Goold] (The Newcastle Sun 1953).

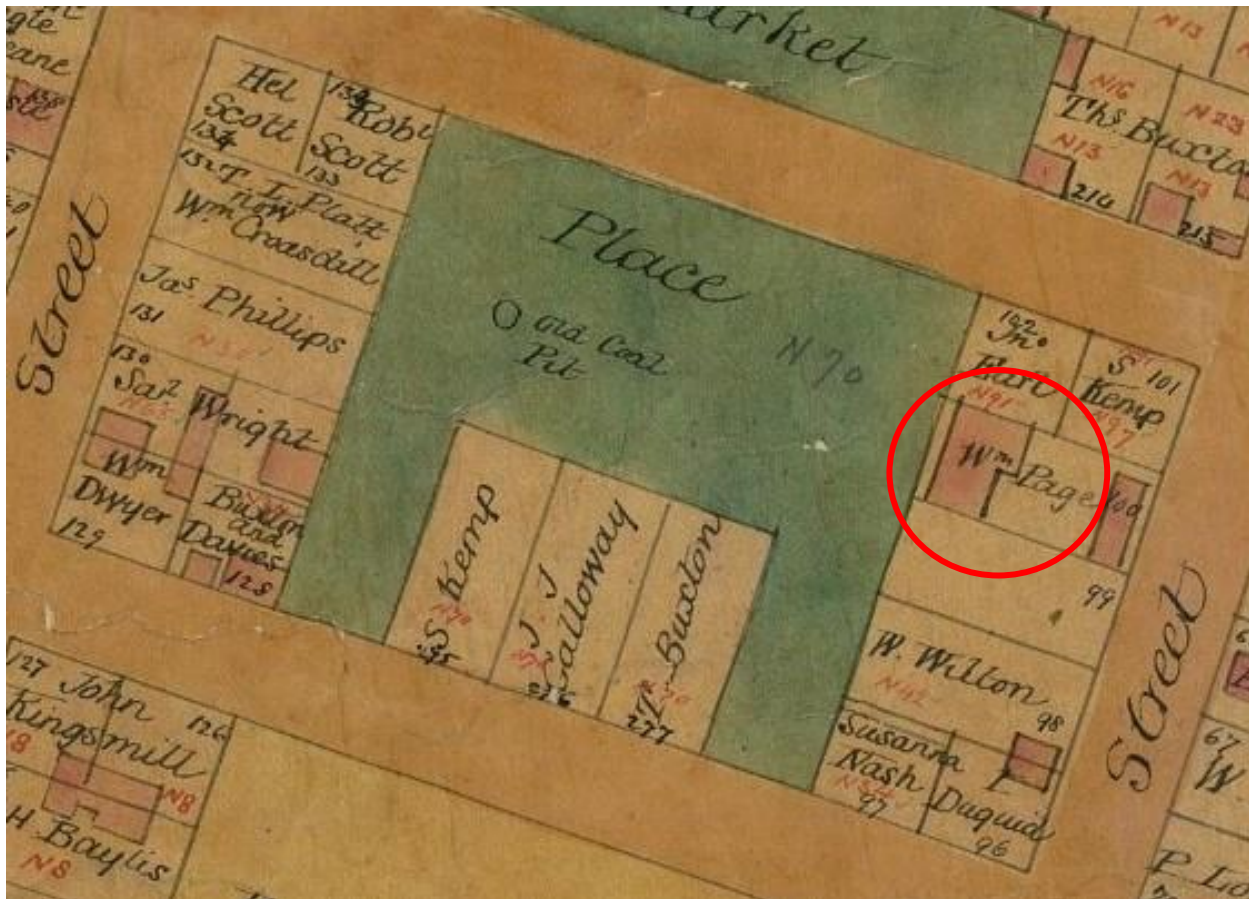


Figure 3.33 Detail of 1854 Plan of the City of Newcastle

Note what is likely The Crooked Billet (circled) within the then William Page owned allotment 100.

Source: Newcastle Regional Library – Local Studies Section LHMB 333.3/90



Figure 3.34 Undated Photograph – 3 Morgan Street

Photograph approximately dates to the 1940s and shows the building formerly located at 3 Morgan Street; likely originally the Crooked Billet.

Source: Mitchell Library – Small Picture File Newcastle

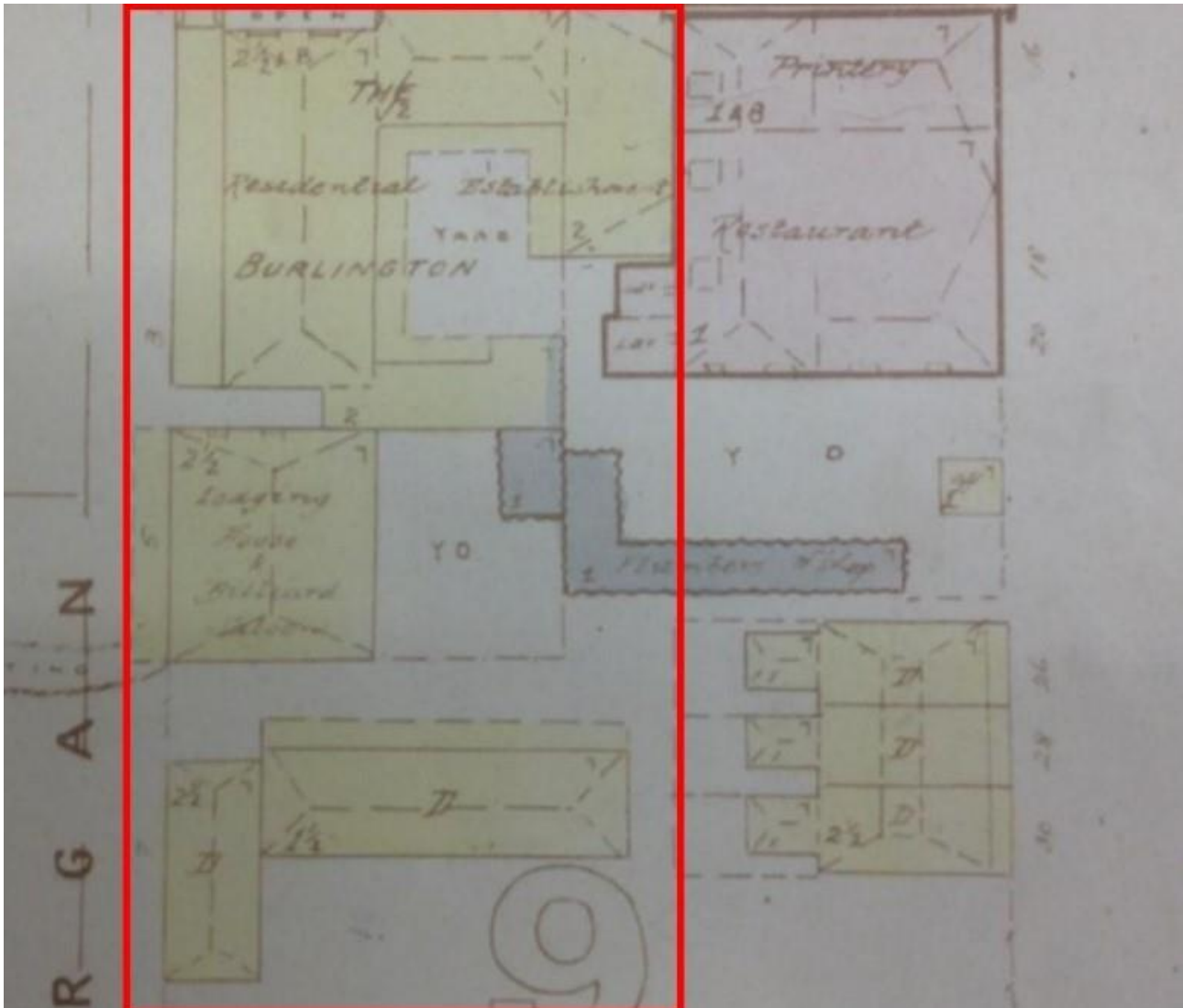


Figure 3.35 Approximately 1930s Plan of 3 Morgan Street (in red)

Plan shows the former Crooked Billet building operating as the Burlington boarding house (top of image).

Source: Newcastle Regional Library Local Studies (from City Plan 2022)



Figure 3.36 Hunt Club Hotel, Newcomen & Hunter Streets, Newcastle, NSW

An undated Ralph Snowball photograph of the Hunt Club Hotel at the corner of Hunter and Newcomen Streets. Note not part of the Project area.

Source: Newcastle University Cultural Collections

3.6.6 Retailers

In addition to the hotels the other establishments present within the Project area by the 1880s included:

Tailors

Boot Shop

Milner

Stables

Butcher

Clothiers

Council Property

Watch Maker

Draper

Grocer

Fancy Goods

Boarding Houses.

3.6.7 Water Retriculation

Following the establishment of the Walka Waterworks in 1887, piped water ran along Newcomen, Hunter, King, Wolfe and Perkins Streets, along Thorn Street from Hunter Street as far as Laing Street, and then along Laing Street and returning down Morgan Street to Hunter Street (refer to **Figure 3.37**).

In 1888 Newcastle City Council began construction of stormwater drain pipes. Sewerage was also disposed of via this system until 1907 when the Newcastle Sewerage Scheme commenced and parts of Newcastle were connected to the sewerage system (refer to Figure 3.38).

Newcastle City Council is reported to have undertaken works to form and maintain streets and also to make safe the sloping topography of the area (Tanners 2007:46). In 1880 a landslip destroyed a large portion of King Street and the stone walling which supported the street. The City Council instigated rebuilding under the direction of its engineer Mr Ellis. This work built up the old wall to the gradient of the street and erected a double flight of steps on the west side of the wall in Wolfe Street and the north side of King Street. The cause of the landslip was believed to have been poor drainage and to remedy this an oviform brick culvert was laid down the centre of Wolfe Street (Tanners 2007).

The oviform brick culvert was constructed along Wolfe Street to improve drainage down the naturally sloping land of the area. In addition to the early brick culvert along Wolfe Street and the water service pipes, stormwater and sewerage drains were constructed running down Morgan, Wolfe and Perkins Streets to outlets into the harbour. These early water supply, stormwater and sewerage drainage systems were constructed by Newcastle City Council prior to the formation of the Hunter District Water Supply and Sewerage Board in 1892.

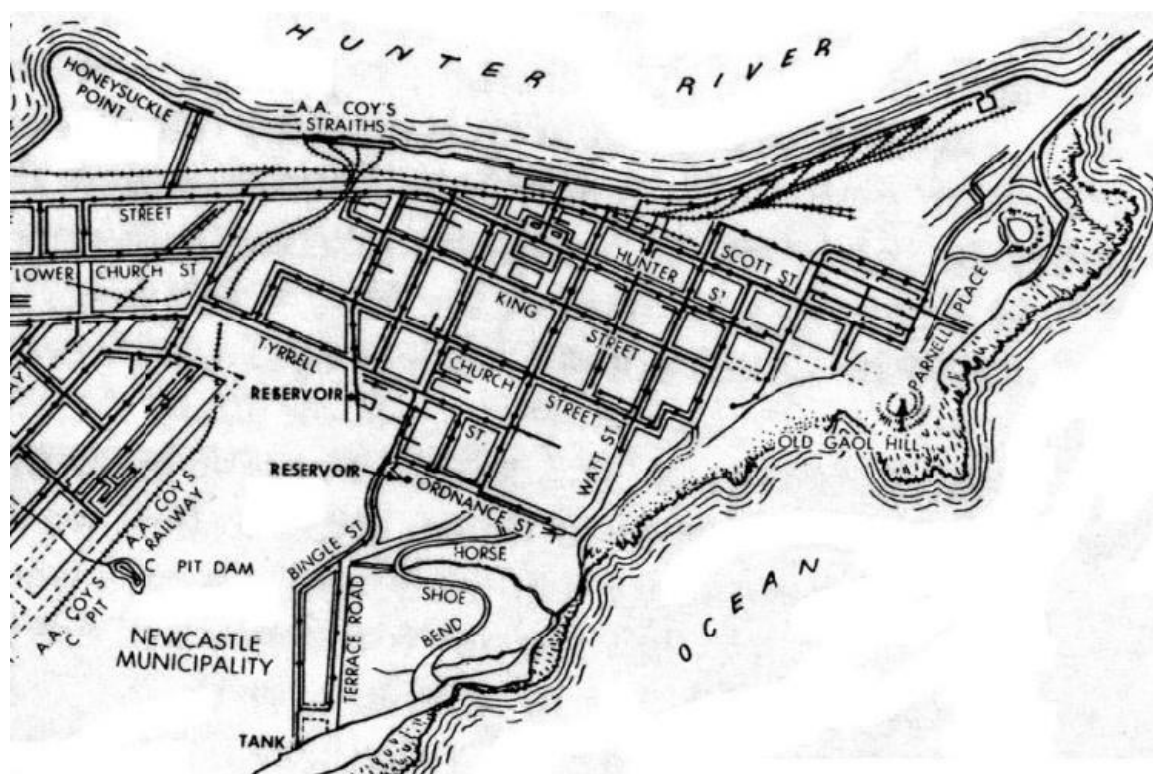


Figure 3.37 Detail of 1892 indicating locations of Water Pipes

Source: John W Armstrong Pipelines and People

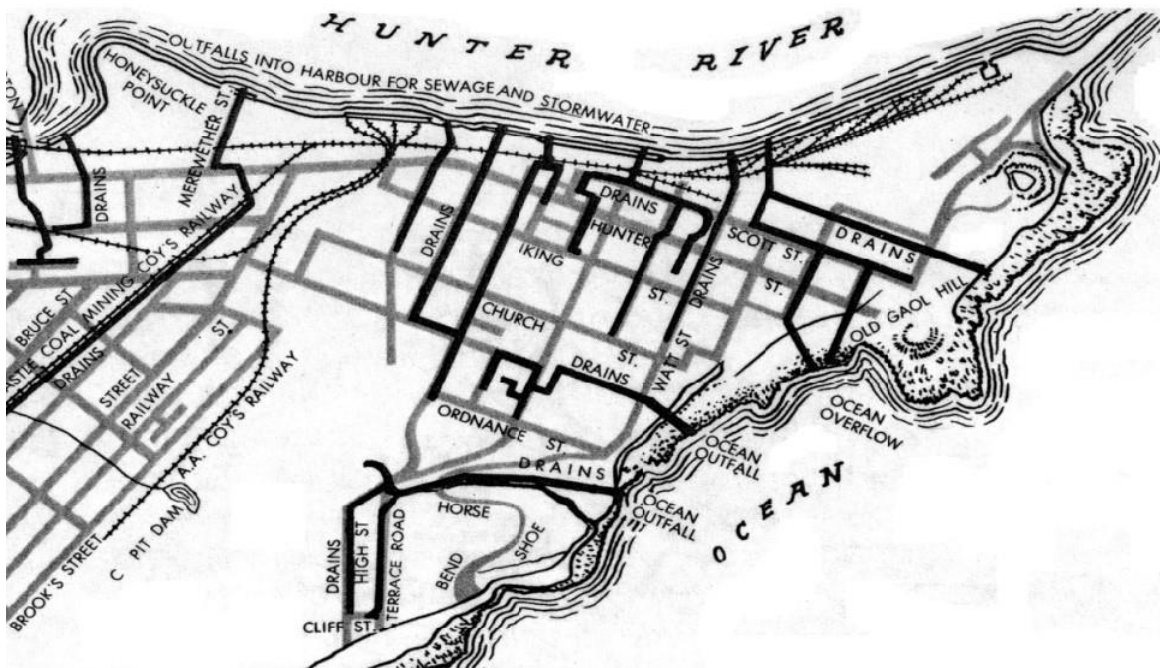


Figure 3.38 Detail of 1892 indicating locations of Stormwater and Sewerage Pipes

Source: John W Armstrong Pipelines and People

3.7 Former Market Reserve and Christ Church Cathedral Cemetery

3.7.1 Market Reserve

The former market reserve, originally located between and including present Thorn and Morgan Streets, is likely to have remained a reserve until the early 1840s when three lots located between King and present Laing Streets were sold to S. Kemp, J.J. Holloway and T. Buxton (refer to **Plate 3.10**). As discussed in **Section 3.6.2** prior to the 1830s a coal pit was located within the former market reserve. In 1869 three blocks within the reserve were granted to Newcastle Borough Council for markets and the remainder of reserve subdivided and sold. Thorn, Morgan and Laing Streets were established at this time, but not formally reserved until 1886. The Borough Markets remained until 1915 when they were demolished for the construction of the Strand Theatre.

Prior to 1869 the former market reserve appears to have been a waste ground that may have been used as a burial ground in the early nineteenth century. In 1915 the area was reported as being:

..a most unsightly piece of land and had previously been used as a burial ground – for blacks or whites is not certain – for in subsequent excavations many human skulls and bones were found. It was also for many years a very unsightly rubbish tip (NMH 22/9/1915).

It is not clear when or where the first European burials were made in Newcastle. An undated and unattributed Newcastle Anglican Diocese Archive document *The First Burials in Christ Church Cemetery* records that the first European burials in Newcastle were of convict miners who died in 1802 under the command of Dr Martin Mason and were buried near present Christ Church Cathedral. The surgeon Martin Mason had replaced Corporal Wixtead as commander of Governor King's initial attempt at establishing a settlement in Newcastle.

The Newcastle Anglican Diocese Archive document also states that:

In 1804, the first recorded burial in this cemetery was that of Archibald Scott, who was accidentally killed when a musket accidentally exploded (Newcastle Anglican Diocese Archived).

Archibald Scott was one of the crew members of the Resource which had arrived at the Hunter River in 1804 to establish a settlement in Newcastle. He is reported as being buried near the site of present Christ Church Cathedral (Newcastle City Council).

3.7.2 Christ Church Cathedral Cemetery

It was not until 1812 that a small slab church is thought to have been constructed on the current site of Christ Church Cathedral (EJE 2016:15), this temporary church was replaced in 1817 and a more permanent brick and stone constructed church. In 1818 Christ Church was officially opened. Although the Reverend William Cowper (Chaplain to the Colony of New South Wales) preached at Divine Service in Christ Church on 2 August 1819, with no chaplain to otherwise perform the religious duties, the Commandants of Newcastle, or their officers, undertook the duties until December 1820, when Rev G.A. Middleton was appointed as Chaplain (Newcastle Cathedral archives). The land on which the church was built was dedicated for a church and a burial ground, the burial ground being laid out on the north side of the church (refer to **Figure 3.4** and **Figure 3.8**). However, it was not until 1859 that the arrangement was formalised by a Crown Grant allocating 1 one acre, 3 roods and 6 perches (0.72 hectares). Initially all denominations were buried in the Christ Church cemetery, before alternative cemeteries were established for Roman Catholics and Presbyterians. The first Christ Church remained for 74 years; it fell into disrepair in 1861 and by 1883 work had finally begun on the site for a new Cathedral (EJE 2016:30-33).

The first surviving burial record dates from 1826, however a Newcastle Morning Herald article dating to 1902 lists inscriptions of headstones from the cemetery dating to 1819 (Private James Ashton), 1820 (David Dickson), 1821 (Matthew Fraser) and 1823 (Colour Sgt. James Smith) (Austral Archaeology 2004). The 1902 article further states:

Where those who died in the very early days of the settlement are buried no one can tell...it is most probable that the land in the vicinity of the present Cathedral grounds suggested a convenient and suitable place for the abode of the dead (NMH 15/3/1902).

Originally the churchyard appears to have been 3 three acres (1.21 hectares) in size, possibly extending to the north of current King Street. By 1859 the size of the churchyard had been reduced to 1 one acre 3 three roods and 6 six perches with King Street forming the new northern boundary of the burial grounds (Austral Archaeology 2004).

Several articles appeared in the Newcastle Morning Herald & Miners Advocate (NMH) in November 1915 reporting the discovery of human skeletal remains uncovered during excavations at the site of the former Borough Markets within the Stage 3 portion of the Project area (123-141 Hunter Street) for the construction of a picture theatre (later the Strand Theatre). It is unclear whether these were Aboriginal or European burials, however, there is suggestion that the wider area was used as an Aboriginal burying burial place and also as the burial place for early settlers. These articles are discussed in **Section 3.7.3**.

3.7.3 Discoveries of Human Skeletal Remains

An article dated 11 November 1915 entitled *Early Newcastle Cemetery - Borough Market Site* reports that human bones were found in the trenches being excavated for the Strand Theatres' foundations. The bones were 'spread over a considerable area' and were initially thought to be 'those of Aborigines' as no coffins were found. However, a coffin was later found containing:

..a complete skeleton of a body which had been laid out in the orthodox manner (NMH 11/11/1915).

A subsequent article dated 13 November 1915 titled *Early Burial Place Borough Market Site* suggested that the human remains were:

..properly interred in a coffin, and laid out according to the orthodox rites of Christian burial, suggested the possibility that at a very early period (the area was a) portion of the old Christ Church burial ground (NMH 13/11/1915).

Interviews in 1915 with longstanding local residents suggested the area was:

..probably used as a burying place by the aborigines, it was never at any time a recognised cemetery of the early settlers of the district (NMH 13/11/1915).

Mr. Colin Christie, a former Mayor of the city who had settled in Newcastle in 1849, said that the site of the former Borough Markets was never a part of the Christ Church Cathedral cemetery. He thought that prior to the construction of the church in 1818 the area had been used as an Aboriginal burial place and possibly for 'very early settlers'. Both Mr Christie and Mr. Peter Streit, who settled in Newcastle in 1857, could not remember the area ever having been reported as being an extension of the cathedral burial grounds or as an Aboriginal burial place. The site of the Newcastle School of Arts (located on the north side of Hunter Street, outside the Project area) was identified as being an Aboriginal burial place and while the former market site on Hunter Street was not identified as a burial place it was thought likely given the uncovered skeletal remains. Early residents in the area are reported to have:

..buried their dead in any place which appeared most suitable, and that, sometimes, was in their gardens (NMH 13/11/1915).

Another early resident, Mrs. Rodgers, who was born in Newcastle in 1843 at 177-187 Hunter Street (corner of Hunter and Perkins Street - former David Jones building), remembers the site of the former markets as being an unfenced paddock. Mrs Rodgers remembers the Christ Church Cathedral burial grounds as always being bound by King Street, however:

..it was quite possible that in those very early days, prior to the existence of any actual cemetery grounds the white people had been buried in the paddocks where the aborigines had found their last resting place (NMH 13/11/1915).

A letter, supplied by the Australian Museum's Aboriginal Ancestral Remains Repatriation Program, dated January 25 1923 from H. Martin Doyle regarding a 'collection of skulls...sent to the Technical College for transmission to the Australian Museum' describes the remains as having likely come from the area of the former market reserve during excavation works associated with the construction of the Market Place in 1869 to 1870.

The remains are described as formerly being in the possession of Major Bolton. Major Bolton arrived in Newcastle in 1837. His daughter married the Archdeacon Bode of Newcastle and gave the skulls to Doyle. Doyle thought that Major Bolton got possession of the skulls when:

...the old burying ground for pagans, executed men etc was dug up to make room for the markets which preceded the present Strand Picture Show (Doyle 1923).

An 1886 Mahlstedt & Gee Plan of Newcastle indicates that Major Bolton owned a number of residences to the east of the Project area between Morgan and Newcomen Streets (refer to **Figure 3.39**). Bolton is known to have owned a number of lots and properties in this block from as early as 1849; including at the time of the construction of Market Place between 1869 to 1870 and may have lived there during the construction works for the Market Place.

In 1935 a skull and other assorted human bones were uncovered during excavations for flats in Church Street to the southwest of the Project area. These were identified as likely being Aboriginal skeletal remains (NMH 15/5/35). In 1881 three or four Aboriginal skeletons are reported to have been exhumed from sandy soil 'a few feet from the surface' near the Broadmeadow racecourse over 3 kilometres to the west of the Project area (NMH 9/06/1881). The coroner who examined the skeletons reported that the Broadmeadow racecourse area had 'been a general camping place and burial-ground' for the Aboriginal population (NMH 09/06/1881).

The unpublished and undated memoirs of Reg Pogonoski, owner of the Falcon Printery (formerly part of the Borough Markets), describes uncovering a coffin under the floor of his business with an engraved plate suggesting it belonged to a child of Lieut. John Plat. John Plat was an early Newcastle settler whose two sons were killed in a bush fire in November 1831. The Christ Church burial register records a Robert and John Platt aged 13 and 4 respectively as dying in a bush fire. John Platt and his wife died in 1836 however no graves are indicated on a 1966 plan of the cemetery.

With the establishment of a church and burial ground, possibly as early as 1812, and the formalisation of a town plan in 1823 there is less likely to have been burials outside the Christ Church cemetery. However, the area of the former market reserve bound by and including present day Thorn, Morgan and Laing Streets may have continued to have been utilised for burials until the 1830s. The 1997 AMP identifies the area of Laing Street as potentially containing burials (refer to Item 1146 on **Plate 2.1**):.

Several maps indicate an old government coal mine shaft in the vicinity of the Market, but disagree about the exact location of the pit. The most likely position is just north of Laing Street, near Thorn Street, or (less likely) in Laing Street itself...graves are also said to have been in the vicinity (Suters 1997).

The AMP Review Inventory Number 2176213 (refer to **Plate 2.2**) states

...burials of the Penal Settlement were originally in the vicinity of Thorn Street, but once the church was built in 1818, they probably shifted to the church, but records only date from 1825 onwards (Higginbotham 2013).



Figure 3.39 Detail of 1886 Mahlstadt & Gee colour plan of Newcastle

Note the group of Major Bolton's properties (circled).

Source: State Library of New South Wales

4.0 Analysis of Evidence

This section discusses the nature and extent of the Project area's potential historical archaeological resources through an analysis of the historical information relating to the urban development and occupation of the area discussed in **Section 3.0** and an inspection of the current conditions of the Project area. Both observed and documented evidence are utilised to gain an understanding of any disturbance that may have occurred to the potential below-ground archaeological resource of the Project area.

Historical archaeology in Australia generally relates to the study of the past using physical evidence in conjunction with historical sources. Historical archaeology is generally defined as comprising the period since European arrival in Australia in 1788. An archaeological resource is the physical evidence of the past and may comprise sub-surface evidence including building foundations, occupation deposits, features and artefacts. Archaeological resources are irreplaceable and have the potential to contribute to our knowledge and understanding of early history using information that is unavailable from other sources (Heritage Office, DUAP 1996:2).

The historical archaeological potential of the Project area is the likelihood that there may be physical evidence relating to the early development and occupation of the Project area beneath the current footprint of the site.

4.1 General Site Description

The Project area comprises two Newcastle CBD city blocks and the immediately surrounding streets:

city block bound by Hunter, Morgan, Laing and Thorn Streets

city block bound by Hunter, Newcomen, King and Morgan Streets (excluding 103 Hunter Street and 16-18 Newcomen Street).

At present the Project area contains a large number of commercial and residential structures.

The general topography of this area of central Newcastle comprises the high ground to the south and the broad low-lying rail and road corridor created by the reclamation of the estuary foreshore. The south portion of the Stage 4 portion of the Project area is located on the high ground with King Street forming its southern boundary on this high ground and the north to south aligned cross streets of Newcomen, Morgan and Thorn Streets providing graded pedestrian and vehicular access to low lying Hunter Street. As such, the north portion of the Project area (fronting Hunter Street) is on relatively level ground, while the rear (south) portion of the Project area (fronting King Street) is on the natural steep slope of this area of central Newcastle.

The buildings fronting Hunter Street are generally all constructed 'on slab' approximately level with current Hunter Street with either a cut into the naturally sloping ground or a slight rise above street level from south to north to achieve a level ground floor. There is one known basement and a number of sub-floor levels within this area (for example 113, 109 Hunter Street and the corner of Thorn and Laing Streets – refer to **Figure 4.1**).

This report does not include a detailed description of the existing site elements, except where relevant to the site's historical archaeological resources. The built context of the Project area is the subject of the Conservation Management Plan: Newcastle East End Project – Blocks 3 & 4 (City Plan 2022). For further information on existing site elements, refer to the Conservation Management Plan (CMP).

Table 4.1 provides photographs of the Project area.

Table 4.1 Site Photographs

Photograph	
 <p>View to north down Thorn Street. Project area (Stage 3) centre image</p>	 <p>View to northeast showing corner of Thorn and Laing Streets. Project area (Stage 3) centre image</p>
 <p>View to west along Laing Street. Project area (Stage 3) on right</p>	 <p>View to north along Thorn Street from Hunter Street intersection. Project area (Stage 3) on left</p>

Photograph



Subfloor level - corner of Thorn and Laing Streets



View to east along Hunter Street. Project area (Stage 3) on right



View to south showing Project area (Stage 3) – current Market Square shopping arcade development



View to southwest showing Project area (Stage 3) – current Market Square shopping arcade development

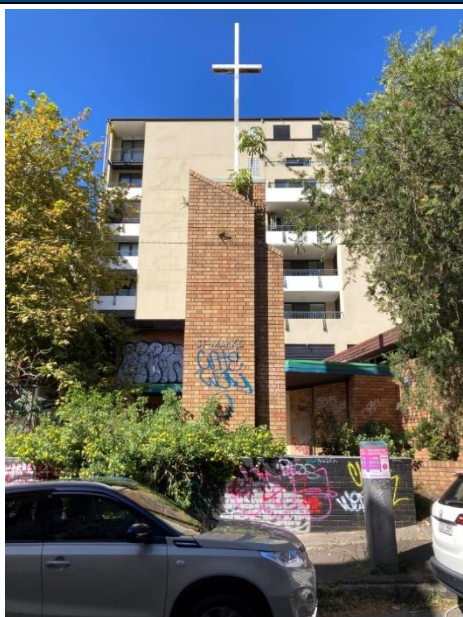


View to south up Morgan Street. Stage 3 portion of Project area on right, Stage 4 on left



View to north down Morgan Street. Stage 3 portion of Project area on left, Stage 4 on right

Photograph



View to east showing St Marks Roman Chapel (5 Morgan Street) – Stage 4 portion of Project area



View to east showing St Marks Roman Chapel (5 Morgan Street) – Stage 4 portion of Project area



View to south along Morgan Street alignment showing steep terraced nature of the area



View to northwest showing Stage 3 portion of Project area (top of image) and the former Council carpark site (bottom of image – outside Project area)

Photograph



View to north down Morgan Street from King Street intersection. Project area (Stage 4) on right



View to east showing brick residential apartment building (1 Morgan Street) and timber residence on corner of King and Morgan Streets – Stage 4 portion of Project area.



View to northeast showing King Street frontage of Project area (Stage 4)



View to west showing commercial building corner of King and Newcomen Streets – Stage 4 area



View to west showing small carpark area off Newcomen Street – Stage 4 area



View to north down Newcomen Street. Project area (Stage 4) on left.

Photograph



View to west showing Blackhall House (22 Newcomen Street) - Stage 4 area



View to south up Newcomen Street showing corner of Newcomen and Hunter Streets. 103 Hunter Street and 16-18 Newcomen Street shown are excluded from Project area



View to along Hunter Street, 103 Hunter Street shown excluded from Project area



View to southwest along Hunter Street frontage of Project area towards Morgan and Hunter Street intersection

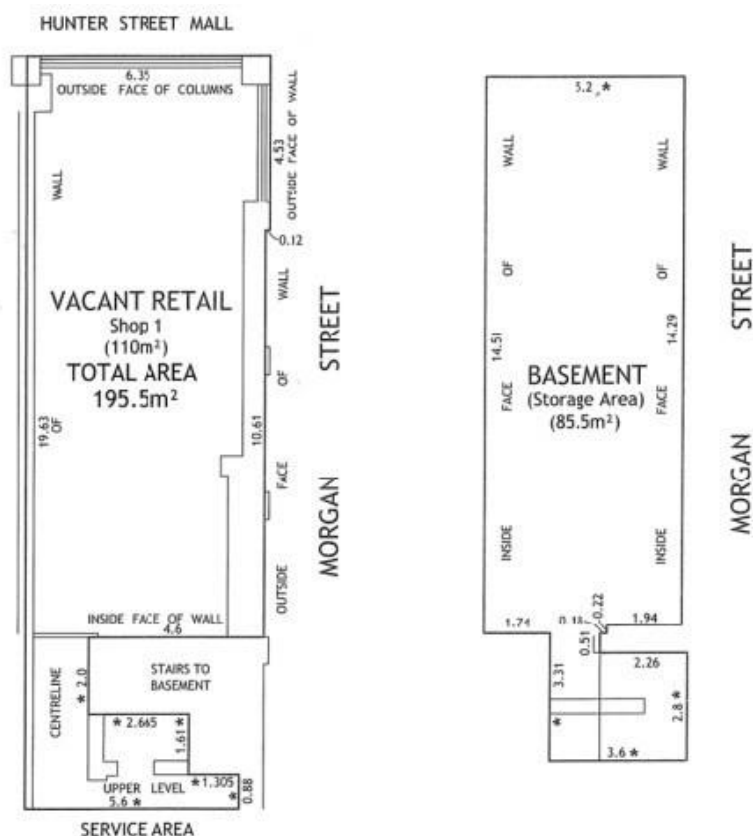


Figure 4.1 113 Hunter Street Plan showing basement level

Source: The GPT Group

4.2 Newcastle East End Studies and Reports

Numerous heritage and archaeological reports have been previously prepared for the East End area of Newcastle encompassing the four city blocks between Perkins, Hunter, Newcomen and King Streets. The current Project area forms the third and fourth stages of the broader Newcastle East End Project (refer to **Figure 1.2**).

The following reports should be referred to in relation to the built context of the Project:

- Newcastle CBD Project Heritage Assessment - Tanners Architects, 2007
- Newcastle East End Project Staged Development Application Statement of Heritage Impact - Tanner Kibble Denton 2014
- Conservation Management Plan: Newcastle East End Project – Blocks 3 & 4 (City Plan 2022).

The following reports should be referred to in relation to the archaeological context of the Project:

Aboriginal Heritage Assessment. Proposed Newcastle CBD Project. Unpublished draft report prepared for Construction Control, on behalf of The GPT Group - Umwelt 2009

Aboriginal and Historical Archaeology Report Newcastle East End – Staged Development Application - Umwelt 2015

Historical Archaeological Assessment. Newcastle East End Project – Stage 1 (Umwelt 2017). Supporting documentation for S140 excavation permit 2017/S140/33.

Historical Archaeological Assessment. Newcastle East End Project – Stage 2 (Umwelt 2019). Supporting documentation for S140 permit 2021/s140/003

Archaeological Report Newcastle East End Project – Stage 1 (Umwelt 2020).

4.2.1 Stage 1 of the Newcastle East End Project Archaeological Excavation

The main archaeological monitoring/investigation program of Stage 1 of the Newcastle East End Project (located to the west of the Project area) was undertaken between November 2018 and January 2019. Preliminary archaeological monitoring was also undertaken concurrent with demolition and site preparation works in July and August 2018. Although this site had undergone several phases of substantial development (including construction of and major modifications to 1906, 1920 and 1937 constructed David Jones buildings) archaeological evidence was exposed within the boundaries of several of the original allotments fronting Hunter and Wolfe Streets. The rear of the site (fronting King Street and the King-Perkins Street corner behind the retained David Jones building) was substantially disturbed by the construction of the David Jones car park in 1967. The archaeological remains included evidence of:

1840s development within boundaries of original city Lot 136 (fronting Hunter Street) exposed approximately 1.2 metres below the current level of Hunter Street. The archaeological remains included footings, sandstone paved floors and a well associated with the 1840s constructed Rouse Hotel.

1850s development within boundaries of original city Lot 138 (fronting Wolfe Street) exposed approximately 1.5 metres below the current level of Wolfe Street. The archaeological remains included footings of 1850s constructed four roomed building with central corridor and associated laneway.

1870/1880s development within boundaries of original city Lot 140 (fronting Wolfe Street) exposed approximately 2 metres below the current level of Wolfe Street. The archaeological remains included footings and the base of a privy of 1870/1880s constructed building (Umwelt 2019b).

The archaeological remains comprised the base of the earlier structures (including the well) and no significant artefact deposits were exposed. There is potential for similar archaeological remains to be present within the Project area.

4.2.2 Stage 2 of the Newcastle East End Project Archaeological Excavation

Four test pits were excavated as part of the archaeological monitoring/investigation program of Stage 2 of the Newcastle East End Project (located to the immediate west of the Project area) to identify the 'integrity of the archaeological profile' across the site:

The pits were located at the northern, southern, eastern and western sides of the site and each measured 7 x 7 metres. They were all located to provide a sample of environmental conditions, chronological span, different types of building, commercial and residential occupation and yards and out-buildings possibly associated with each (RPS 2021).

The test pits exposed:

partially intact foundations of two later nineteenth century shops on Hunter Street

a nineteenth century yard adjoining what may have been a rubble stone wall or building

stone wall foundation potentially from a later nineteenth century building (RPS 2021).

The report concluded that the scarcity of an understandable archaeological resource was due to:

...a combination of both nineteenth and twentieth century works and the impact of the 2020 demolition (RPS 2021).

It is noted that following the completion of the historical archaeological testing further historical archaeological material was exposed and recorded (for example a well or cistern close to the Thorn Street frontage) as part of the Aboriginal archaeological component of works (RPS 2022). The well/cistern may have been related to the early approximately 1850s use of original lot 130; noting that it isn't indicated on the 1890s water board plans suggesting it was no longer in use by the late nineteenth century and pre-dates the 1890s plan.

4.3 Newcastle CBD Archaeological Reports

4.3.1 200-212 Hunter Street

This site is located immediately northwest of the Project area, on the north (opposite) side of Hunter Street to the existing David Jones building. The site was the former location of the Johns Department Store, one of the more substantial commercial developments of the late nineteenth century; demolished in 2004.

No evidence of European occupation of the site dating to before 1860 was exposed, however structural evidence of three commercial (retail) structures dating to between 1860 and 1882 were found (Insite nd). These remains consisted of sandstone footings, underfloor deposits and evidence of external yard areas. There is potential for similar archaeological remains to be present along Hunter Street within the Project area.

4.3.2 28-30 Bolton Street

The site is located on the north side of King Street, between Newcomen and Bolton Streets, immediately to the east of the Project area. The site was assessed as having potential for remains associated with the post 1850s residential development and use of the area (approximately 1870s constructed terraces fronting King Street), light industrial structures (printing works) and a portion of an early structure as indicated on Armstrong's 1830 plan of Newcastle (Umwelt 2016). The entire northern half of the site comprised a deep twentieth century constructed basement that had substantially cut down the site by several metres removing any archaeological evidence that may have been present in the area.

The archaeological investigation of the site confirmed that as a result of the steep sloping nature of this part of Newcastle the side of the hill was substantially cut down for the construction of the terraces formerly fronting King Street. No evidence of the pre 1830s structure that potentially extended into the 28-30 Bolton Street site was exposed; if formerly present excavation for the construction of the terraces on the steeply sloping site likely removed all evidence of the early structure (Umwelt 2017b).

The majority of the archaeological remains exposed comprised basement/cellar walls and a number of paved basement/cellar floors of the terraces. All remains were covered in deep dense brick demolition rubble. A number of cesspits at the rear of the terraces were exposed however no archaeological deposits were present. The cesspits were likely cleaned out prior to water and sewerage services being installed in this area. No artefact deposits were exposed during the archaeological investigation (Umwelt 2017b).

4.3.3 Newcastle Light Rail Project

Archaeological investigation associated with the Newcastle Light Rail Project (a 2.7 kilometre light rail route from Wickham Interchange to Pacific Park in the Newcastle CBD) was undertaken between September 2017 and August 2018, following completion of a program of archaeological testing undertaken in July and August 2017. The Light Rail Project area extended in a west to east direction within the former rail corridor from Wickham and then along Hunter and Scott Streets. A number of historical archaeological remains were exposed along the length of the Light Rail Project area, including in the vicinity of the current Project area. The depth of these remains varied considerably across the investigated area. Remains exposed included:

- Rail related cisterns
- Brick footings/walls
- Sandstone footings/walls
- Sandstone abutments
- Large sandstone blocks (likely foundations for the former coal staithes located west of Market Street)
- Early culverts and drains
- Timber footings related to 1830s and 1840s constructed AA Co. bridges, and
- Kerbing and drains.

It is noted that the majority of the archaeological remains were exposed within the former rail corridor and street alignments, rather than within town allotments associated with the residential and commercial development of the early town of Newcastle. However, the presence of the remains highlights the potential for archaeological remains to be present within the developed urban context of the Newcastle CBD. In the immediate vicinity of the Project area brick drains and culverts were exposed beneath the current street alignments of Hunter, Scott, Perkins and Newcomen Streets (Umwelt 2019b).

4.3.4 22 Bolton Street

This site is located on the west side of Bolton Street, one city block to the east of the Project area. The site comprised investigation of sub-surface elements of original Lots 62 to 65 fronting both Bolton and Newcomen Streets.

Evidence of 1850s to 1860s use of the site in the form of artefactual material (including in refuse pits) and later archaeological evidence (artefacts and footings etc) from the 1870s and 1880s (and into the twentieth century) use of the site associated with the then extant buildings which comprised the Gorrick Building and Eldon Chambers (Umwelt 2006).

4.3.5 73-77 King Street

This site is located on the south side of King Street, immediately to the east of the King and Newcomen Street intersection; one city block to the east of the Project area. The known development of the site commenced in approximately the 1850s and the archaeological resource was expected to comprise of remains dating from the 1850s (AMAC Group 2003a).

Although partially disturbed, the archaeological resource of the site contained evidence of nineteenth century residential development, including building footings, occupation deposits (containing artefacts), cesspits/privies and wells (AMAC, pers. comm.). The final report of the archaeological investigation of this site was not available during the preparation of this report.

4.3.6 37 Bolton Street

This site is located one city block to the east of the Project area, closer to the original convict settlement of Newcastle. Its history of development relates to commercial and residential use from about 1830 (AMAC Group 2003b). The archaeological assessment undertaken by the AMAC Group identified the potential archaeological resource as comprising remains associated with the development of the town of Newcastle, from the convict period through to the small-scale residential and business development of the town's CBD in the 1870s.

We understand that to date the archaeological investigation works at 37 Bolton Street have not been undertaken (AMAC pers. comm.).

4.3.7 45 Bolton Street

This site is located approximately one city block to the east of the Project area; on the south side of King Street. The potential archaeological resource was assessed as predominantly consisting of 1870 to 1890 constructed terraces, with some potential for evidence of earlier convict and town allotments (AMAC Group 2003c).

Archaeological excavation was undertaken at the site in 2016. The excavation exposed some sandstone foundations and a cesspit related to the mid to late nineteenth century use and occupation of the site (AMAC pers. comm.). The final report of the archaeological investigation of this site was not available during the preparation of this report.

4.3.8 53-5 Newcomen Street

This site is located to the south of the Project area, to the east of Christ Church Cathedral. The site had limited development impacts, as a result of being vacant from about 1956.

Assessment identified the potential for remains associated with a pre-1818 guard house utilised and extended up till 1956, in addition to an 1840s cottage. Evidence of a flagstone pavement, brick dish drain and brick paving in addition to a well, possibly associated with the guard house was also identified. Although not excavated, the well was identified to be over 2.75 metres deep (Bairstow, 1998).

4.3.9 9 Watt Street

This site is located along Watt Street approximately four city blocks to the east of the Project area. The site was archaeologically excavated in 2014. The results of the excavation are currently being documented in the final archaeological report (in preparation) for the site. Although having been impacted by construction undertaken in the 1930s intact archaeological evidence of a 1830s structure and a number of associated cut features (pits, drains and postholes), part of the rear wall of A.W.Scott's 'Newcastle House' (likely constructed in the late 1840s) and a number of other features dating to the late 1800s including a brick built cistern (Umwelt 2014) were exposed.

4.3.10 Corner of Church and Newcomen Streets (15 Church Street)

This site is located to the southeast of the Project area, on the south side of the Christ Church Cathedral. From the early 1820s this was the site of the Parsonage, later Kirkwood House. The archaeological resource of the site was assessed as potentially including evidence of the original 1820s parsonage and associated outbuildings (AMAC Group 2008).

Test excavations undertaken in 2008 revealed remains of the 1820s constructed parsonage incorporated within the extant structure. The main stage of archaeological investigation undertaken in 2009 exposed the fully intact core of the original parsonage, fireplaces and a cellar (AMAC 2012).

Further archaeological works associated with the installation of electrical services exposed a sandstone block constructed wall, sandstone cobble paving and a circular brick built drain (AMAC 2013).

4.3.11 Convict Lumberyard Site

The area of the convict lumberyard site on Scott Street, northeast of the Project area, has been subject to extensive assessment, reporting and excavation, revealing rare evidence of a convict industrial workplace.

The Lumberyard excavations uncovered substantial remains of an 1818 convict barracks, which had stood till 1851 when it was gutted by fire and abandoned rather than being demolished. The convict occupation levels of the site have been shown to be between approximately 1.5 to 3.8 metres below the current ground surface, beneath layers of fill and drift / dune sand (Bairstow 1987 & 1989, Umwelt 2017d).

With the possible exception of the Hunter Street frontage, the presence of deep fill above the archaeological remains is unlikely to be reflected in the archaeological resource of the Project area as the area is predominantly located up the hill away from the flat lying land along the bay that has been subject to reclamation and drifting sands.

4.4 Geotechnical Investigations

Geotechnical investigations can be used to indicate where natural profiles have been modified and assist to locate where disturbances such as construction, landscaping and demolition have left evidence in the soil profile. Geotechnical samples can also indicate potential archaeological deposits and any disturbance that may have occurred to the archaeological resource.

Douglas Partners have undertaken geotechnical investigations around the Project area in 2007, 2008 and 2015 (refer to Figure 3.2). In 2017 Douglas Partners prepared a report on behalf of Iris Land Pty Ltd reviewing the results of previous investigations and in consideration of the potential footprint of the proposed Newcastle East End Project. Previous geotechnical boreholes indicate:

Corner of Hunter and Thorn Streets (borehole 107) has 'fill' to 1.20 metres.

Laing Street (borehole 108) has 'fill' to 1.40 metres

Corner of Hunter and Morgan Streets (borehole 111) has 'fill' to 0.40 metres

Laing Street (borehole 112) has 'fill' to 1.10 metres

Corner of Morgan and Laing Streets (borehole 114) has concrete rubble fill to over 2.0 metres

Carpark area between Morgan and Newcomen Streets (borehole 115) has 'fill' to 0.45 metres.

Table 4.2 summarises the results of these boreholes.

Table 4.2 Summary of relevant borehole results

Borehole	Discussion
107 Corner of Hunter and Thorn Streets	0 to 1.2 metres: asphalt concrete above fill – described as generally comprising orange/brown sandy fine to medium grained subrounded gravel with some silt to 0.25 metres. Grey/brown clayey fine to medium grained sand to 0.40 metres. Yellow/brown fine to medium grained sand with some silt to 0.70 metres. Brown gravelly silty fine to medium grained sand with ash and trace slag cobble inclusions to 1.20 metres. 1.2 to 2.1 metres: silty sand / sandy silt – described as being dark grey/brown moist to wet silty sand/sandy silt with traces of clay. Clayey lense from 1.70 to 1.75 metres. 2.1 to 3.7 metres: sand – described as being light grey fine to medium grained moist sand (saturated from 3.10 metres) 3.70 metres: claystone .
108 Laing Street	0 to 1.4 metres: asphalt concrete above fill – described as generally comprising mixed grey/brown silt, sand and gravel to cobble sized slag to 0.35 metres. Yellow fine to medium grained sand to 0.60 metres. Brown silty fine to medium grained sand (with ash and charcoal lense at 1.20 metres) to 1.40 metres. 1.40 to 2.10 metres: sand - medium dense yellow/brown fine to medium grained moist sand with some silt 2.10 to 2.90 metres: sand - medium dense yellow/orange fine to medium grained moist sand with some silt 2.90 to 3.5 metres: clayey 3.50 to 4.0 metres: orange, silty , wet to saturated 4.0 metres: borehole discontinued
111 Corner of Hunter and Morgan Streets	0 to 0.40 metres: asphalt concrete above fill – described as generally comprising brown sandy gravel and cobbles with clay and silts 0.40 to 1.60 metres: sand - light grey/grey fine to medium grained sand, moist 1.60 to 2.10 metres: sand – grey to dark grey with some silt 2.10 to 3.10 metres: sand – light grey/brown (moist to wet from 2.70 metres) 3.10 to 3.4 metres: sand - light grey with some orange mottling, saturated 3.40 to 3.60 metres: clayey with trace to some fine to coarse grained subangular gravel 3.6 metres: claystone

Borehole	Discussion
112 Laing Street	<p>0 to 0.60 metres: asphalt concrete above fill – described as generally comprising orange/brown sandy gravel and cobbles with clay and silts</p> <p>0.60 to 1.10 metres: sand (possible fill) - light grey/brown fine to medium grained sand, moist</p> <p>1.10 to 1.6 metres: sand - orange silty fine grained sand with trace clay moist to wet</p> <p>1.60 to 3.1 metres: sand - red/orange mottled light grey with increased silt and clay content. Saturated from 1.90 metres</p> <p>3.10 to 3.50 metres: silty sandy clay – firm to stiff light grey mottled orange clay with some fine to coarse grained subangular gravel</p> <p>3.50 to 4.0 metres: clay – stiff to very stiff grey/mottled orange clay with some fine to coarse grained subangular gravel</p> <p>4.0 metres: borehole discontinued</p>
114 Corner of Morgan and Laing Streets	<p>0 to 1.10 metres: concrete above fill - grey/brown silty sandy fine to coarse grained gravel and cobbles including concrete and slag, humid.</p> <p>1.10 to 2.0 metres: concrete rubble - described as generally comprising concrete rubble</p> <p>2.0 metres borehole discontinued - refusal</p>
115 Carpark area between Morgan and Newcomen Streets	<p>0 to 0.45 metres: concrete above fill – silty sand with gravels and brick fragments</p> <p>0.45 to 1.80 metres: sand - light orange/brown fine to medium grained sand with some silt, moist</p> <p>1.80 to 2.0 metres: sand – orange with some clay</p> <p>2.0 to 4.0 metres: clayey – slightly clayey, grading into extremely weathered sandstone</p> <p>4.0 metres: borehole discontinued</p>

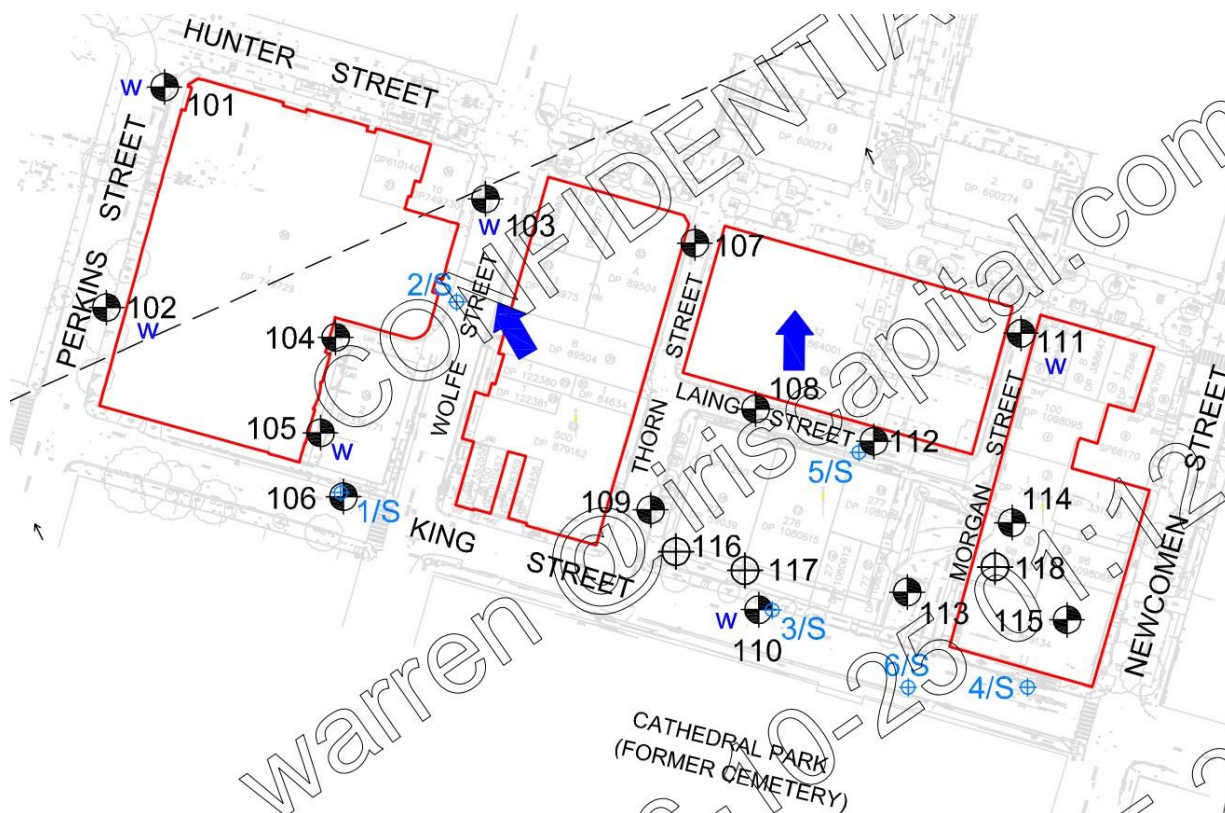


Figure 4.2 Location of geo-technical boreholes

Source: Douglas Partners 2015

4.5 Potential Disturbance/Alterations to the Project Area

The potential for a site to contain an archaeological resource is determined not only by the nature and extent of the historical development and occupation of the area, but also by the nature and extent of any subsequent disturbance to the site. In assessing archaeological potential, it is important to understand the level of potential disturbance to the archaeological resource. Existing below-ground disturbance may preclude the potential for historical archaeological remains in that particular location. While it is not possible to accurately determine the extent of disturbance due to the lack of subsurface visibility, it is possible to make a number of informed observations.

4.5.1 Current Footprint

As discussed, the Project area contains a large number of commercially and residentially built structures dating from the late nineteenth and early twentieth centuries. The north portion of the current built footprint of the Project area (fronting Hunter Street) is at street level with one extant basement and a number of sub-floor levels. Extant structures are either cut into the natural slope of the area or built up to create level building platforms.

There is potential for remains of earlier buildings that may have been terraced into the hillside to provide a level building platform to be present beneath the extant built footprint of the site. However, it is noted that evidence provided at the rear portion (King Street frontage) of Stage 1 of the Newcastle East End and the King Street frontage of the 28-30 Bolton Street site (refer to **Section 4.2**) indicates that late nineteenth and twentieth century construction can remove any evidence of earlier structures that may have been present.

As discussed in **Section 3.6.1**, the proximity of Hunter Street to the original harbour shoreline resulted in frequent flooding prior to the reclamation which created the current broad low-lying rail and road corridor of the estuary foreshore. It is understood that nineteenth century Hunter Street was likely lower than it is today and the area was filled to reduce the risk of flooding. As a result, some of the early shops along Hunter Street (not necessarily within Project area) were in filled to bring them up to new street levels or steps were constructed down from the street into shops (City Plan 2018). As such there may be the potential for evidence of the early use of the Hunter Street frontage to be preserved beneath introduced fill levels. It is noted that evidence of 1840s construction was exposed approximately 1.2 metres below the current level of Hunter Street and 1850s to 1870s construction was exposed between 1.5 and 2 metres below the current level of Wolfe Street within Stage 1 of the Newcastle East End Project area. The geotechnical data discussed in **Section 4.3** suggests the potential for a depth of fill along the Hunter Street frontage before natural sand deposits are encountered.

A number of utilities will be present across the site, likely excavated to varying depths. The installation of these services would have resulted in localised disturbance of subsurface deposits across the area; particularly in street areas. While the precise nature and extent of this disturbance is difficult to ascertain, it is assumed that the installation of these services would have resulted in at least minor disturbance to any archaeological remains present in these areas.

4.6 Potential Historical Archaeological Remains

An intact historical archaeological resource within the Project area could potentially consist of building foundations, occupation deposits containing cultural material associated with former structures, cut features (wells/cisterns, cesspits/privies and refuse pits) occupation deposits and artefacts. The historical archaeological remains could yield information about the historical development and occupation of the area throughout the nineteenth and twentieth centuries.

The potential for an intact archaeological resource to be present within the Project area will depend on the level and methods of demolition of the earlier structures and the method of construction of the later buildings that replaced them, in addition to historic cut and fill episodes to manage the low lying north portion fronting Hunter Street, and potentially the increasingly naturally sloping nature of the rear portion Project area.

Previous excavations in the vicinity of the Project area with a similar history of development and disturbance indicate the potential for an archaeological resource consisting of structural footings, deposits, cesspits/privies and wells to be present within the site.

Evidence of deeper subsurface features such as cesspits/privies and wells/cisterns may survive within the Project area. Such evidence would be generally associated with the nineteenth century residential, commercial and light industrial development of the area. Evidence of such features may even survive in areas that have been subject to major disturbance, depending on the depth of the feature and the nature of the disturbance. Other deeper subsurface features potentially present may consist of rubbish pits. It is noted that surviving evidence of deeper subsurface features was limited within Stage 1 of the Newcastle East End Project. This may have been as a result of the high level of disturbance associated with the construction of and major modifications to the 1906, 1920 and 1937 constructed David Jones buildings. In addition, the proximity to the original harbour shoreline appears to have negated the need for deep wells (as a result of the high water table) in the Stage 1 area and may have hindered construction of cesspits or other deeper subsurface features. Wells had been sunk into the sand close to the foreshore since the successful establishment of the penal settlement in 1804 (Umwelt 2019).

The built urban development of the Project area occurs prior to the provision of water to Newcastle's households and businesses (in 1887) and sewerage services (in 1888 via stormwater system and later via Newcastle Sewerage Scheme) to Newcastle. Night soil carts still collected from domestic homes in the late nineteenth century and were being emptied into the sand drifts and buried in what is now Pacific Park (Umwelt 2019). The Newcastle Sewerage Act 1902 had made it mandatory that people in the sewered area had to be connected to it, with sewers in the first sections in Newcastle city finally handed over to the Hunter District Water Supply and Sewerage Board in 1907. By 1910 with a low-level pumping station completed near the corner of Hunter and Brown Streets, the first 650 properties were connected, with one of the main sewers running the length of Scott Street. Many of the trenches were dug by miners during a strike at the Newcastle collieries (Umwelt 2019). There is, therefore, potential for cesspits/privies and wells/cisterns (if present and intact within the Project area) to contain deposits of accumulated material associated with the mid-late nineteenth century occupation of this area. It is not possible to accurately assess the potential for deposits of accumulated material to be present within these features without some excavation. It is possible that when the water and sewerage services were installed in this area the cesspits/privies were cleaned out prior to their conversion, thus removing the potential archaeological resource. However, the sewer pipes may have been installed above any accumulated deposit, resulting in some disturbance to the fabric of the cesspit but leaving the deposit in situ. Both of these situations have been witnessed on other archaeological sites.

The late nineteenth and early to mid twentieth century date of the extant structures on the site would have precluded the accumulation or deposition of substantial or significant occupation deposits (either internal subfloor deposits, external yard deposits or rubbish pits) associated with the current built footprint. In addition, the Project area has been subject to disturbances associated with the urban development of the area; with the Stage 3 portion of the Project area having been subject to substantial disturbance and development (refer to **Section 3.6.4**). Many of the extant buildings have also undergone major modifications which may have further disturbed earlier deposits and remains that may have been present. However, underfloor occupation type deposits may remain as part of the archaeological resource associated with any earlier established structures within the Project area.

The remains of yards, garden beds and any evidence of early pastoral/timber clearing activities are typically ephemeral and sensitive to later disturbance. Later landscaping, construction and subsequent demolition of buildings, and the installation of utility services are likely to have disturbed evidence for the original yards, gardens, landscaping and any evidence of early pastoral/timber clearing activities.

The potential archaeological resource of the Project area is discussed further below.

4.6.1 Early Settlement and Establishment of Town Plan (pre 1830 to 1850s)

Any evidence associated with the historical use of the Project area prior to the first known development of the area in the early nineteenth century is likely to be fragmentary at best. The extensive development and modification of the Project area through the nineteenth and twentieth centuries is likely to have destroyed any pre-existing historical archaeological remains, particularly evidence of any early timber clearing, agricultural use of the area or fenced paddocks. This type of archaeological resource is typically ephemeral and sensitive to disturbance in an urban environment.

The Project area is located on the western boundary of the 1804 penal settlement and the area of the original town plan. The west boundary of the area identified as having potential for convict huts in the AMP Review is approximately Newcomen Street (Higginbotham 2013 Volume 2:75). Armstrong's 1830 plan of Newcastle shows the coal mine shaft, what is likely a residential structure and a pathway running approximately across the north boundary of the Project area. The area is shown as having been cleared of timber and sloping down towards the harbour.

The steep sloping ground leading to the flat flood prone foreshore may have been considered unsuitable for simply constructed timber huts. With the exception of the potential for the residential building and mine shaft, any improvements or occupational use of the site (including the potential pathway) that may have occurred is likely to have been destroyed by the later development which would have included extensive cut and fill events to provide level dry areas to develop and construct on.

Although included in the area of 190 town allotments established by Dangar, there is unlikely to be any archaeological resource relating to the town allotments being established. If present in the form of fencing the allotments any evidence would be difficult to distinguish from later similar improvements or have been entirely removed.

Evidence of several structures (and any associated outbuildings) and the former mine shaft shown on early mapping may survive dating to the pre-1850s development of Newcastle:

Armstrong's 1830s Plan of the Town of Newcastle provides detail of all extant buildings and streets in the town at the time. The map shows what is likely a residential structure with a privy/cesspit within a fenced area at the southern end of the Stage 4 area.

As discussed in **Section 3.6.5**, The Crooked Billet may have been constructed as early as 1827. The building may have still been standing in 1953 (as reported in the Newcastle Sun). The 1886 Mahlstedt & Gee colour Plan of Newcastle describes it as being a two storey structure; the first storey being brick and the second timber. The hotel was likely formerly located in the current open courtyard to the north of St Marks Roman Chapel (5 Morgan Street).

1854 Plan of the City of Newcastle shows what is likely a residential building close to the corner of King and Newcomen Streets. The structure is shown on plan until the late 1800s and is described on the 1886 Mahlstedt & Gee colour plan of Newcastle as being a one storey timber structure.

A government coal mine shaft is known to have been located in the Project area in the vicinity of the former market reserve to the east of Thorn Street. The mine shaft is shown on a number of early maps, however the exact location of the shaft is unclear as a result of differences between the early maps. The area of the coal shaft may have first been mined in 1801 and is likely to have been used until 1830 when government mine works ended in the city centre. As discussed in **Section 4.4**, a geotechnical borehole (borehole 114) at the corner of Morgan and Laing Streets indicated the presence of concrete rubble in that location to at least 2 metres depth.

Figure 4.3 to Figure 4.5 illustrate the potential locations of these buildings and mine shaft.

Results of the East End Stage 1 archaeological investigation showed the 1854 Plan of the City of Newcastle to be accurate; the footings of an 1850s constructed four roomed building with central corridor and associated laneway shown on the plan was exposed approximately 1.5 metres below the current level of Wolfe Street (refer to **Section 4.2.1**).

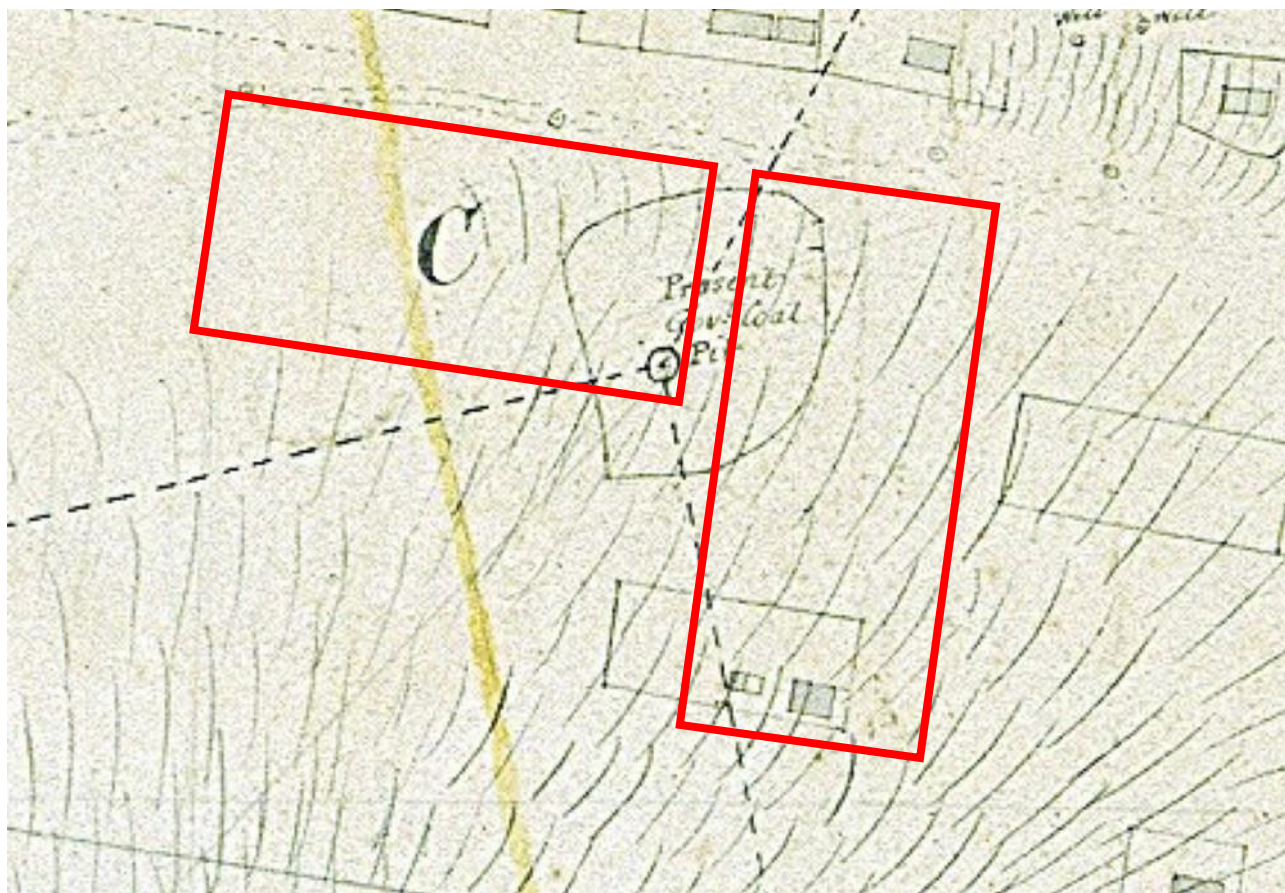


Figure 4.3 **Detail of Armstrong's 1830s Plan of Newcastle in NSW**

Approximate location of Stage 3 and 4 areas outlined in red. Note the location of the 'Present Govt Coal Pit' within Stage 3 area and the building indicated at the southern end of the Stage 4 area.

Source: National Library of New Zealand

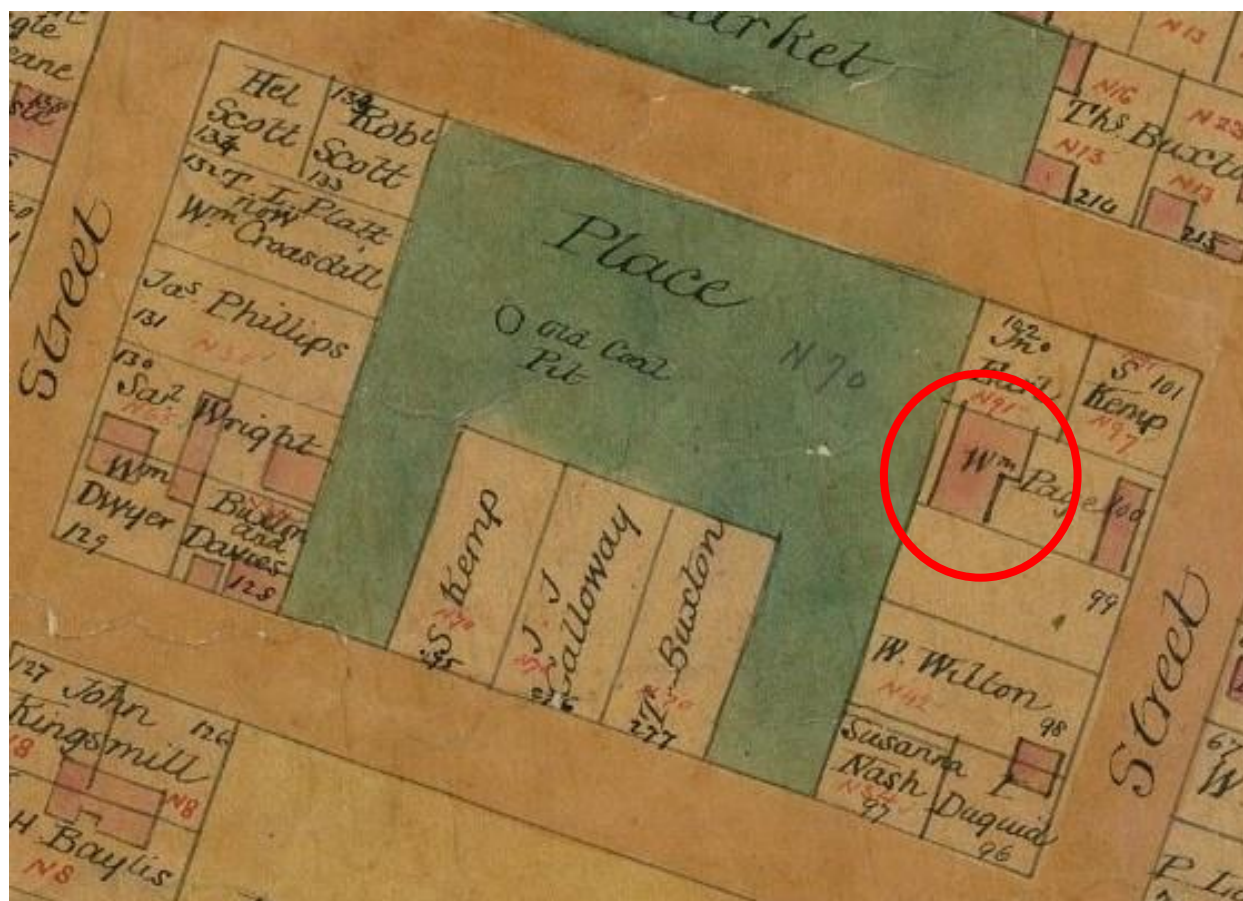


Figure 4.4 Detail of 1854 Plan of the City of Newcastle

Note what is likely The Crooked Billet (circled) within the William Page owned allotment 100 within the Stage 4 area. Other structures are also shown with the current Street block of Hunter, Newcomen, King and Morgan Streets (including within the Project area). The 'Old Coal Pit' is shown in a different location to that shown on the 1830s map.

Source: Newcastle Regional Library – Local Studies Section LHMB 333.3/90



Figure 4.5 Overlay Showing Early Structure Locations

Blue shows approximate Stage 4 area boundary. Yellow shows the fence line and structures (likely a residence and privy/cesspit) shown on Armstrong's 1830s map. Red shows structures (including the Crooked Billet) shown on the 1854 plan of the city. The white circle shows the approximate location of borehole 114 which indicated the presence of concrete rubble to at least 2 metres depth.

Source: Nearmaps 2023, National Library of New Zealand, Newcastle Regional Library Local Studies Section

4.6.2 Urban Development and Expansion (mid 1850s – late 1800s)

By the mid nineteenth century this area of Newcastle formed part of the central business area of the city. A series of plans dating second half of the nineteenth century indicate that there was a substantial growth in the development of Newcastle by this time, with buildings shown on all the allotments within the Project area by the 1870s; including the Borough Markets building. The commercial development of Hunter Street increased dramatically in the late 1860s and 1870s as illustrated on the 1875 'aerial' lithograph of Newcastle which shows the densely built nature of the Project area by that time. There are buildings along the street frontages with the central portion of the Stage 4 area less well utilised. The central and rear areas of city blocks typically have outbuildings associated with the street frontage buildings or lighter industrial uses (blacksmiths, stables for example). The rear of the Stage 3 area was less well utilised until the twentieth century.

With portside licensed hotels catering for itinerant seamen, three hotels were located within the Project area by the 1880s, including The Crooked Billet (the London Tavern by the 1880s). Hotels typically had stables, outbuildings and yards with light industrial uses (for example blacksmith's shops) to the rear and frequently ended up as boarding houses; such as The Crooked Billet / London Tavern which operated as the Burlington boarding house in the 1930s.

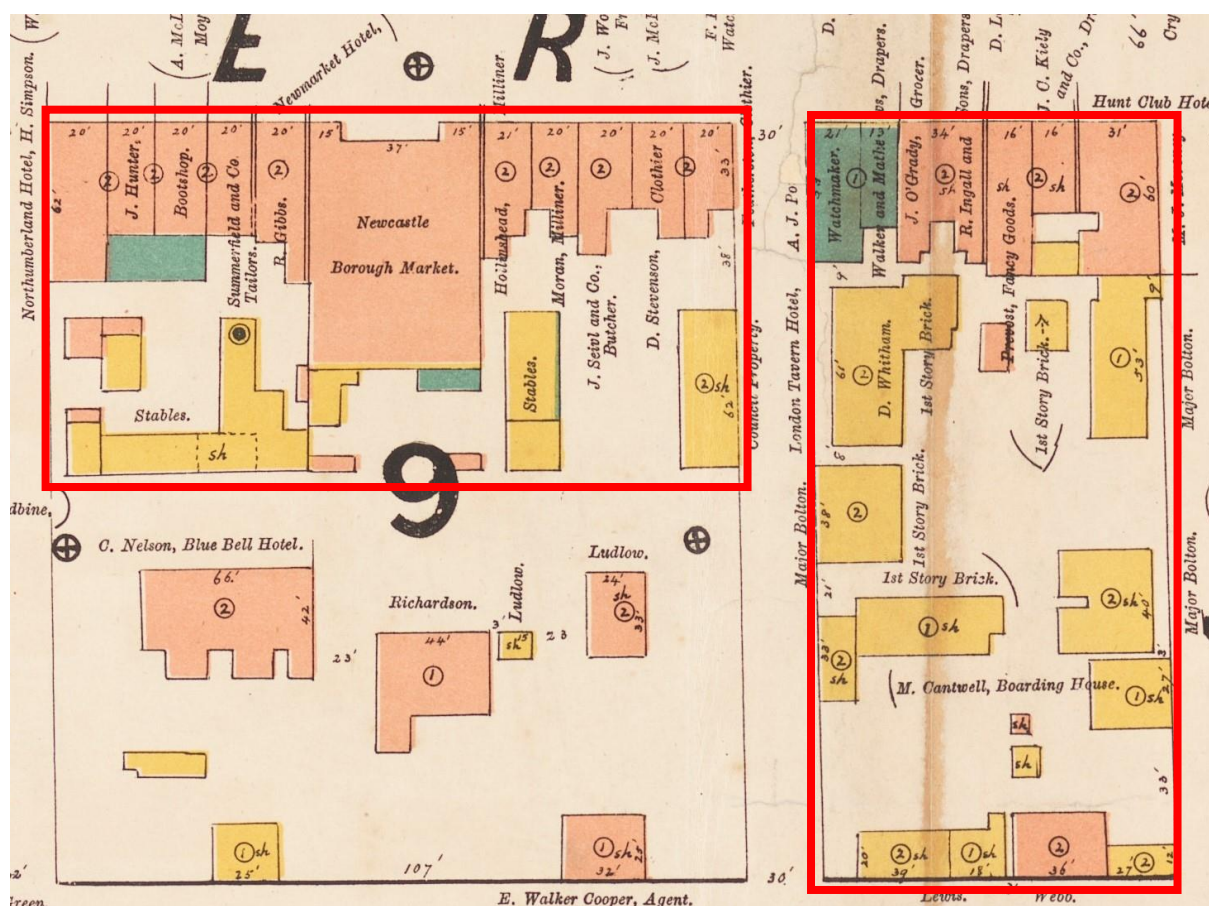


Figure 4.6 Detail of 1886 Mahlstedt & Gee colour plan of Newcastle

The detail shows the Stage 3 area on left with commercial development along Hunter Street (including the Borough Markets building, Northumberland Hotel and Newmarket Hotel) and lighter industrial development (stables) to the rear along Laing Street. Stage 4 area on right includes the commercial development along Hunter Street, the London Tavern on Morgan Street (former Crooked Billet building) and more residential development to the rear of the block.

Pink shading indicates brick or stone construction, yellow timber and green 'iron faced'

Source: State Library of New South Wales



Figure 4.7 Detail of 1895-1896 Hunter District Water Board Plan Sheet 026

Detail shows all the buildings present within the Project area, including backyard cesspits (the smaller square structures and cisterns (circles). Alignments of utilities in the surrounding streets are also shown. Approximate Stage 3 and 4 areas shown, noting the Hunt Club Hotel at the corner of Hunter and Newcomen Streets is excluded from the Project area.

Source: Cultural Collections, University of Newcastle

4.6.3 Twentieth Century Urban Development and Consolidation

Larger scale developments in the late nineteenth and twentieth centuries, including the Borough Markets, Municipal buildings, Strand Theatre and current Market Square shopping arcade, replaced a number of the nineteenth century commercial and residential structures. A number of these buildings comprise the current built footprint of the Project area.

4.6.4 Streets

The streets surrounding the Project area have been predominately maintained as streetscapes/public domain since they were formalised.

It is generally considered unlikely that historical archaeological ‘relics’ will be exposed during works in the established and highly disturbed streets surrounding the Project area (refer to **Figure 4.8** showing the locations of underground services within the footpath and road areas). The draft Newcastle AMP Review 2013 considers that any potential archaeological remains in the footpath and road areas of central Newcastle:

...will have been disturbed, but not necessarily destroyed by road and pavement metalling, kerbing and service trenches (Higginbotham 2013 Volume 2 Page 190).

Previous archaeological monitoring of the excavation of utility trenches within streets in the central Newcastle area:

confirmed the disturbed nature of the street and footpath areas of central Newcastle

confirmed the high level of disturbance resulting from previously installed utilities

found no evidence of archaeological relics (Umwelt 2016, 2019[b] and 2020[b])

However, there remains potential for historical remains such as culverts/drains and historical road foundations to be present below the current road surfaces, which while unlikely to be considered archaeological relics (as defined by the Heritage Act) would require management dependant on their significance. In most instances, this will involve recording prior to removal or disturbance works.

The exception to this is the need to consider the potential for evidence of burials to be present in Laing Street – which as an east west running street likely only formalised in the second half of the nineteenth century may have been subject to less disturbance than the steeper north south aligned streets within the Project area. Noting the street has been impacted by utility installation and upgrades and street improvement works.

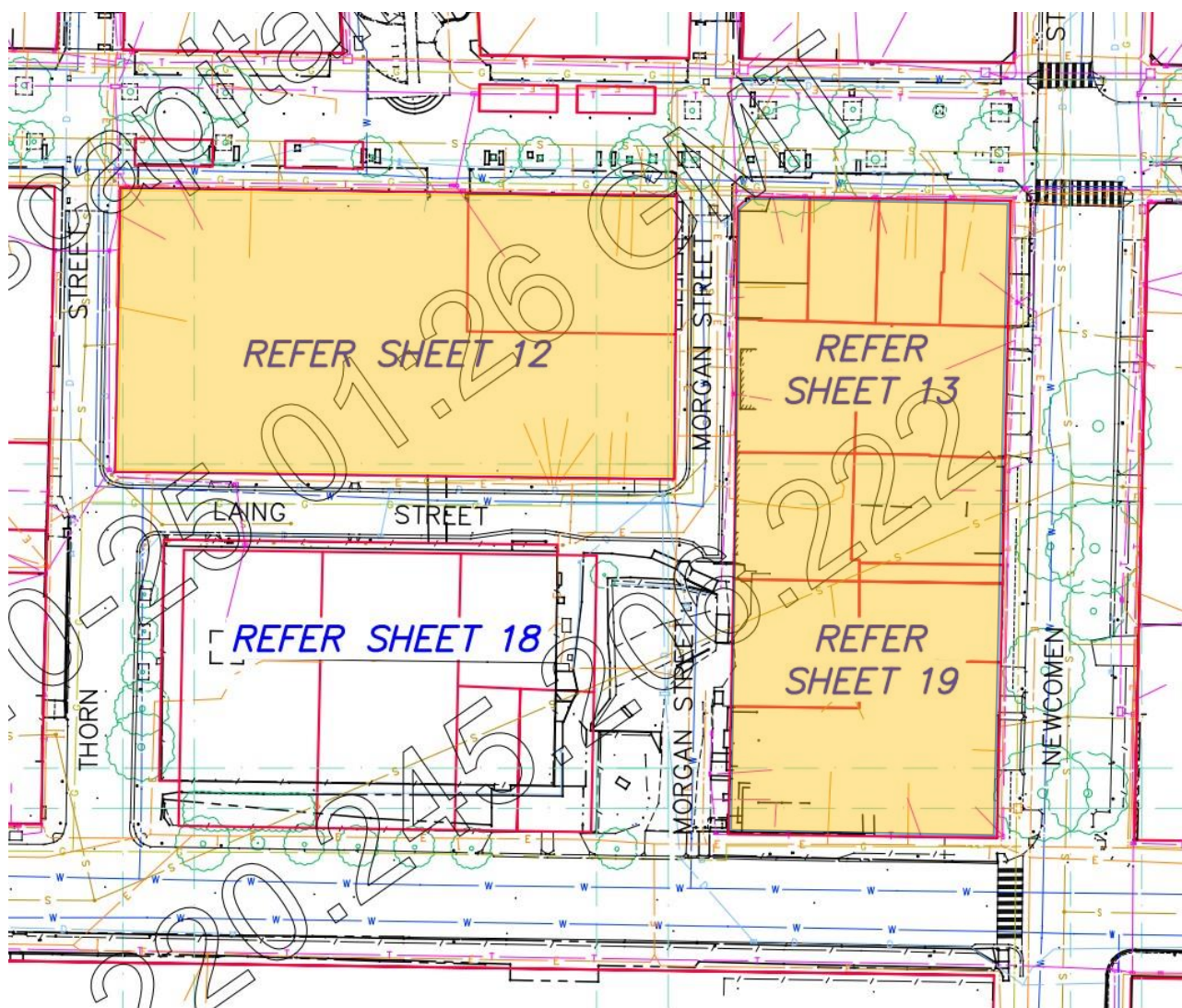


Figure 4.8 Detail showing Location of Underground Services

Approximate Stage 3 and 4 areas shaded

Source: Monteath & Powys 2008

4.6.5 Human Skeletal Remains

As discussed, the area around the Christ Church Cathedral may have been utilised as a burial place for early settlers dating from 1802, and by the Aboriginal inhabitants of the area, until the establishment of a church and burial ground and the formalisation of a town plan in 1823. The area of the former market reserve bound by and including present day Thorn, Morgan and Laing Streets may have been utilised for burials.

The 1997 AMP identifies the area of Laing Street as potentially containing burials. The 2013 AMP Review Inventory Number states:

...burials of the Penal Settlement were originally in the vicinity of Thorn Street, but once the church was built in 1818, they probably shifted to the church, but records only date from 1825 onwards (Higginbotham 2013)

As such, early settler burials may have occurred within the Stage 3 area of the Project area.

However, this portion of the Project area has been subject to substantial and ongoing disturbance and development from the early nineteenth century, including a coal mine shaft. The location of a mine shaft and other associated shaft top structure/activities may have discouraged burials in the current Stage 3 area. It is considered more likely that burials would have taken place in the block formed by King, Thorn, Laing and Morgan Streets in the location of the recently demolished City of Newcastle carpark (not within Project area).

Although the continuous levels of development and change that have occurred across the Stage 3 area will certainly have disturbed any early pre-1820s development (including potential burials), this does not negate the possibility such remains may be present. It is noted that no evidence of skeletal material is known to have been found since the Strand Theatre was constructed in 1916; including during the 1937 remodelling of the Strand, its demolition in 1979 and subsequent construction of the current Market Square shopping arcade development.

If present early remains (including skeletal remains) are considered to likely be disturbed, fragmentary and dispersed in nature. In addition, being outside a dedicated cemetery, burials may have been shallow and as a result susceptible to later disturbance/removal (refer to **Section 3.7.3** discussion regarding a coffin under the floor of a business in the Borough Markets building).

4.7 Summary of Archaeological Potential

The majority of the archaeological resource of the portion of the Project area proposed for below ground impacts / bulk excavation has the potential to date from approximately the 1850s to 1870 and relate to the urbanisation and commercialisation of Newcastle from the mid nineteenth century. However, there is also potential for remains of the Crooked Billet (reported to have been first constructed in the late 1820s), a pre-1830s structure (potentially residential), the early 1820s coal pit and disturbed, fragmentary and dispersed pre-1820s burials.

The potential archaeological resource that may be present within the Project area is likely to be limited principally to structural remains, deposits and associated deeper subsurface features. These may include cesspits/privies, refuse pits and potentially wells/cisterns located at the rear of the former structures and outbuildings.

It is acknowledged that the presence of an archaeological resource does depend on the level and methods of demolition of the earlier structures and the method of construction of the later buildings that replaced them; noting that the Stage 3 area has been subject to substantial disturbance and development from the early nineteenth century.

The date and nature of the cut and fill episodes that will have occurred will also determine the likelihood of a surviving archaeological resource; however these events are likely to have occurred prior to or in association with the post 1850s development of the Project area; suggesting that the post 1850s archaeological resource has the potential to survive if present in the form of deeper subsurface features.

The remains of yards, garden beds and any evidence of early pastoral/timber clearing activities are typically ephemeral and sensitive to later disturbance such as construction and subsequent demolition of buildings. This is also true of potential evidence of the pathway shown crossing the approximate north boundary of the Project area on the 1830s Armstrong plan which would most likely have been disturbed by later landscaping, construction and subsequent demolition of buildings, and the installation of utility services.

As discussed in **Section 4.6**, key historical maps available (for example 1830, 1854, 1886 and 1895) illustrate the potential known archaeological resource of the Project area; within the main areas of proposed sub-surface disturbance / bulk excavation.

Table 4.3 Summary of archaeological potential

Location	Potential Remains	Dates	Main Disturbance	Potential for Survival
Stage 3 area – former Market Reserve	Burials	Pre 1820s	Substantial disturbance and development from the early nineteenth century	Nil – for any intact burial Nil to low – for fragmentary and dispersed skeletal remains
	Government coal mine shaft	Early 1800s	Demolition of any associated shaft top structures. Filling	High – if located within Project area
	Brick and stone constructed commercial development along Hunter Street (including the Borough Markets building)	Post 1860s	Demolition and extensive development (especially the Borough Markets area)	Moderate
	Timber constructed light industrial structures fronting Laing Street	Post 1860s	Demolition and extensive development	Low
Stage 4 area – city block bound by Hunter, Newcomen, King and Morgan Streets	Government coal mine shaft	Early 1800s	Demolition of any associated shaft top structures. Filling	High – if located within Project area
	Residential (?) structure shown on Armstrong's 1830s Plan	Pre-1830s	Demolition and subsequent later construction; including potential cutting down of natural slope of the area	Low
	The Crooked Billet	1827	Alterations, demolition and construction of St Marks Roman Chapel	Moderate
	Residential (?) structure likely timber on stone foundations shown on 1850s plans	1850s	Demolition and subsequent later construction; including potential cutting down of natural slope of the area	Low-moderate
	Brick and stone constructed commercial development along Hunter Street	Post 1860s	Demolition and subsequent development in twentieth century	Low - Moderate

Location	Potential Remains	Dates	Main Disturbance	Potential for Survival
	Residential and light industrial development along Newcomen, King and Morgan Streets (rear of Stage 4 area)	Post 1860s	Demolition and subsequent development in twentieth century	Low - Moderate
Surrounding street subject to utility and streetscape upgrades	Culverts/drains and historical road foundations - unlikely to be considered archaeological relics	From mid nineteenth century	Multiple street and utility upgrades	Low-moderate for fragmentary evidence

5.0 Significance

5.1 Introduction

An assessment of significance is undertaken to explain why a particular place is important and to enable appropriate site management to be determined.

The Australian ICOMOS Burra Charter 1999 (the Burra Charter) defines cultural significance as meaning ‘aesthetic, historic, scientific or social value for past, present or future generations’ (Article 1.2). The Burra Charter was written to explain the basic principles and procedures that should be followed in looking after important places. Cultural significance is defined as being present in the ‘fabric, setting, use, associations, meanings, records, related places and related objects’. The fabric of a place refers to its physical material and can include built elements, sub-surface remains and natural material (Australia ICOMOS 2013).

5.2 Basis of Heritage Significance Assessment

The NSW Heritage Manual (1996) published by the then NSW Heritage Office and Department of Urban Affairs and Planning, sets out a detailed process for conducting assessments of heritage significance. The manual provides a set of specific criteria for assessing the significance of an item, including guidelines for inclusion and exclusion.

The Heritage Council of NSW recognises four levels of significance for heritage in NSW: Local, State, National and World. An item has local heritage significance when it is important to the local area. An item has state heritage significance when it is important in NSW. Most heritage in NSW is of local significance.

The seven criteria defined by Heritage NSW, and used by the NSW Heritage Council as an assessment format within NSW are outlined below:

- Criterion (a) an item is important in the course, or pattern, of NSW’s cultural or natural history
- Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW’s cultural or natural history
- Criterion (c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW
- Criterion (d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons
- Criterion (e) an item has potential to yield information that will contribute to an understanding of NSW’s cultural or natural history
- Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW’s cultural or natural history
- Criterion (g) an item is important in demonstrating the principal characteristics of a class of NSW’s cultural or natural places or cultural or natural environments.

5.2.1 Archaeological Significance

As a component of the holistic concept of significance, archaeological significance has traditionally been described as a measure by which a site may contribute knowledge, not available from other sources, to current research themes in historical archaeology and related disciplines (Bickford & Sullivan 1984 19-26). Archaeological significance has traditionally been linked to archaeological research potential in that 'a site or resource is said to be scientifically significant when its further study may be expected to help answer questions...that is scientific significance is defined as research potential (Bickford & Sullivan 1984 23-24).

Following Bickford and Sullivan's work on archaeological significance (Bickford & Sullivan 1984) the following questions are generally used as a guide to assessing the significance of an archaeological site in terms of its research potential (Criterion (e) of the NSW Heritage assessment criteria):

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

In 2009 the Heritage Council of NSW endorsed the Heritage Branch Department for Planning (now Heritage NSW) guideline Assessing Significance for Historical Archaeological Sites and 'Relics' which considers a broader approach to archaeological significance rather than a focus on the research potential of an archaeological site only.

The following significance assessment is based upon the broader questions detailed in the 2009 endorsed guidelines.

5.3 Archaeological Significance Assessment

5.3.1 Archaeological Research Potential (NSW Heritage Criterion E)

Archaeological research potential is the ability of archaeological evidence, through analysis and interpretation, to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site and its 'relics'. Archaeological deposits and features can provide evidence of the history and settlement of NSW unavailable from other sources, such as historical documentation. Archaeological investigation can provide information regarding technologies, economic and social conditions, taste and style. Archaeological features and deposits can provide primary evidence about the way of life of previous generations. The investigation, analysis and interpretation of the potential archaeological remains that may be present within the Project area may contribute information about the nature of the development and occupation of the area and thus provide a better understanding of the social, economic and cultural history of Newcastle.

Research potential of a particular site and its ability to answer research questions is dependent on a high level of intactness in the archaeological resource. While it is not possible to accurately determine the extent of disturbance, and hence the level of intactness of the potential archaeological resource, due to the lack of subsurface visibility, portions of the Project area have undergone several phases of development associated with the establishment and growth of Newcastle. The various phases of redevelopment of the site have included episodes of construction, demolition and likely site preparation works (cut and fill) all of which are likely to have had, in places, a substantial impact on the survival of the archaeological resource.

Any evidence of activities such as timber clearance or the pathway shown on Armstrong's 1830 map is likely to be patchy at best, and it would be impossible to specify what such remains may entail and where they would be located. Given the nature of the potential evidence and the level of disturbance that has occurred across the site as a result of subsequent and ongoing development there is unlikely to be any surviving evidence from this period of development.

The archaeological resources that may survive across the Project area include; building foundations, occupation deposits containing cultural material associated with former structures, deeper sub surface features (cellars, cesspits/privies, rubbish pits) and artefacts. The deeper subsurface features likely to be present across the Project area may contain intact deposits associated with the mid to late nineteenth century occupation and use of area. The cesspits/privies are likely to have been constructed prior to the installation of water and sewerage services to Newcastle in the late 1880s and may contain intact artefact deposits pre dating the 1880s.

Archaeological investigation of Stage 1 of the Newcastle East End Project exposed evidence of mid 1800s residential and commercial development and expansion of the growing CBD, however the archaeological remains comprised the base of the earlier structures (including a well) only and no artefact deposits were exposed. No meaningful archaeological evidence was exposed in Stage 2 of the Newcastle East End Project.

As such, there is still relatively limited information relating to the early spread of the city into this area; on the western limit of the convict settlement area. Archaeological evidence of the use and occupation of post 1850s commercial, light industrial development and residential structures may provide a time capsule of data of the domestic occupation and employment of working-class Newcastle. The opportunity to archaeologically investigate domestic sites of high integrity in the old town of Newcastle has the potential to yield information that will contribute to an understanding of the area's cultural or natural history (AMAC 2003).

Any remains associated with the twentieth century use of the Project area would, in general, have at best low archaeological significance and research potential.

Crooked Billet

Although the Crooked Billet was potentially constructed in the late 1820s, the building was utilised as a hotel and boarding house possibly until 1960. Any outbuildings (including cesspits or wells) appear to have been located closer to Newcomen Street, outside the Project area. Considering the likely number of alterations and additions any evidence of the original use and construction of the building may be fragmentary and difficult to distinguish in the archaeological record. However, any remains present dating to the pre-1850s would have research potential and contribute to our knowledge of the early hotels established in Newcastle following the establishment of Dangar's town plan and their use by itinerant seafarers. It is also noted the Crooked Billet was also utilised as a temporary Customs House from 1837 into the early 1840s under the administration of Major Charles Bolton, Sub-collector of Customs. Henry Parkes worked in the temporary Customs House in 1840.

1830s Structure

In 1827 Dangar noted that private houses in Newcastle only numbered between 25 to 30. The residents included storekeepers or mercantile men, shopkeepers, innkeepers, carpenters, bricklayers, brickmakers and blacksmiths (Higginbotham 2013 Volume3:56). If evidence survives of the building shown on Armstrong's 1830's plan in the southern portion of the Stage 4 area it would provide the rare opportunity to archaeologically investigate an early residential structure from the early growing town of Newcastle.

Coal mine shaft

There is potential for evidence of a pre 1830s coal mine shaft to be present within the Project area (potentially including discarded domestic artefactual material deposited when the shaft ceased to be worked). If intact evidence is present, these remains could provide information regarding the early exploitation of Newcastle's natural coal resources.

However, the depth of the shaft and later filling likely negates the potential for any significant archaeological remains or relics to be exposed during bulk excavation activities.

Burials

Christ Church cemetery is one of earliest cemeteries in NSW and is therefore likely to contain interments dating to early phases of European occupation of Australia (Austral 2004). Prior to the 1820s the cemetery may have extended to Hunter Street; beyond King Street which was the established northern boundary of cemetery by the 1820s. As such the Stage 3 portion of the Project area (the former Market Reserve area) bound by Hunter, Thorn, Laing and Morgan Streets may have been utilised for burials in the early nineteenth century.

As discussed in **Section 3.7**, there are reports that human bones were found in the trenches being excavated for the Strand Theatres' foundations within the Project area. Other documented evidence includes suggestions a coffin was exposed beneath the floor of a printing business within the Borough Markets. The 1997 AMP identifies the area of Laing Street as potentially containing burials (refer to Item 1146 on **Plate 2.1**). The AMP Review Inventory Number 2176213 (refer to **Plate 2.2**) states:

...burials of the Penal Settlement were originally in the vicinity of Thorn Street, but once the church was built in 1818, they probably shifted to the church, but records only date from 1825 onwards (Higginbotham 2013).

The opportunity to study historical skeletal material in an Australian context has been available at a number of other locations and sites. However, early settlement burials are a relatively rare occurrence (noting that examples such as Cadia and Randwick Destitute Children's Institution date to after 1860). Outside Sydney/Paramatta Newcastle is Australia's oldest city (the first permanent settlement in Newcastle being in 1801). While skeletal remains have been excavated and studied from Old Sydney Burial ground (dating from the 1790s) and the later Devonshire Street cemetery in the Central Station area (from the 1820s), the opportunity to study pre-1820s burials within a non-cemetery site that was unlikely to have been subject to any form of exhumation activity is a rare occurrence. Early infant and foetal remains have been excavated outside of the boundaries of a cemetery (for example the discovery of the infant and foetal remains at the Parramatta Justice Precinct in 2007 [Casey & Lowe]), however if burials were undertaken in the former market reserve area evidence suggests both adults and infants were buried there; potentially a representative cross section of the population of early Newcastle, including miners, convicts, soldiers and early settlers/residents.

In the context of Newcastle, development at 700 Hunter Street provided evidence of grave cuts and scattered human remains (disturbed by a partial exhumation) related to the Presbyterian & Roman Catholic cemetery located to the west in the Honeysuckle area of Newcastle. This cemetery dates to approximately 1844 to 1881.

If present, burials dating to prior the official establishment of the Cathedral would not be noted on any burial records. Physical evidence could contribute spatial information and stratigraphic evidence which could shed light on where and when the burials were taking place in the early period of European settlement in Newcastle. In addition, basic forensic and anthropological information could be derived from any skeletal remains present, including sex, age, race, gender, cause of death and palaeopathology (nutritional status of the deceased and diseases that may be evident from a study of the bones) of the interments. Information may also be derived concerning eighteenth century English burial practices, not only in an Australian context but also outside a dedicated cemetery. Information could be compared with that from NSW cemetery sites and in particular comparison between burial within a cemetery and those outside a cemetery. Although considered unlikely, information may also be provided concerning the construction and typologies of coffins and other grave goods.

If present, identification of individuals would be difficult, however, evidence may be present in the form of inscribed coffin plates. Coffins are reported to have been found within the area with inscribed plates, for example that of a child of Lieut. John Plat uncovered within the area of the former market reserve (refer to **Section 3.7**). Early residents in the centre of Newcastle are reported to have buried their dead '*in any place which appeared most suitable, and that, sometimes, was in their gardens*' (NMH 13/11/1915). If this was the case, tentative identification may be possible from the locations of the burial in relation to the original lots and their owners/grantees.

However, as discussed, the Stage 3 portion of the Project area has been subject to substantial and ongoing disturbance and development from the early nineteenth century, including a coal mine shaft. The location of a mine shaft and other associated shaft top structure/activities may have discouraged (and disturbed any present) burials in the current Stage 3 area rather than in the block formed by King, Thorn, Laing and Morgan Streets in the location of the recently demolished City of Newcastle carpark (not within Project area). Being outside a dedicated cemetery, burials may have been shallow and as a result susceptible to later disturbance/removal.

Although the continuous levels of development and change that have occurred across the Stage 3 area will certainly have disturbed any early pre-1820s development (including potential burials), this does not negate the possibility such remains may be present. It is noted that no evidence of skeletal material is known to have been found since the Strand Theatre was constructed in 1916; including during the 1937 remodelling of the Strand, its demolition in 1979 and subsequent construction of the current Market Square shopping arcade development.

If present early remains (including skeletal remains) are considered to likely be disturbed, fragmentary and dispersed in nature.

In the unlikely event intact burials are uncovered within the Project area, their rarity value would contribute to their high level of significance. The discovery of early settlement burials within a non-cemetery site is an rare occurrence, if present any remains would have high archaeological research potential.

As discussed in **Section 3.7**, documentary evidence suggests there may have been Aboriginal burials in the area, as well as early settlers. The Aboriginal Cultural Heritage and Archaeological Assessment prepared for the Project should be referred to for further consideration of Aboriginal burials.

5.3.2 Associations with individuals, events or groups of historical importance (NSW Heritage Criteria A, B & D)

The Project area has close associations with a number of leading merchants and business men who would have been prominent members of Newcastle society and would have contributed to the social, cultural and economic life of Newcastle, and NSW in the nineteenth and twentieth centuries. In addition, there would have been a number of other smaller businesses within the Project area known locally in the late nineteenth century. The Project area also has associations with notable Australians such as Henry Parkes, Ralph Snowball and Major Charles Bolton.

Several known and respected architects, both of Sydney and local to Newcastle worked on structures formally present within the Project area. The 1870s constructed Borough Market building was designed by Sydney architect George Allan Mansfield with the involvement of local architect Joseph Backhouse.

If present, burials in Project area may be of miners, early convicts, pioneers, soldiers and settlers buried before, during and possibly after the establishment of Christ Church burial ground. If present, skeletal remains may have strong contemporary social links and are likely to have significance to people living in Newcastle or elsewhere in Australia whose ancestors may have been buried in the area.

It is also noted an archaeological site can take on additional social values as a result of community interest in archaeological excavations and remains.

5.3.3 Aesthetic or technical significance (NSW Heritage Criterion C)

At this time, when the archaeological evidence at the site is obscured, it is impossible to determine with any certainty whether, and if so, how, the archaeological features at this site would meet this criterion.

If present, skeletal remains may consist of disturbed and fragmentary human skeletal remains, decaying remnants of timber coffins, and possibly some decorative coffin elements, nails and buttons. There is unlikely to be any remains of headstones or monuments, which if present could demonstrate the craftsmanship of the time. (Casey Lowe 2007).

The archaeological resource of the site is unlikely to meet this criterion.

5.3.4 Ability to demonstrate the past through archaeological remains (NSW Heritage Criteria A, C, F & G)

The Project area is significant for its demonstration of the historical development and growth of Newcastle.

In general, the potential archaeological resources associated with the Project area are not associated with an unusual or remarkable aspect of Newcastle's history; likely being dominated by evidence of the commercial, residential and light industrial development of Newcastle from the 1850s. The remains would be part of a resource provided by sites which contribute evidence of nineteenth to early twentieth century commercial, residential and light industrial usage of this nature throughout Newcastle, and would be considered as representative of their period.

However, evidence of the early mine shaft could demonstrate an important part of the history of the development of Newcastle associated with the early discovery of coal and the subsequent development of the mining industry. There is also potential for evidence of early nineteenth century structures to be located between present Newcomen and Morgan Streets, including the Crooked Billet Tavern, thought in the 1950s when it was still standing, to have been the oldest surviving building in Newcastle. Archaeological remains of these structures could provide a rare opportunity to investigate this period of Newcastle's history.

The Project area is part of an ever decreasing archaeological resource within the Newcastle area, and as such, any archaeological remains present could be seen as a surviving element of Newcastle's history.

The Newcastle East End Stage 1 and 2 Project areas, located immediately adjacent to the current Project area, have a similar history of development. The nature of the archaeological remains and level of preservation within the Stage 1 and 2 Project areas needs to be taken into account when considering archaeological investigation of the Stage 3 and 4 areas and any associated archaeological sampling strategy (as discussed in **Section 8.2**). It is noted that archaeological investigation of Stage 1 exposed structural remains dating from the 1840s (refer to **Section 4.2.1**). However, the area had been disturbed by several phases of substantial development including construction of and major modifications to the 1906, 1920 and 1937 constructed David Jones buildings. As such, remains were in general limited to the base of the earlier structures (including a well) and no artefact deposits were exposed. The Stage 2 area exposed limited archaeological remains (refer to **Section 4.2.2**).

The current Project area, although subject to several phases of construction, may have a better preserved archaeological resource; particularly the less intensely developed Stage 4 area. It is noted that the Project area is located closer to the original area of the penal settlement located along Watt Street.

Any historical human remains uncovered within the Project area would have the potential to provide information regarding the burial practices, religion, class/status etc of inhabitants of Newcastle in the early nineteenth century.

5.4 Statement of Significance

Newcastle is Australia's second oldest urban settlement in NSW. The eastern capital cities of Sydney, Hobart and Brisbane, as well as smaller centres like Port Macquarie, were also founded as penal colonies. If an archaeological resource relating to the convict era settlement, or early town development as shown on Armstrong's 1830s plan, of Newcastle was found to be present within the Project area, it could provide information not only about Newcastle itself but also of the early colonial and convict era way of life from the initial European settlement of Australia.

The Project area is located at the edge of the original convict and early town areas of Newcastle centred around Watt Street and its archaeological resource may contain evidence of this early period of European settlement and exploitation of Newcastle. Although any remains relating to the original convict settlement would likely to be of State significance, there is considered to be little potential for such intact remains to be present within the Project area.

The development of the port, land reclamation and the construction of the railway contributed to the rise of retail and commercial enterprises and the creation of the Newcastle CBD of the mid to late nineteenth century, of which the Project area was, and still is, an integral part. The Project area is located within an early part of Newcastle originally at the edge of what was the growing main commercial, residential and light industrial district.

If intact, archaeological remains within the Project area could provide a tangible link to the early town development of Newcastle.

Table 5.1 Summary of Archaeological Potential and Significance

Period	Potential	Significance (if present intact)
Convict settlement (including early burials). 1804 to early 1820	Nil to low potential	State
Early town development. Including early use, management and alteration of the low lying flood prone waterfront land. 1823 to 1850	Low to moderate potential	Local
Commercial and residential expansion - buildings and terraces / light industrial use. Post 1850	Moderate potential	Local

6.0 Impact Assessment

As discussed in **Section 1.0**, the Project comprises the mixed use development of Stages 3 to 4 of the Newcastle East End Project incorporating retail uses, residential apartments, basement car parking and associated works.

The proposed excavation of the Project area for three levels of basement parking will result in the removal of all potential historical archaeological remains that may be present within the areas subject to bulk excavation (refer to **Figure 6.1** to **Figure 6.2** showing basement levels).

Additional works to be undertaken as part of the project include:

- demolition of extant building footprint (with some façade retention)
- perimeter piling / basement retention wall
- utility upgrades (including water, sewer, electrical and communications) will be undertaken in the surrounding streets
- streetscape upgrades and landscaping will be undertaken in portions of the streets immediately adjacent to the Stage 3 and 4 areas
- mine grouting will also be undertaken as part of the Project.

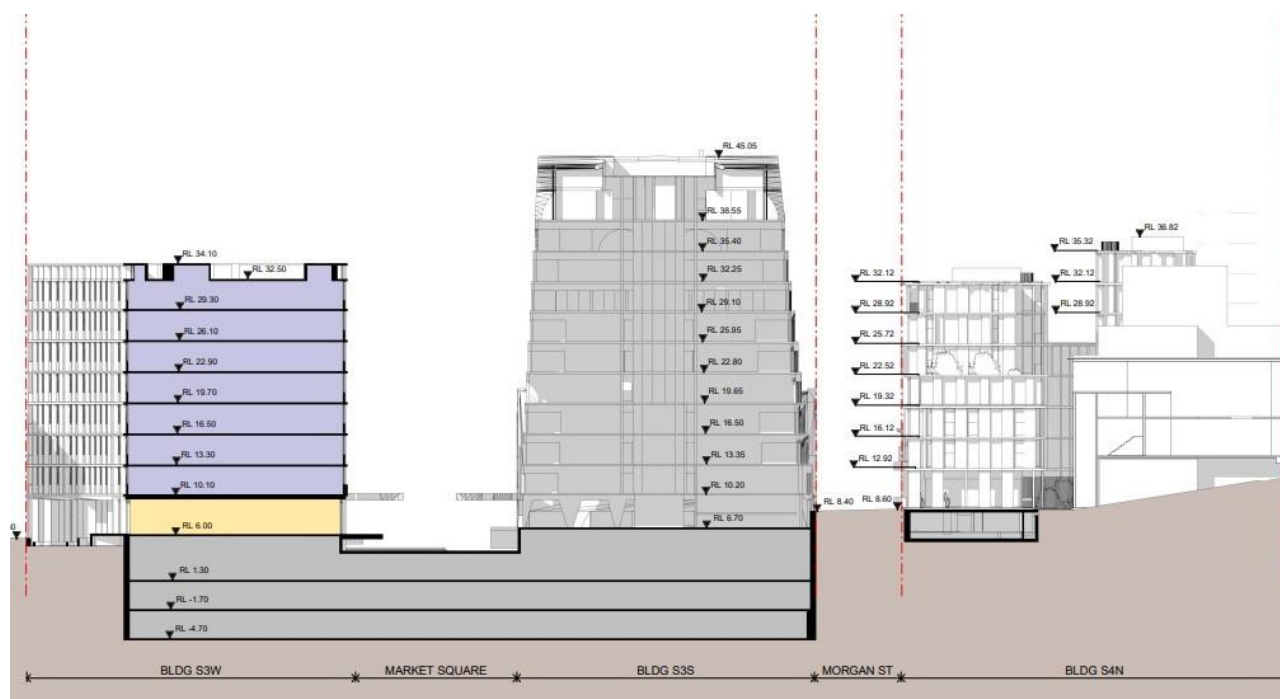


Figure 6.1 Section across Project Area (West to East)

Thorn Street is on left. Newcomen on right.

Source: SJB Architects/ Iris

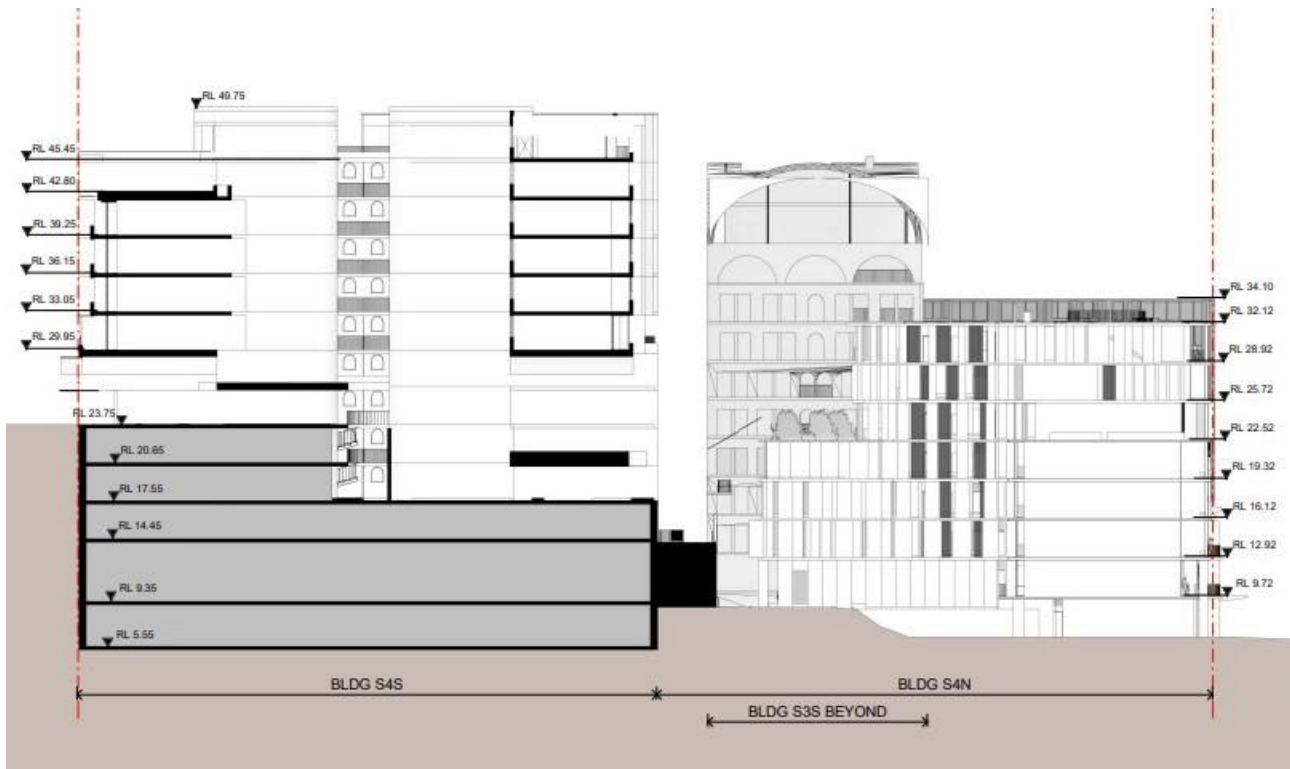


Figure 6.2 Section Across Project Area (South to North)

King Street is on left. Hunter Street on right.

Source: SJB Architects/ Iris

7.0 Research Design

7.1 Introduction

A research design is an important prerequisite for an archaeological investigation. In NSW all applications for an excavation permit must be accompanied by a research design. This research design has been prepared to be part of the supporting documentation for an excavation permit application made under Section 140 of the Heritage Act.

A research design is a set of research questions developed specifically for a site within a wider research framework to ensure that when the archaeological resources of the site are destroyed by excavation, their information content is preserved and can contribute to current and relevant knowledge about the past. An archaeological research design aims to ensure that the excavation of an archaeological site is managed in a way to recover information available through no other technique.

A fundamental requirement of an archaeological research design is that the questions posed must be responsive to the nature of the archaeological evidence that is likely to be encountered. However, the nature of an archaeological resource cannot be accurately determined until excavation commences. It is essential that the research design is adaptable and can be revised as the nature and extent of the resources within the site become better understood. With the better understanding of an archaeological resource, more informed management of the remains can be undertaken.

7.2 Research Framework

Archaeological investigation of the Project area should consider physical evidence associated with the historical development and occupation of this site within a broad thematic context as well as within a local and site specific context (Heritage Council NSW 2001).

7.2.1 NSW Historical Themes

A historical theme is a research tool, which can be used at the national, state or local level to aid in the identification, assessment, interpretation and management of heritage places (AHC 2001:1). Nine national historical themes have been identified by the Australian Heritage Commission (AHC now Australian Heritage Council). The Heritage Council of NSW has compiled historical themes for understanding the heritage of NSW. The NSW Historical Themes, as compiled by the Heritage Council, that are relevant to the potential historical archaeological resource of the Project area are discussed in **Table 7.1**.

Table 7.1 NSW Historical Themes

Research Theme	Research Questions
Convict	Activities relating to incarceration, transport, reform, accommodation and working during the convict period in NSW (1788-1850).
Agriculture	Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes.
Commerce	Activities relating to buying, selling and exchanging goods and services

Research Theme	Research Questions
Environment (Cultural Landscape)	Activities associated with the interactions between humans, human societies and the shaping of their physical surroundings
Industry	Activities associated with the manufacture, production and distribution of goods
Towns, Suburbs and Villages	Activities associated with the creating, planning and managing urban functions, landscapes and lifestyles in towns, suburbs and villages
Land Tenure	Activities and processes for identifying forms of ownership and occupancy of land and water, both Aboriginal and non-Aboriginal
Utilities	Activities associated with the provision of services, especially on a communal basis.
Accommodation	Activities associated with the provision of accommodation, and particular types of accommodation
Domestic Life	Activities associated with creating, maintaining, living in and working around houses and institutions.
Leisure	Activities associated with recreation and relaxation
Social institutions	Activities and organisational arrangements for the provision of social activities.
Birth and Death	Activities associated with the initial stages of human life and the bearing of children, and with the final stages of human life and disposal of the dead.

7.2.2 Newcastle AMP Research Themes

The 1997 AMP developed a series of research themes for the archaeology of Newcastle, as a guide for any archaeological investigations in Newcastle. The aim of the research themes was to ensure the collection of relevant data from any archaeological investigation in Newcastle. The research themes, as identified in the 1997 AMP, relevant to the potential historical archaeological resource of the Project area are detailed below (Suters 1997).

Table 7.2 Newcastle AMP Research Themes

Research Theme	Research Questions
Environmental Modification and Disturbance	Fill levels and extent of altered ground
	Water supplies (public wells/private wells / cisterns / reticulated supply)
	Vegetation (disturbance/loss and introductions)
Penal Settlement	Physical /spatial layout (including street layout)
	Sites/buildings (including building materials and technology)
	Occupants / lifeways (including residential/domestic sites)

Research Theme	Research Questions
	Early industries
Government Town	Physical/spatial layout (including street pattern and subdivision, town allotments)
	Sites/buildings (including building materials and technology)
	Occupants / lifeways (including residential/domestic sites)
	Public utilities and services
Urbanisation and the Nineteenth Century City	Development of the CBD and specialised land uses
	Occupations and residents of the CBD (lifeways)
	Town services / urban amenity
	Nature of development / expansion of the city (increased structural / spatial / functional complexity)
Industry and Manufacturing	Industry locations and industrial production
	Economic organisation and control of production vs. social differentiation
Gender and Ethnicity	Roles / status (social and economic) including occupations
	Historic, social, spatial and physical environment
	Locations and / or concentration of specific groups
	Lifestyle
Archaeological Management Issues	Site preservation; integration and comparison of results
	Assessment of management plan predictions

7.3 Research Design Framework

The proposed archaeological investigation of the Project area would be undertaken with the aim of recovering information available through no other source or technique. The investigation will allow general questions regarding the nature, extent and stratigraphic integrity of the surviving archaeological resource to be addressed (what is there and what is the sequence of events on the Project area from the earliest European usage to present day).

The type of questions that might be asked of the intact surviving archaeological remains include:

- What physical evidence of former activities survives on the site?
- What is the extent of the surviving archaeological evidence?
- What is the nature of extant archaeological features?
- What is the date of the identified elements?

- What can the material culture contribute to our knowledge about this site or other sites?
- Is there evidence of any undocumented development and use of the Project area?

The site investigation is designed to answer these basic questions about the nature and extent of the existing archaeological resource. While these questions provide a basic archaeological context for further site investigations, more specific questions must be asked to address the research potential of the Project area. These questions are discussed below in relation to the various phases of development and occupation of the Project area and Newcastle.

7.3.1 Convict Settlement / Pre-Town Plan

The wider Newcastle area is likely to have been known by the early European settlers from the early 1790s. However, it was not until Lieutenant Shortland's observations of coal there and Lieut. James Grant's subsequent exploration of the area and its natural resources in the late 1790s that miners and timber merchants began to visit the area. Governor King's first attempted penal settlement in 1801 failed and it wasn't until 1804 that the area was successfully settled as a penal settlement. Little is known of the specific usage of the Project area at this time which was located on the outer limits of the early penal settlement area on what would have been steeply sloping ground leading to a flood prone foreshore.

- Is there evidence of pre or post-contact Aboriginal land use across the Project area?
- Was the landscape of the Project area modified during this early stage of Newcastle's development?
- Is there any evidence of the use of this area at the time of early settlement and if so what does it consist of (for example mining)? Was the area utilised for any early agricultural / gardening activities by the inhabitants of the main convict settlement?

7.3.2 Armstrong's 1830s Plan of the Town of Newcastle

John Armstrong's 1830s Plan of the Town of Newcastle in New South Wales is a highly detailed map of Newcastle stretching across the new government town to the AA Co. grant. The map provides precise detail of all extant buildings and streets in the town and shows what could be the first residential construction in the Project area (refer to **Figure 4.3**). In 1827 Dangar noted that private houses in Newcastle numbered between 25 to 30, with about 200 inhabitants, apart from the government mining establishment. The residents included storekeepers or mercantile men, shopkeepers, innkeepers, carpenters, bricklayers, brickmakers and blacksmiths.

- Is there any surviving evidence for this structure within the archaeological resource?
- If so what can the evidence reveal about the accuracy of Armstrong's 1830s plan and can this information be utilised to predict the likelihood of potential remains dating to this period shown on Armstrong's plan in other areas of central Newcastle?
- Do any underfloor deposits, occupation deposits or deeper subsurface features associated with the early structure survive?
- Do these deposits/features contain artefacts related to this early development of the area and if so what do they reveal about the inhabitants of the area?

- Did this structure remain in use following the establishment of the allotments and if so how long for?
- Is there evidence of modification in terms of cut and fill events to enable development of the steep sloping nature of the Project area at this time?

7.3.3 Government Coal Pit

A coal mine shaft is known to have been located within (or in the vicinity of) the Project area. The mine shaft is shown on a number of early maps, however the exact location of the shaft is unclear as a result of differences with the early maps. The coal shaft is likely to have been used until 1830 when government mine works ended in the city centre. The coal mined from this pit may have first been discovered in 1797 during Lieutenant Shortland's search for escaped convicts.

- Is there surviving evidence of the shaft and its methods of construction?
- Can the shaft tell us anything about the early development of the mining industry and the technology used, prior to the establishment of the AA Co?
- Was the shaft capped/backfilled when it ceased to be used or was it used as a rubbish pit until the area was subdivided in the late 1860s?
- Is there any evidence of shaft top infrastructure?

7.3.4 Establishment of Town Plan (1823)

In 1823 Dangar laid out the Newcastle town plan; which included establishing allotments within the Project area. The extant built elements on the site reveal little evidence of the original town allotment boundaries.

- Is there any evidence surviving in the archaeological resource of the original town plan established by Dangar?

7.3.5 Early Urban Development following Subdivision (approximately 1823 to 1850)

Following subdivision there is there is documented evidence for development across the Project area prior to the 1850s (in addition to the mine shaft and structure shown on the 1830s plan). Early 1850s plans show established structures within the Stage 4 area (refer to **Figure 4.4**); including what is likely the Crooked Billet Hotel and residential structure.

- Is there any surviving evidence for these structure within the archaeological resource?
- If so what can the evidence reveal about the accuracy of 1850s plans and can this information be utilised to predict the likelihood of potential remains dating to this period in other areas of central Newcastle?
- Do any underfloor deposits, occupation deposits or deeper subsurface features associated with the early structure survive?
- Do these deposits/features contain artefacts related to this early development of the area and if so what do they reveal about the inhabitants of the area?

- Is there evidence of modification in terms of cut and fill events to enable development of the steep sloping nature of the Project area at this time?

7.3.6 Utilising the Flood Prone Land

Hunter Street is reported to have been lower than it is today and several attempts were apparently made to realign/re-level the street. There are reports of the level of Hunter Street being raised to avoid flooding. Buildings constructed along Hunter Street (not necessarily within Project area) are reported as having been built on stilts or pillars to avoid flooding and some early shops were in-filled to bring them up to new street levels.

- Is there any evidence for the alteration of the levels of Hunter Street and the methods utilised by occupants to manage this dating to this time?
- Is there evidence of more general modification of the area in terms of cut and fill events to enable development?

7.3.7 Post 1850s Development and Expansion (approximately late 1850 to 1880s)

The development of the Project area increased dramatically in the later parts of the nineteenth century which included the commercial development along Hunter and likely more residential and light industrial use of the rear and central portions of the Project area. The pattern of development in Newcastle is reflected with Hunter Street generally developing as the main commercial area. Residential development along street frontages (for example King Street) away from the main commercial strip of Newcastle with light industrial uses occurring behind the residential areas appears to have been typical of this period of development.

- Is there any surviving evidence for these structures within the archaeological resource and is there evidence for structures not shown on early mapping?
- Is the differing usage of the structures reflected in methods of construction and does this reflect the details on the 1886 Mahlstedt & Gee colour plan of Newcastle?
- Do any underfloor deposits, occupation deposits or deeper subsurface features associated with the structures survive?
- Do these deposits/features contain artefacts related to this period of development and if so what do they reveal about the inhabitants of the area?
- What comparisons can be made with the information retrieved from data collected from the archaeological investigation of Stages 1 and 2 of the Newcastle East End Project or other archaeological investigations in the area – and do the differences reflect location in relation to the increasing commercial development of central Newcastle? Or are differences dictated by level of impact from later development?

7.3.8 Late Nineteenth to Twentieth Century Development

Larger scale commercial development and in fill replaced a number of the nineteenth century structures.

- To what extent did the twentieth century development impact on the earlier archaeological resource of the area?

7.3.9 Deeper Subsurface Features

Historical records and evidence from other archaeological sites suggest the potential for a number of deeper subsurface features across the site which may include cesspits/privies, rubbish pits or wells/cisterns. However, evidence provided by investigation of the Stage 1 Project area suggests that the proximity to the original harbour shoreline appears to have negated the need for deep wells (as a result of the high water table) along Hunter Street and may also have hindered construction of cesspits or other deeper subsurface features.

- Does the site contain intact evidence of the cesspits/privies (or wells/cisterns) indicated in nineteenth century plans?
- If present, do these features contain accumulated deposits associated with the nineteenth century occupation of the site? If so, what does this material reveal about the history of the site?
- What impact did the high water table and installation of water and sewerage services from the late 1880s have on these features?

7.3.10 Lives of Inhabitants

If intact deposits exist within cesspits/privies, well/cistern, rubbish pits or within occupation deposits the contents of these deposits may reveal useful information about the 'lifeways' of the inhabitants. Analysis of the artefacts recovered could, for example, provide direct evidence of the socio-economic status of the nineteenth century Newcastle CBD community.

- Are there differences between the artefact deposits associated with the commercial, residential buildings and light industrial buildings?
- Food remains may indicate aspects of diet. Was there a reliance on seafood with the proximity of the coast and port?
- Did the diet of the inhabitants change with the increased prosperity and commercial success of the late nineteenth century?
- Is the proximity of the harbour evident in any other aspects of the material culture/archaeological resource?

7.3.11 Licensed Hotels

There were 57 hotels located in the city centre by the end of the nineteenth century; capitalising on the steady growth of the city and the number of itinerant seamen present in the Newcastle CBD as a result of the ships brought to Newcastle as part of the foreign coal trade.

Hotels in the town centre generally had associated stables, outbuildings and yards. Some of them are known to have had light industrial activities taking place in the yards (including blacksmiths' shops). Three hotels were formally located within the Project area including the Crooked Billet; potentially constructed in the 1820s.

- Do any underfloor deposits, occupation deposits or deeper subsurface features, including cellars, survive?
- Do these deposits/features contain artefacts and if so what do they reveal about the patrons of the hotel?
- If present, are there differences in the artefactual assemblage of the hotel and that of the other commercial, residential and light industrial structures?

7.3.12 Burials

Documentary evidence suggests the Project area is within an area utilised to bury the early European settlers before the establishment of Christ Church and its burial ground.

- Has the subsequent nineteenth and twentieth century development of the area removed all evidence of burials? Or is there dispersed/scattered material surviving?
- Are there differences in the burial patterns between early burials in non cemetery land and those interred within dedicated cemeteries?
- What information can any surviving burials reveal regarding English burial practices within an early Australian settlement context?
- What can we learn about the growth, development, nutrition, general health, genetic relationships and taphonomic changes in burials in this early period of European settlement in Newcastle and NSW?

8.0 Archaeological Excavation Methodology

An archaeological assessment is prepared to recommend specific methodologies with regards to the archaeological investigation of a site. Recommendations can vary depending on the type and size of the site, the potential archaeological resource and its significance and the level of impacts resulting from the proposed development. Methodologies (recommended by Heritage NSW) can include no further action, archaeological monitoring, test excavation, archaeological excavation, or in situ conservation (Heritage Office 1996:8).

The Project area has been assessed as having a potential archaeological resource of local significance, with low potential for remains of possible state significance. While the Project area will have been subjected to a certain degree of disturbance, there is potential for an intact archaeological resource to be present, (potentially dating from the 1820s) relating to the occupation, use and development of the Newcastle CBD.

The redevelopment of the Project area would likely remove all historical archaeological remains within areas of proposed bulk excavation. Archaeological investigation of the Project area would enable the recovery of information through the identification and recording of the archaeological remains and the realisation of the archaeological research potential of the site.

Test Excavation

The level of preservation of the below-ground archaeological resources in the Project area and the level of disturbance that has occurred to the resource is unknown. In theory archaeological test excavation (mechanical excavation of localised trenches or hand excavation of test pits) in key locations (areas of archaeological potential and/or proposed impact, or areas that would best characterise the subsurface profile of the site) can be an efficient method of testing the archaeological potential of an area.

There is expected to be a considerable depth of fill (potentially up to 2 metres) present above any archaeological remains (archaeological remains exposed in the East End Stage 1 area were at least 1.20 metres to over 2.0 metres below street level). The current built nature of the Project area and the depths of fill would make meaningful and safe archaeological testing unfeasible and negate the opportunity for archaeological testing before commencement of the Project.

As such, a program of archaeological monitoring (Phase 1 works), following the demolition of the extant structures to ground slab is recommended. The program of monitoring is likely to result in more detailed investigation of certain areas of the Project area (Phase 2 works) if intact archaeological remains are exposed.

8.1 Phase 1 Works - Archaeological Monitoring

Following the proposed demolition of the extant buildings, archaeological monitoring should be undertaken in conjunction with the removal of ground slabs and the commencement of bulk excavation of the Project area.

All machine excavation (of areas of bulk excavation and any additional localised excavation outside the main area of bulk excavation) is proposed to be archaeologically monitored. The monitored machine work will continue until the interface of any below slab level fill material and significant archaeological material have been encountered or the maximum depth of excavation required for the proposed development / culturally sterile deposits are reached.

In the event that monitoring works reveal the presence of significant or intact archaeological evidence, further investigation in these areas would be required before site works can proceed. The archaeologists on site will need the authority to halt site works, as necessary, to undertake further investigation or detailed recording, if required; of any remains exposed during the Phase 1 monitoring process. Machine excavation work should not recommence in these areas until directed by the archaeologist on site.

Any archaeological remains revealed during monitored machine excavation will be identified and assessed to determine if further archaeological investigation is required (Phase 2 works). It is anticipated that structural remains, features or deposits may be exposed during the Phase 1 works. Any significant historical archaeological remains exposed during Phase 1 works will be investigated further as part of Phase 2 works.

8.1.1 Basement Retention Wall and Footing Demolition

It is anticipated that the perimeter of the Project area will be piled (basement retention wall) and mines grouting undertaken prior to (and to enable) the bulk excavation of the area. Due to the retained facades along street frontages and the anticipated depth of fill material above both historical archaeological remains and the natural sands of the areas, bulk excavation of the Project area can not commence prior to the piling. Archaeological monitoring (particularly of potentially archaeologically sensitive areas) is proposed to be undertaken of the clearing of the perimeter of the Project area prior to piling being undertaken. Concrete footings of the extant twentieth buildings (following demolition) may also be required to be removed/demolished at this time. If this occurs the demolition will also be archaeologically monitored.

It is noted that archaeological monitoring of perimeter piling and in ground footing demolition was successfully undertaken as part of East End Stage 1 works. Monitoring the perimeter of the Stage 1 area prior to piling confirmed the presence of remains of the 1840s Rouse Hotel and enabled their complete recording (refer to **Section 4.2.1**).

8.2 Phase 2 Works - Detailed Archaeological Investigation

Where warranted, Phase 2 works will comprise the detailed archaeological investigation of certain areas of the Project area following Phase 1 works.

8.2.1 Archaeological Investigation

All historical archaeological excavation will be undertaken to normal professional standards and in accordance with any relevant conditions of the approved Excavation Permit. Phase 2 works may include comprehensive archaeological excavation of areas of high archaeological integrity in order to recover information through the excavation and recording of the archaeological remains and thus realise the archaeological research potential of the site as discussed in **Section 7.0**.

Where required, detailed historical archaeological investigation should continue until:

- the nominated excavation director is satisfied that the research potential of the subsurface deposits/archaeological remains has been realised; or
- culturally sterile deposits have been encountered; or
- the maximum depth of excavation required for the approved development of the site has been reached.

Archaeological remains (potentially including nineteenth century structural/foundational remains, deposits potentially containing artefacts, cesspit/privies, wells/cisterns, pits, postholes etc) uncovered would be excavated to normal professional standards and in accordance with any relevant condition of the Excavation Permit issued by Heritage NSW unless a sampling strategy has been developed. The location and form of all archaeological remains will be recorded in accordance with the requirements of Heritage NSW and best practice procedures (including photography, measured drawings and written descriptions).

If the level of preservation across the Project area is found to be high, and there are extensive intact archaeological remains present which are associated with the mid to late nineteenth century commercial and residential development of the area, a sampling strategy may need to be developed - especially in relation to cut subsurface features (for example cesspits/privies), which by the deeper nature of their construction are more likely to remain intact within a site that has been subject to various levels of later disturbance.

The sampling strategy would aim to select those areas/remains with high archaeological integrity and research potential as opposed to areas where the archaeological resource will simply confirm what is known from the historical research undertaken for the site, and the available historical plans and images.

If cesspits/privies or other relatively shallow subsurface features (for example rubbish pits) are uncovered on site with an intact artefactual deposit relating to the mid to late nineteenth century use and occupation of the site, it is recommended that these are excavated by hand to recover any artefactual material that may be present and to identify and record the nature of construction. As discussed, if the level of preservation across the site is found to be good and a large number of the cesspits/privies are exposed a representative sample of cesspits, rather than every single cesspit/privy, is proposed to be fully excavated by hand. However, the level of later disturbance that is likely to have occurred as a result of twentieth century development and demolition within the Project area may have disturbed/removed a significant number of cesspits/privies, in which case all the surviving intact cesspits/privies will be investigated.

At this time when the nature of the archaeological resource is unknown it is not possible to develop an appropriate sampling strategy. An appropriate sampling strategy is proposed to be developed, following consultation with Heritage NSW if appropriate, once the nature and extent of the archaeological resource is known.

Following initial identification, documentation and preliminary investigation, subsurface features uncovered during site works of too great a depth to be excavated by hand (for example potential wells/cisterns) may be half-sectioned by mechanical excavator under archaeological supervision, to identify and record the nature of construction, the depth of survival and to record and/or investigate any internal deposits (including the recovery of any artefactual material that may be present). Alternatively, if they are within an area of approved bulk excavation the surrounding area could be progressively excavated by machine to allow for the safe excavation of the well/cistern where safe to do so.

Smaller cut features like postholes may also only be sampled. Their location, form and associated features/postholes would be archaeologically recorded (planned, photographed and a written description prepared) in order to understand any alignments or form of any structures formed by the postholes.

In the event intact remains of potential state significant relics are exposed discussions will be held with Heritage NSW with regards to the appropriate management of these relics.

8.2.2 Aboriginal Cultural Heritage

The Project area forms part of Registered Aboriginal Site 38-4-1084 which consists of a potential archaeological deposit located in the city blocks bound by Newcomen, King, Hunter and Perkins Street (refer to **Section 2.7**).

A separate Aboriginal Cultural Heritage and Archaeological Assessment has been prepared for the Project (Umwelt 2023) as required supporting documentation for an Aboriginal Heritage Impact Permit (AHIP) application. It is envisaged the AHIP will be approved prior to any archaeological monitoring or investigation of the Project area.

The historical archaeological monitoring and any subsequent investigation and any Aboriginal archaeological site works are proposed to be undertaken as an integrated program of archaeological works. However, the intent would be for any Aboriginal archaeological testing to be undertaken following the historical archaeological monitoring and any required historical archaeological investigation in any specific area.

The Aboriginal archaeological methodology will include allowance for identification and collection of Aboriginal objects during the historical archaeological investigation (for example if found within historical fill layers or cut features). If this occurs the methodology for historical archaeological excavation would continue according to normal professional standards and in accordance with any relevant conditions of the Excavation Permit (with the opportunity for Registered Aboriginal Parties (RAPs) to be involved). It is noted that 'historical' archaeological deposits (which may have an Aboriginal object within the deposit) would continue to be excavated stratigraphically; including the recording and collection of any Aboriginal objects.

All deposits identified as having potential for historical archaeological remains/relics will be excavated stratigraphically prior to any Aboriginal cultural heritage investigations in the area. The Aboriginal investigations will likely include sampling the area proposed for ground surface disturbance; following which (depending on the results of the sampling) some Aboriginal salvage excavation may occur.

8.2.3 Burials

In the unlikely event that potential human skeletal material is exposed, work in the vicinity of the remains is to halt immediately to allow assessment and management. If the remains are suspected to be human, a physical anthropologist, Heritage NSW (and potentially the local police) will be contacted to determine an appropriate course of action.

Any skeletal remains uncovered during archaeological investigation works proposed to be removed will be removed in a sensitive and dignified manner. Controlled excavation and removal by the site archaeologists and other appropriate specialists (forensic anthropologist, Aboriginal stakeholders, New South Wales Police Force, as appropriate) will be undertaken in accordance with Heritage NSW Guidelines (*Skeletal Remains: Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977*) and any requirements of Heritage NSW.

A site specific management policy for the removal of any potential human skeletal remains uncovered within the Project area during archaeological investigation should be developed, in consultation with a physical anthropologist, Heritage NSW and relevant stakeholder groups, as required. The management policy would need to consider the issues detailed in Heritage NSW Skeletal Remains Guidelines. These issues include:

- Excavation issues - including personnel who may need to be required, Work, Health and Safety and recording.
- Access issues - including limited access, security and public and professional participation.
- Management issues – including management during excavation and analysis, publicity, interpretation, ongoing curation of recovered materials and professional access to data.
- Re-interment and commemoration.

8.2.4 Government Coal Pit

If evidence of the former coal pit is exposed all requirements relating to Works Health & Safety must be adhered to during any archaeological investigation associated with the coal pit.

If bulk excavation of the pit is required as part of the Project to remove and manage the uncontrolled fill likely present within the former pit, archaeological monitoring, recording and the collection of any potential artefactual material is proposed; but only where safe to do so.

8.2.5 Street Utility Upgrades

As discussed in **Section 4.6.5**, it is considered unlikely that historical archaeological ‘relics’ will be exposed during the proposed utility upgrades and other proposed works in the streets (including mine grouting) within the Project area. However, there remains potential for historical remains such as culverts/drains and historical road foundations to be present below the current road surfaces, which while unlikely to be considered archaeological relics would require management dependant on their significance. In most instances, this will involve recording prior to removal or disturbance.

8.2.6 Site Recording

Any archaeological remains exposed during Phase 1 and 2 archaeological investigation/excavation works would be recorded in accordance with the requirements of Heritage NSW and accepted best practice procedures.

The entire Phase 1 monitoring process would be recorded photographically. Detailed site recording as part of Phase 2 works would include photography, measured drawings and the completion of context sheets (pro-forma sheets used to record basic information about each archaeological unit or context) if an archaeological resource is exposed.

All archaeological remains should be professionally surveyed by the project surveyor, in addition to any measured drawings prepared by the site archaeologists, to ensure an accurate plan of the archaeological remains is recorded.

Any artefacts recovered during archaeological investigation would be collected in accordance to the context they are found in. They would be retained and recorded using standard recording methods. Where possible, initial processing of artefacts and other preliminary analysis and any required conservation treatment would occur on site during the excavation phase. The detailed analysis and cataloguing of artefacts would be undertaken as part of post excavation works and the results included in the final archaeological report.

If appropriate, samples of soil or other deposits may be taken during on site work and specialist recording and analysis undertaken as part of the post excavation analysis phase of works. Any results would be included in the final archaeological report.

The applicant is responsible for the storage of any historical artefacts or samples collected from the site and should make arrangements for the collection to be stored in an appropriate repository.

At the completion of the archaeological investigation and reporting a suitable storage facility will be nominated by the applicant (according to the excavation permit) in which to store artefacts retained from the excavations.

8.2.7 Work Health and Safety

All requirements relating to Works Health & Safety (WH&S) must be adhered to during any archaeological works undertaken in relation to the Project. The archaeological requirements of the Project area may need to be reassessed if any safety constraints or issues arise during archaeological investigation works. Constraints that can arise during archaeological investigation works include contaminated subsurface deposits and structural instabilities which can hinder the safe manual excavation of parts of a site.

8.2.8 Site Inductions

All relevant contractor and subcontractor site personnel should attend a site induction prior to commencement of works on the Project to ensure that all on site personnel are aware of the archaeological issues associated with the Project area and the role of the Nominated Excavation Director and other archaeologists and stakeholders (including their obligations and requirements in relation to the relevant provisions of the Heritage Act and the NPW Act).

8.3 Aboriginal Archaeological Works

As discussed, following the completion of the historical archaeological investigations in a specific area, Aboriginal cultural heritage and archaeological investigation would commence. These investigations would aim to identify the location and depth of any Aboriginal cultural heritage material and it is acknowledged that there is likely to be some overlap between the historical and Aboriginal excavations as discussed in **Section 8.2.3**.

The Aboriginal archaeological investigations would be managed by an archaeologist experienced in both Aboriginal and historical archaeology and Project RAPs. The investigations would be comprehensively recorded in accordance with both historical and Aboriginal cultural heritage best practice standards and in accordance with the AHIP and Excavation Permit.

8.4 Reporting

A report of the results of the fieldwork would need to be produced at the completion of the on-site archaeological works program, in accordance with standard Conditions of Approval of excavation permits. The format, content and length of the report will be determined by the nature and extent of the archaeological remains uncovered during archaeological investigation and the size of the artefact collection recovered from the site (Heritage Office 1996). The report should include:

- a description of the results of the investigation
- a formal response to the research design (refer to **Section 7.0** of this report)
- the results of post excavation analysis of artefact collection and
- primary site records, including measured drawings and photographs.

8.5 Interpretation

A public information / dissemination program should be developed during any archaeological investigation works. Provision could be made for interpretive signage, media releases, information leaflets and if appropriate public open days.

Provision should be made for the interpretation of the archaeological resource of the Project area. An Interpretation Strategy/Plan should be developed to consider (and incorporate, where relevant) the results of the archaeological investigation of the site.

9.0 Conclusions and Recommendations

9.1 Conclusions

The Project area is located within an area of central Newcastle that has been subject to occupation and use associated with the expansion and commercial development of central Newcastle potentially from the early to mid 1800s. While the Project area, particularly the Stage 3 area, has been subjected to ongoing development and disturbance throughout the nineteenth and twentieth centuries, there is potential for an intact archaeological resource to be present, (potentially dating from the 1820s) relating to the occupation, use and development of the Newcastle CBD.

Although there is potential for evidence of an early 1800s mine shaft and two structures dating to the late 1820s (the Crooked Billet and a residential structure), the potential archaeological resource is likely to be dominated by remains associated with the commercial, residential and light industrial development and use of the area from the mid nineteenth century.

The Project area has been assessed as having a potential archaeological resource of local significance, with low potential for remains of possible state significance.

The potential archaeological remains would be considered 'relics' under the Heritage Act. As 'relics' are protected under the Heritage Act an excavation permit application to the Heritage Council under Section 140 of the Heritage Act is required if land that is likely to contain archaeological relics is going to be excavated or disturbed. This report would form the supporting documentation for an application under Section 140 of the Heritage Act to disturb these relics.

Archaeological monitoring of proposed bulk excavation of the Project area and detailed archaeological excavation as required of areas of high archaeological integrity should be undertaken in order to recover information through the excavation and recording of the archaeological remains and thus realise the archaeological research potential of the site.

9.2 Recommendations

It is recommended that an excavation permit for archaeological monitoring of bulk excavation and detailed archaeological excavation as required be applied for under Section 140 of the Heritage Act. The investigation methodology and research framework outlined in **Sections 7.0** and **8.0** of this report should be adopted as the recommended strategy for undertaking physical investigation of the site in conjunction with the approved development.

Note that the Project area forms part of a registered Aboriginal site. An Aboriginal Cultural Heritage and Archaeological Assessment is being prepared for the Project which will result in the need for an AHIP for the Project. In the event that any Aboriginal objects are identified during historical archaeological investigations, works within the immediate vicinity of the Aboriginal object should cease and the RAPs for the Project be contacted so that the appropriate management strategies in accordance with the Heritage NSW approved AHIP can be implemented.

In the unlikely event that potential human skeletal material is exposed, work in the vicinity of the remains is to halt immediately to allow assessment and management. If the remains are suspected to be human, a physical anthropologist, Heritage NSW (and potentially the local police) will be contacted to determine an appropriate course of action.

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