

Appendix 6.I I

Archaeological Assessment and Research Design

Prepared by Casey and Lowe

FINAL
ARCHAEOLOGICAL ASSESSMENT
&
RESEARCH DESIGN

Dr Chau Chak Wing Building
14-28 Ultimo Road
Ultimo



For
University of Technology, Sydney
February 2011

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Archaeology & Heritage

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EXECUTIVE SUMMARY

RESULTS

The study area may contain potential archaeological remains of local significance. These remains may include:

- Pre and post-1788 natural environment - a swampy headwater of Darling Harbour.
- Reclamation of the area by c1850 and modification of the course of a creekline.
- 1850s timber housing, possible dairy and other structure.
- Replacement of early housing with terrace housing by c1874 with Chinese occupation in the early twentieth century at nos 20 and 22.
- Occupation of most of the study area by the NSW Shale and Oil Company from the 1870s to 1920s.
- Demolition of early buildings and construction of the Dairy Farmers Garage in 1953.
- The culvert known from the adjacent Energy Australia site and identified in the DGRs is outside of the current study area. This culvert was dismantled in 2003.
- The existing sewer line running along the eastern side of the site is separate to the culvert as it is part of c. 1880 Sydney council infrastructure. The proposed development retains this sewer line in its current location.

RECOMMENDATIONS

1. A program of archaeological investigation should be undertaken and an excavation director appointed to manage this program. The archaeological program should be undertaken prior to commencement of other site works, or in a co-ordinated program, such as with the site remediation. The archaeological program is likely to take between 4 to 8 weeks.
2. Enough flexibility in the development timetable must be allowed to enable remains to be recorded in appropriate detail.
3. A Research Design report needs to be written to guide this investigation (Section 7). This report needs to draw on a range of Heritage Branch, Department of Planning guidelines.
4. Archaeological testing of the site is a way to clarify the nature of the archaeological resource so as to determine more accurately the nature and depth of archaeological remains. This can be undertaken as part of the Environmental Assessment or following Project Approval. Under Section 75U, Part 3A of the EP&A Act it is not necessary to apply for a S140 application if the works are undertaken as part of the Environmental Assessment.
5. Based on the archaeological integrity and significance of the remains, a program of archaeological salvage and recording will be required. Salvage would include sampling sections of the site, such as:
 - Evidence for the early topography and natural landform and how this was modified through time.
 - The nature of the site's reclamation fills should be investigated – these will be present throughout the study area.
 - Reclamation across the study area.
 - The timber houses and associated yard and occupation deposits and features, such as, wells, cesspits, rubbish pits and underfloor deposits.
 - The two groups of structures in the northern part of the site, one a possible dairy and the other whose use is unknown.
 - Sections of the NSW Shale and Oil Company buildings to clarify their function.

- Limited excavation of the c1874 terraces, nos 20 and 22, which had some Chinese occupation. The other terraces do not reach the local significance threshold and do not require further investigation.
6. The archaeological sampling and recording need to be undertaken according to Heritage Branch guidelines and best practice archaeological methodologies. This will then feed into future interpretation and produce a detailed record of the site.
 7. The results of the archaeological program should be interpreted within the new development. The archaeologists need to have a central role in the development of ideas and themes and interpretative concepts.
 8. In accordance with standard Heritage Branch, Department of Planning guidelines and conditions, all artefacts recovered during excavation will need to be cleaned, labelled, bagged, boxed and catalogued and entered into a database. A detailed excavation report will need to be written including responses to the identified research design. Significant artefacts need to be conserved. UTS will need to provide permanent archival storage for artefacts recovered from the excavation.
 9. If the nature of the proposed works in any of the area changes then the impact on the archaeological resource should be reassessed.

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**Archaeological Assessment
Dr Chau Chak Wing Building
14-28 Ultimo Road, Ultimo**

1.0 Introduction

1.1 Background

Casey & Lowe Pty Ltd were commissioned by The University of Technology, Sydney to undertake an Archaeological Assessment of 14-28 Ultimo Road, Ultimo as part of their Part 3A application for the redevelopment of site for the Dr Chau Chak Wing building (Figs 1.1, 1.6-1.9).

The University of Technology, Sydney (UTS) Dr Chau Chak Wing Building will be a 16,343 square meter academic building that will replace the current home of the business faculty in the Haymarket Building. It will contain teaching and learning spaces, research spaces, and faculty offices, as well as support facilities including a publicly accessible café. Parking for 28 cars will be in a basement level along with bicycle parking and shower rooms for students and staff who choose to cycle to the school. It will be located on the Dairy Farmers building site at the corner of Ultimo Road and Omnibus Lane. The 2,816 square metre site is bounded on the north by Mary Ann Street and on the east by the Ultimo Pedestrian Network (UPN).

The proposal specifically incorporates the following components:

- A ground level entry
- 11 stories above this
- A basement carpark

The study area was identified on Map 9, Urban Development Plan for Ultimo-Pymont Precinct as a potential archaeological site. Therefore this is needs to be the subject of an Archaeological Assessment in accordance with Heritage Branch guidelines.

1.2 Study Area

The study area is a rectangular block between Ultimo Road and Mary Ann Street with former Darling Harbour Goods Line to the east and Omnibus Lane to the west (Fig. 1.1). There are currently no standing buildings on the site as the former Dairy Farmers building was demolished down to ground slab and is currently being used as a carpark (Figs 1.2 to 1.5). The ground slab of the carpark is raised about the surround street level, being more than 0.5m higher at the Ultimo Road end of the site and slightly less at the northern end of the site.

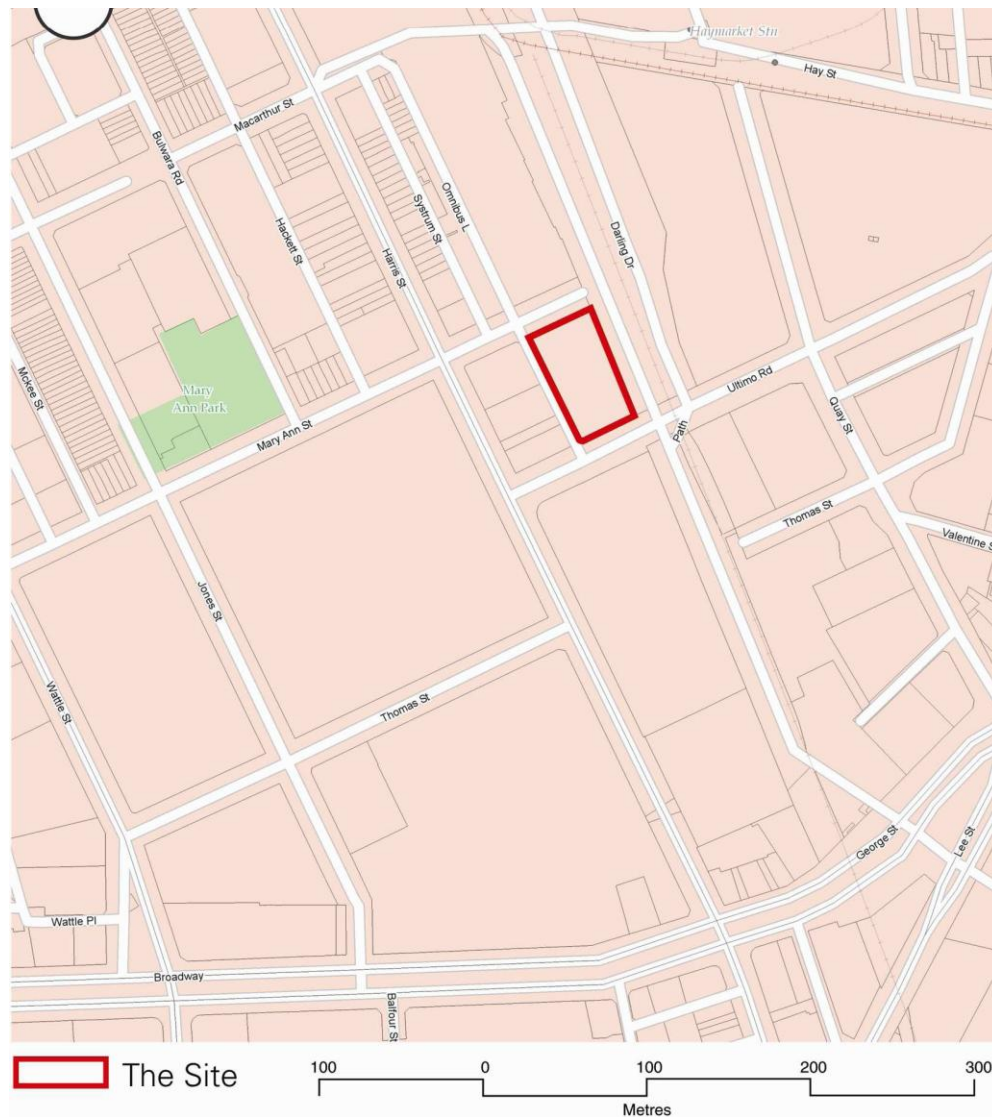


Figure 1.1: Location of site on the eastern side of George Street. JBA Planning



Figure 1.2: View looking southeast from Mary Ann Street towards the carpark on the current study area. Note the cars in the carpark are above the street level.



Figure 1.3: View looking southeast from Mary Ann Street along the western side of the study area, along Omnibus Lane. The former National Cash Register building is on the right.



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Figure 1.7: The proposed development covers the footprint of the study area. Gehry Partners 2011, Z1-1.02

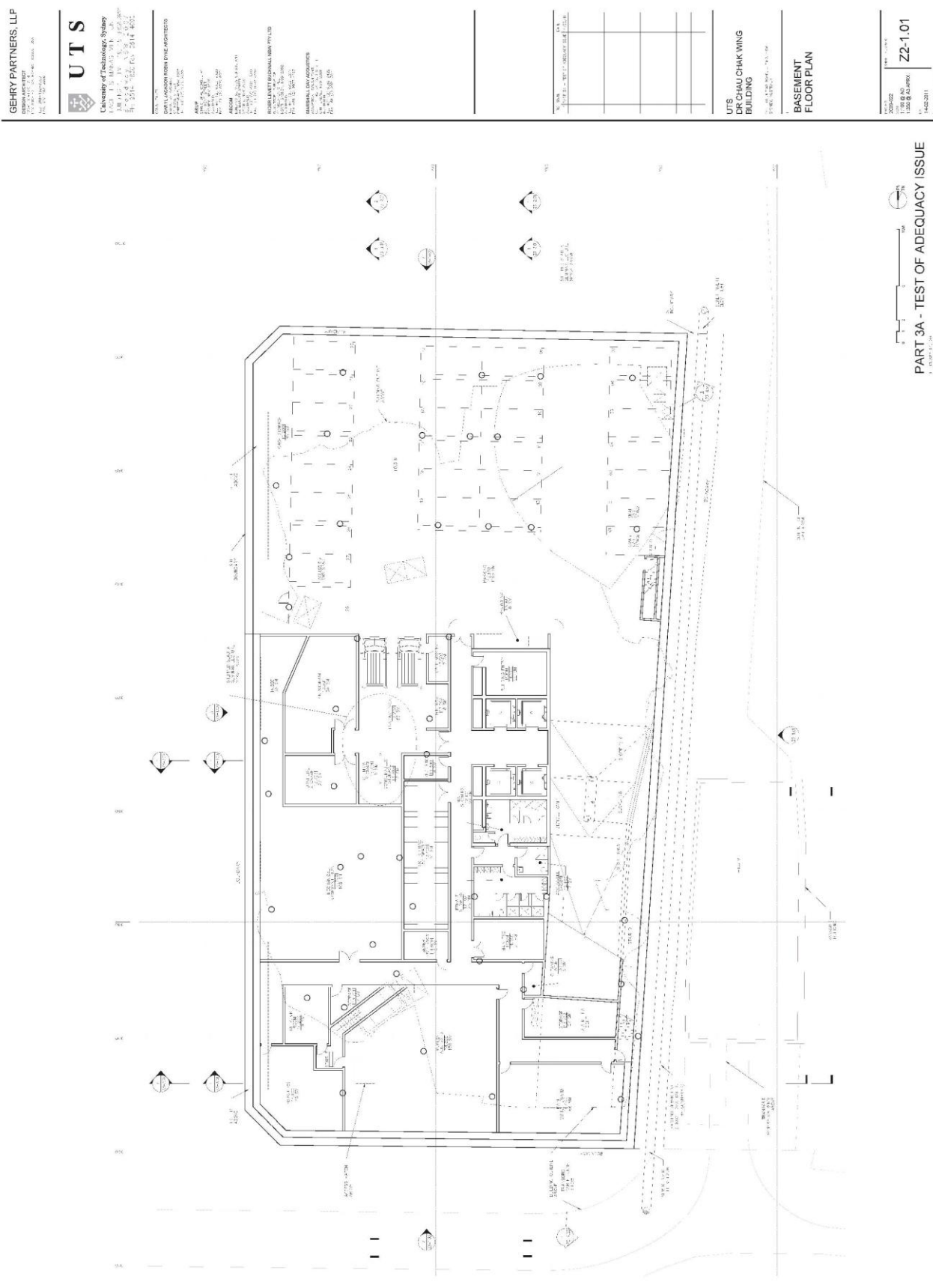


Figure 1.9: Plan of proposed basement showing the location of the superstructure which is smaller than the basement which fill the whole of the study area. Gehry Partners 2011, Z2-1.01

1.3 Methodology

The production of an Archaeological Assessment is a systematic methodological process that involves a series of phases:

1. Historical research utilising primary material such as maps, pictorial material, directories and council records, and secondary sources. Through this process sub-surface remains may be located on plan and an analysis made of their historical development, construction and use. This provides a picture of the likely extent of archaeological remains and a mini-picture of land use for the site within the context of a wider land use scenario.
2. This analysis is then compared to the extant buildings and vacant spaces of the site. From this synthesis an assessment can be made of the nature and extent of existing archaeological deposits. In addition archaeological deposits associated with extant structures can be identified. This leads into a discussion of the archaeological potential of the site.
3. The heritage significance of the site's archaeological deposits is addressed through criteria listed in the *NSW Heritage Act 1977* (amended) and implemented through the *Burra Charter*, the *Heritage Manual* and the *Assessing Significance for Historical Archaeological Sites*. They include the nature and degree of heritage significance such as historical, social, research potential, rarity and representativeness and other types of significance.
4. Based on this assessment of archaeological potential and significance, policy and recommendations are produced regarding the management of the archaeological deposits and mitigating actions in light of a proposed development.

The above process is based on the *Burra Charter* guidelines and the *Archaeological Assessment Guidelines* for the establishment of heritage significance and the development of a conservation policy. Through this methodology the archaeological resource will be best served and delays to or interference with development proposals will be minimised.

1.4 Statutory Constraints

The study area does not contain any listed heritage item. The following heritage registers were reviewed as part of this report:

- Sydney Water Section 170 register
- City of Sydney LEP 2005
- NSW Heritage Register

The Sydney Water Section 170 register was specifically researched because of the presence of a sewer/stormwater channel crossing the site. This channel is not listed on any of the above registers. In addition the culvert identified on the adjacent property was dismantled in 2003 and therefore no longer survives.

1.4.1 Part 3A, Environmental Planning and Assessment Act, 1979

UTS is applying for approval under Part 3A of the Environmental Planning & Assessment Act. This report forms part of the Environmental Assessment report for the application. The client will respond to the Director-General's Requirements with a Statement of Commitments. The Commitments relating to Non-indigenous Archaeology will typically be based on the recommendations provided in this report. This report does not deal with built heritage or Aboriginal heritage. Reports on Aboriginal Archaeology and the nearby built heritage have been written by Godden Mackay Logan.

75U Approvals etc legislation that does not apply

The following authorisations are not required for an approved project (and accordingly the provisions of any Act that prohibit an activity without such an authority do not apply):

(c) an approval under Part 4, or an excavation permit under section 139, of the [Heritage Act 1977](#),

(d) a permit under section 87 or a consent under section 90 of the [National Parks and Wildlife Act 1974](#),

A reference in this section to an approved project includes a reference to any investigative or other activities that are required to be carried out for the purpose of complying with any environmental assessment requirements under this Part in connection with an application for approval to carry out the project or of a concept plan for the project.

Therefore under 75U once the Project Application is approved then the archaeological work has been approved, as assessed and outlined by this Archaeological Assessment and the subsequent Research Design. Therefore if the values have been assessed for Non-indigenous and Aboriginal archaeology and a Research Design written which outlines how the proposed archaeological program is to be undertaken then there is no statutory requirement to apply for a S139 or a S87.

Director-General's Guidelines

The DGRs for the site were issued on 27 August 2009. In relation to Non-Aboriginal heritage the following issues were identified:

The Proponent shall commission an Archaeological Assessment incorporating Research Design in accordance with DoP Heritage Branch guidelines. Due consideration must be given to the low-lying original landform and evidence from historical maps and plans which allude to historical items of significance being located within the site.

The relevant guidelines are to which the above paragraph are listed below.

1.4.2 Statutory and Non-statutory Guidelines

The management of heritage sites in NSW should conform to the requirements of the *Burra Charter* of Australia ICOMOS. Many of the following guidelines provide for best practice conservation approaches and can be used to inform all the management of the archaeological remains. There are a range of archaeological guidelines which inform the management of the place:

Archaeological Assessment Guidelines, NSW Heritage Office, Department of Urban Affairs & Planning, 1996. A new draft of this has been prepared but not yet published.

Assessing Significance for Archaeological Sites and 'Relics', Heritage Branch, Department of Planning, 2009.

NSW Heritage Manual, NSW Heritage Office, Department of Urban Affairs & Planning, 1996.

Historical Archaeological Investigations: A Code of Practice, NSW Department of Planning, 2006.

Historical Archaeological Sites, Investigation and Conservation Guidelines, Department of Planning and NSW Heritage Council, 1993.

Excavation Director's Assessment Criteria, NSW Heritage Office.

ICHAM Charter, The ICOMOS Charter for the Protection and Management of Archaeological Heritage, ICOMOS International, 1990.

Recommendation on International Principles Applicable to Archaeological Excavations, UNESCO, 1956.

Heritage Interpretation Policy and Guidelines, Heritage Information Series, NSW Heritage Office, August 2005.

Photographic Recording of Heritage Items, Heritage Information Series, NSW Heritage Office, 2006.

1.4.3 Heritage Act 1977

Division 9: Section 139, 140–146 - Relics Provisions - Excavation Permit

It is noted that if the development of this site is approved under Part 3A the relics provisions are suspended. They have been inserted into this report to outline the normal statutory process under *Heritage Act*.

The main legislative constraint on archaeological remains is the relic's provisions of the *Heritage Act 1977*. According to Section 139:

- (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.
- (3) This section does not apply to a relic that is subject to an interim heritage order made by the Minister or a listing on the State Heritage Register.
- (4) The Heritage Council may by order published in the Gazette create exceptions to this section, either unconditionally or subject to conditions, in respect of any of the following:
 - (a) any relic of a specified kind or description,
 - (b) any disturbance or excavation of a specified kind or description,
 - (c) any disturbance or excavation of land in a specified location or having specified features or attributes,
 - (d) any disturbance or excavation of land in respect of which an archaeological assessment approved by the Heritage Council indicates that there is little likelihood of there being any relics in the land.

A 'relic' is an item of 'environmental heritage' which is defined by the *Heritage Act 1977* (amended) as:

those places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance.

A relic as further defined by the Act as:

-any deposit, artefact, object or material evidence that:
- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
 - (b) is of State or local heritage significance.

State and Local heritage significance is defined as:

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

scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

An item can be both of State heritage significance and local heritage significance. An item that is of local heritage significance may or may not be of State heritage significance.

1.4.4 City of Sydney Heritage Development Control Plan 2006

Under Section 1.10 a Development Application requires 'where there is a likelihood of disturbance of significant archaeology, an Archaeological Assessment will be required' (p. 5).

1.4.5 Urban Development for Pyrmont-Ultimo - 1999 update¹

To assist with the identification of sites possessing archaeological potential, Council commissioned the Pyrmont-Ultimo archaeological zoning plan to identify what sites hold archaeological potential, that is, the potential to contain archaeological remains which fall under the provisions of the *Heritage Act* 1977. If a site was considered to possess archaeological potential then Council could call for an archaeological assessment to be undertaken prior to development consent being granted. Archaeological potential was determined by estimating whether current or previous development had removed the archaeological resource. The usual example of this would be where a modern building's basement occupied the full property area.

The zoning plan indicates that only part of current study area is considered to have some archaeological potential while the area coloured in white has no archaeological potential (Fig. 1.10). The zoning plan is Map 9 of the UDP for Pyrmont-Ultimo. The following Note is also in the update:

Note: It is recommended that early investigations of the likelihood that archaeological material will be found on a development site be undertaken, and that the necessary excavation permit required under the Heritage Act be obtained before siteworks commence.²

Map 9 indicates locations which are most likely to contain such archaeological material. Below is an extract from Map 9 (Fig. 1.10).

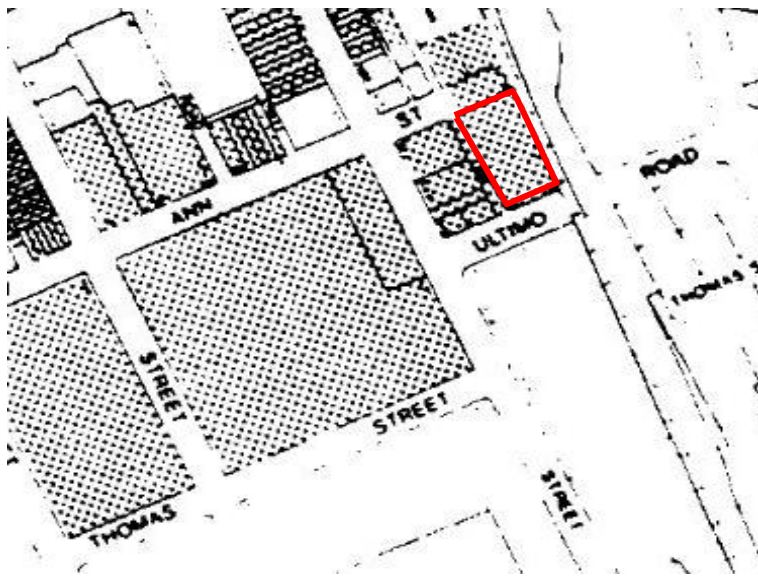


Figure 1.10: Detail from the Archaeological Zoning Plan for Pyrmont-Ultimo (Map 9) with the whole of the study area shaded as having archaeological potential.

¹ http://www.cityofsydney.nsw.gov.au/development/documents/PlanningControlPlans/DCP/Ulltimo-PyrmontUDPParts1_5.pdf.

² Taken for UDP for Pyrmont-Ultimo 1999:30.

1.4.6 Sydney Local Environmental Plan 2005

Section 105: Potential archaeological sites

Before granting consent to development on land identified as a potential archaeological site in any environmental planning instrument or policy of the Council, the consent authority may request a report on the likely impact of the development on any archaeological material.

1.5 Limitations

There was sufficient time and funding to adequately complete this report. Please note that additional research will need to be undertaken in association with the excavation and reporting on the results of any archaeological excavation. One of the issues for this site is that Council Rate Assessment books and Sands directories are not really able to help us understand the use of the northern sections of the study area as they are not listed in such a way as to be helpful. To try and clarify some of this we gained access to private Harris papers but these were not helpful in relation to this site.

1.6 Author Identification

This assessment was written by Dr Mary Casey and Caroline Plim. Caroline researched and wrote Section 2 and the appendices. Mary Casey wrote the other sections and added additional information to Section 2. Abi Cryerhall produced the overlay plans. This report was reviewed by Tony Lowe, Casey & Lowe Pty Ltd.

1.7 Acknowledgements

Katherine Hayward, RPS Group

Mike Cave, UTS

John Harris, who was generous in providing historic plans and information relating to Block 8 of the Harris Estate.

Richard Mackay, Godden Mackay Logan

Ian Jack, historian

1.8 Terminology³

Historical Archaeology

Historical Archaeology (in NSW) is the study of the physical remains of the past, in association with historical documents, since the European occupation of NSW in 1788. As well as identifying these remains the study of this material can help elucidate the processes, historical and otherwise, which have created our present surroundings. It includes an examination of how the late eighteenth- and nineteenth-century arrivals lived and coped with a new and alien environment, what they ate, where and how they lived, the consumer items they used and their trade relations, and how gender and cultural groups interacted. The material remains studied include:

- Archaeological Sites:
 - below ground: these contains relics which include building foundations, occupation deposits, rubbish pits, cesspits, wells, other features, and artefacts.
 - above ground: buildings, works, industrial structures and relics that are intact or ruined.

³ Many of the definitions used here are taken from the *Archaeological Assessments Guidelines*, Heritage Office of New South Wales.

- Cultural Landscapes
- Maritime Sites:
 - shipwrecks
 - structures associated with maritime activities.

Archaeological Potential

Archaeological potential is here used and defined as a site's potential to contain archaeological relics which fall under the provisions of the *Heritage Act 1977* (amended). This potential is identified through historical research and by judging whether current building or other activities have removed all evidence of known previous land use.

Archaeological Site

A place that contains evidence of past human activity. Below ground sites include building foundations, occupation deposits, features and artefacts. Above ground archaeological sites include buildings, works, industrial structures and relics that are intact or ruined.

Archaeological Investigation or Excavation

The manual excavation of an archaeological site. This type of excavation on historic sites usually involves the stratigraphic excavation of open areas.

Archaeological Monitoring

Archaeological monitoring is recommended for those areas where the impact of the works is not considered to mean the destruction of significant archaeological fabric. Nevertheless the disturbance of features both suspected and unsuspected is possible. In order to provide for the proper assessment and recording of these features an archaeologist should inspect the works site at intervals they consider to be adequate and to be 'at call' in case the contractor uncovers remains that should be assessed by the archaeologist.

It is not anticipated that monitoring will impact on the planned works or unduly hold up the contractors' work schedules. If recording of features is necessary it would be carried out as quickly as possible so that any time delays are minimised.

Monitoring is a regular archaeological practice used on many building and development sites.

Excavation Permit

A permit to disturb or excavate a relic issued by the Heritage Council of New South Wales under Section 60 or Section 140 of the *NSW Heritage Act 1977*.

Research Design

A set of questions which can be investigated using archaeological evidence and a methodology for addressing them. A research design is intended to ensure that archaeological investigations focus on genuine research needs. It is an important tool that ensures that when archaeological resources are destroyed by excavation, their information content can be preserved and can contribute to current and relevant knowledge.

Research Potential

The ability of a site or feature to yield information through archaeological investigation. The significance of archaeological sites is assessed according to their ability to contribute information to substantive research questions.

1.9 Abbreviations

ADB	Australian Dictionary of Biography
CCS	Council of the City of Sydney
CRS	Council Record Series

LPI	Land and Property Information
LPMA	Land and Property Management Authority
ML	Mitchell Library
MUP	Melbourne University Press
MWS&DB	Metropolitan Sewerage and Drainage Board
SHFA	Sydney Harbour Foreshores Authority
SLNSW	State Library of NSW
SMH	<i>Sydney Morning Herald</i>

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2.0 Historical Occupation and Land Use

2.1 Sources

Primary and Secondary Sources have been used to write a history of the site, dating from land grants in 1803 and 1806 through to the late 20th century. Sources include, but are not limited to, Land Titles, maps and plans (various archives and repositories), *Sands' Sydney and Suburban Directory* listings, Council of the City of Sydney archival records, Sydney Water records, and pictorial evidence.

2.2 Historical Overview

2.2.1 John Harris (1754-1838) and Ultimo Farm

The site is linked to a grant of 34 acres (13.76 ha) made to John Harris (1754 - 1838) on 31 December 1803, and another of 135 acres (54.63 ha) made on 1 January 1806.⁴ They were two of a number of grants made to Harris making up Ultimo Farm. The land on the Pyrmont peninsula lay between Cockle Bay (Darling Harbour) on the east, Blackwattle Bay on the west and George Street (Broadway) in the south.⁵ Harris, a surgeon in the NSW Corps, acquired by purchase and grants a substantial area of land in the colony. He keenly pursued his farming interests, and at the same time was employed as a magistrate and naval officer (Section 2.2.8).⁶



Figure 2.1: Ultimo House with Ultimo Road being the main entrance drive from the east. The study area would have been in the foreground at the edge of the water. Joseph Lycett's 'East View of Ultimo in Sydney, New South Wales, the Property of J. Harris Esqre.', 1820. The view provides an artist's impression of Harris' house from Darling Harbour, formerly known as Cockle Bay (PX*D 41 ML SLNSW).

⁴ See Land Titles Schedule in Appendices.

⁵ S. Fitzgerald & H. Golder, *Pyrmont & Ultimo: Under Siege*, Ultimo, NSW, Halstead Press, 2007: 16.

⁶ B.H. Fletcher, 'John Harris (1754-1838)', *Australian Dictionary of Biography*, Vol 1. Carlton, Vic, Melbourne University Press, 1966: 519-520.

Harris constructed a house on Ultimo Farm in 1804, establishing it as a rural retreat where he kept sheep and cattle, bred guinea fowl and, more extravagantly, established a deer park (Fig. 2.1).⁷

By 1818 Harris held most of the land on the peninsula, having acquired three grants and purchasing other allotments. In 1821 Harris, with his wife and nephew moved to Shane's Park at South Creek and leased the Ultimo property. Ultimo Cottage, another house on the estate was used by Harris when visiting Sydney. John Harris died in 1838 bequeathing most of his Ultimo landholdings to his brothers and, on their deaths, to their sons, both named John Harris. The Estate was entailed and managed by a trust with beneficiaries receiving rents from leases. A plan prepared in 1837 (Fig. 2.2) shows the configuration of Ultimo Estate, buildings and areas of land-use. Present-day Ultimo Road (sometimes shown as Ultimo Street) corresponds with the general alignment of the track between Ultimo Farm and George Street (shown dotted). A creek draining into wetlands at the head of Darling Harbour ran through the site.

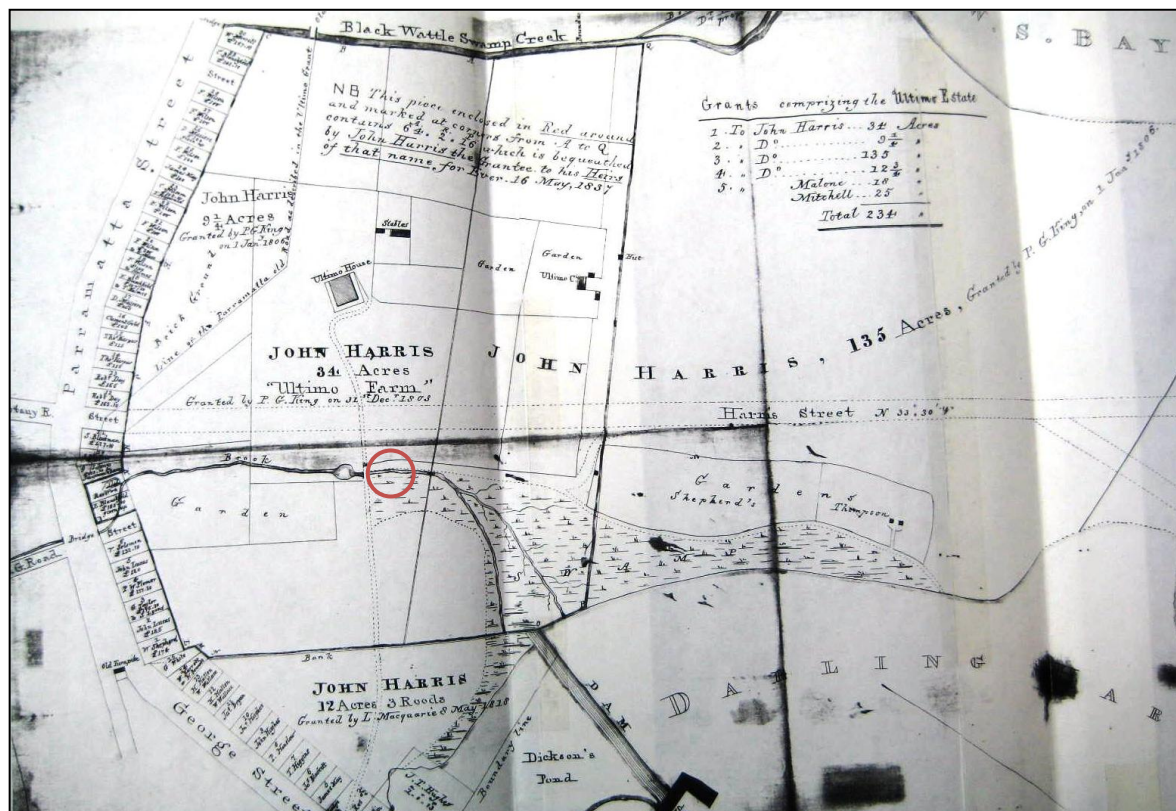


Figure 2.2: Copy of a plan of John Harris's Ultimo Estate prepared in 1837. The plan is diagrammatic and the approximate location of the study area is circled (Harris Family – Papers concerning John Harris, ML MSS 4897).

When the swampy land was resumed or started being resumed is unclear. The reclamation of the nearby Paddy's Market site commenced with the establishment of Dickson's Mill in 1815 and his establishment of a fresh water dam. The Paddy's Market area was on land granted to surgeon John Harris in 1818. The research for the Paddy's site suggests that Ultimo Road was built along a small creek. Some reclamation within the site appears to

⁷ Fitzgerald & Golder, *Pyrmont & Ultimo*, 2007: 18, 20; M.R. Matthews, *Pyrmont and Ultimo: A History*, Sydney, M.R. Matthews, 1982: 12, 20.

have happened by 1822. With further extensive works involving reclamation of the headwaters of Darling Harbour being associated with the 1837 cutting down of Brickfield Hill. The shifting of one million cubic feet of material was used to raise the lower swampy ground of Darling Harbour. An 1840s plan shows that the swampy land at the southwestern headwaters of the harbour was reclaimed. Dickson's mill pond was infilled by 1855.⁸ It is noted that it is suggested that there was more reclamation in the 1860s when the area between Hay Street and the railway was reclaimed. Following this reclamation the area was subdivided.⁹

2.2.2 Harris' Ultimo Estate and the Darling Harbour Branch Line (or Goods Line) of the Great Southern Railway

The economic growth of the colony and development of industries away from the centre of Sydney led to demand for better access to ports such as Darling Harbour. Seeing the advantage of connecting the port to the main western railway line in 1853 the Sydney Railway Company (formed in 1849) resumed a 7 acre strip of land (2.83ha) from the trustees of the Harris Estate, connecting Cleveland Paddocks, the site of the Sydney Railway Terminus (Central Station), to proposed wharfs on the western shore of Darling Harbour. An additional 7 ½ acres (3.04 ha) was to be resumed for a goods terminus at Pyrmont.¹⁰ The acquisition of land by the railway company is not shown on land titles linked to the study area.¹¹ A Government investigation into the construction of the Railway through the Ultimo Estate in 1863-4 explained to some extent the difficulties in formally acquiring the land in Fee Simple due to a complex inheritance arrangement that 'entailed' the land for future generations.¹²

Like other private railway companies of the era, the Sydney Railway Company experienced financial difficulties and was taken over by the NSW Government in 1854.¹³ A portion of a c.1853 plan showing the line of the proposed rail corridor in relation to the study area is shown below (Fig. 2.3). The study area corresponds approximately with the allotment numbered '13' and is undeveloped. Ultimo Road is shown bridging the creek at a widened section of road.

It was anticipated that the construction of the Darling Harbour Branch Line and proposed terminus would stimulate development in Pyrmont and Ultimo adding value to the Harris' property and businesses in the locality. The embankments and cuttings built for the line however almost completely cut off Ultimo from the foreshores of the harbour and from easy access to the city. Documentation linked to planning and reclamation work at the head of Darling Harbour prepared in 1855 shows two buildings within the study area, and the creek meandering through the western side of the site (Fig. 2.4). Council Rate Assessment records for 1855 show Mrs Harris as the landlord of most Ultimo Road properties. It is difficult to determine who leased the property. Edward Smith a rope maker and Elijah Butler

⁸ Godden Mackay with Wendy Thorp 1993: 39, 48-49,

⁹ Fitzgerald & Golder 1994:41

¹⁰ 'Darling Harbour Rail Corridor,' SHFA Heritage Register, Last update: Monday 31 May 2010; 'Plan of Darling Harbour Branch of the Sydney Railway,' c.1853, SRNSW, AO Map No 6381. Fitzgerald & Golder, *Pyrmont & Ultimo Under Siege*, Halstead Press, Ultimo, 2007: 45.

¹¹ See Land Titles Schedule in Appendices.

¹² 'Progress Report from the Select Committee on the Railway through the Ultimo Estate,' NSW Legislative Assembly, 1863-4, Govt Printer, Sydney, 1864[4]: 233.

¹³ 'Darling Harbour Rail Corridor,' SHFA Heritage Register, Last update: Monday 31 May 2010.

leased two brick houses from Mrs Harris in the vicinity. The single-storey, 4-roomed, shingled-roofed houses were described in association with a 'rope walk'.¹⁴

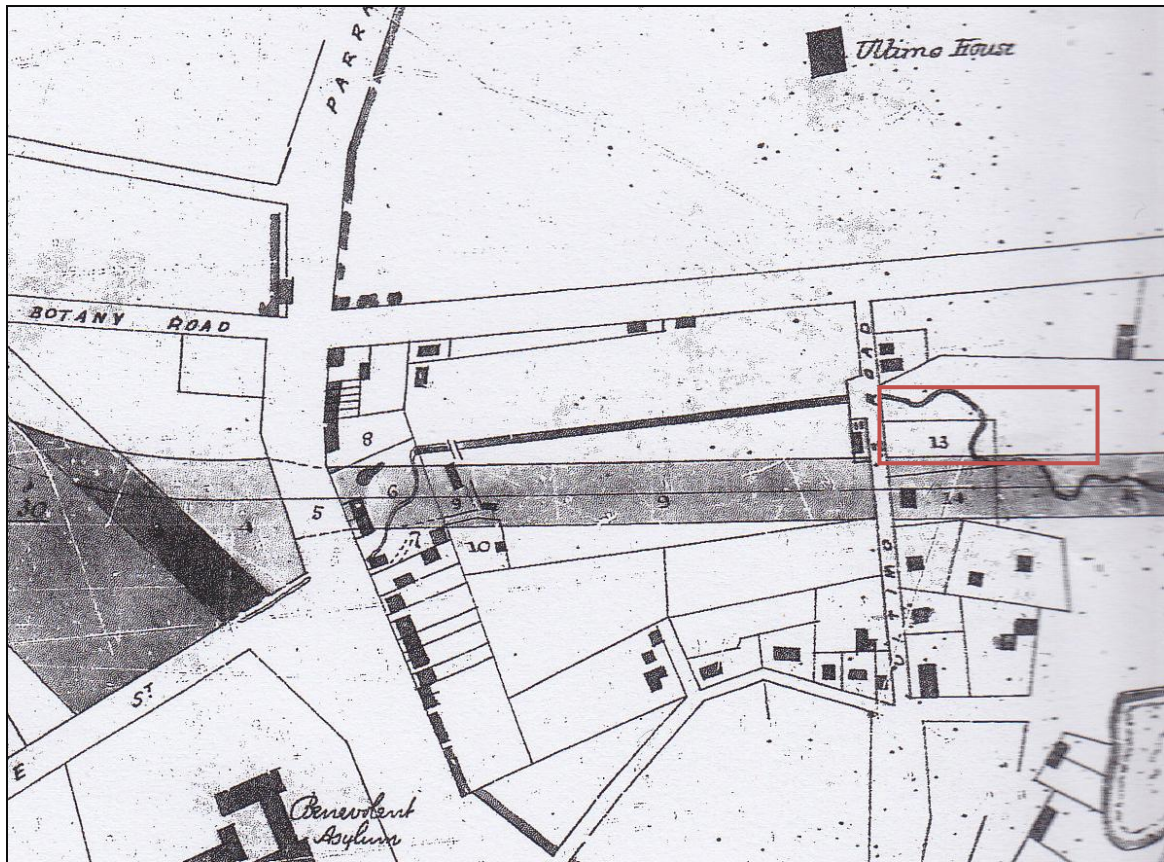


Figure 2.3: Proposed alignment of the Darling Harbour line (shaded) with the areas to the north of Ultimo Road shown as subdivided and with buildings, suggesting that it was probably already reclaimed. The new extent of the Darling Harbour area is indicated on the bottom right of the plan. Part of the 'Plan of the Darling Harbour Branch of the Sydney Railway,' dated c.1853. The approximate location of the study area is indicated (SRNSW AO Map No 6381).

Ultimo Road is shown as bridging the railway although ultimately a railway bridge was built over the road, also bridging the creek further down the line.¹⁵ Due to the uneven topography along the line it was built on a series of embankments (between 1 and 5 m high) and cuttings.¹⁶ A culvert under the line catered for the creek running through the study area towards the head of Darling Harbour. The enquiry into the railway through the Ultimo Estate described the watercourse as an 'open drain' put in by the Government, passing under the railway by means of a culvert before passing into the bay.¹⁷

¹⁴ See Rates Assessment and *Sands' Directory* Schedules in Appendices.

¹⁵ 'Plan of Head of Darling Harbour, Port Jackson, 1855,' SRNSW AO Map No X1053 pt 3 of 3.

¹⁶ Sandstone Culvert and Brick Drain: Mary Ann Street, Ultimo, NSW: Salvage and Significance Assessment,' Susan McIntyre-Tamwoy Heritage Consultants, Feb 2004: 10.

¹⁷ 'Progress Report ... Railway through the Ultimo Estate,' NSW Legislative Assembly, 1863-4, Govt Printer, Sydney, 1864[4]: 235.

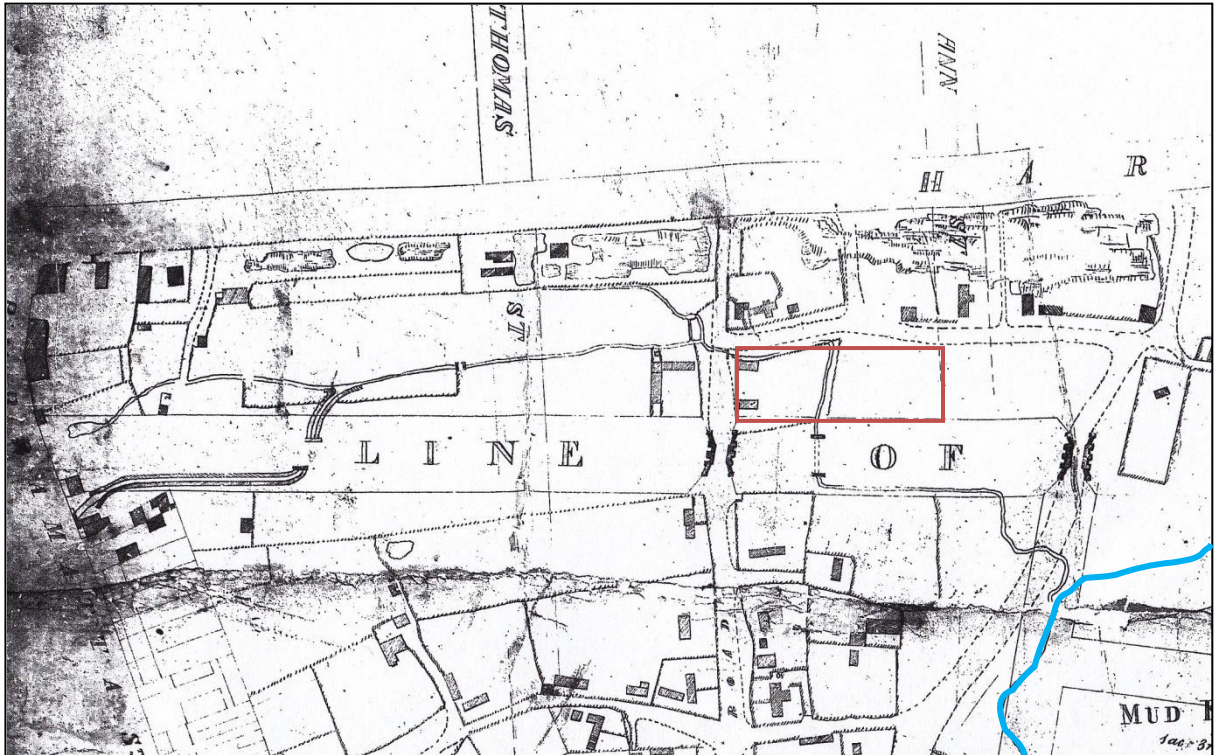


Figure 2.4: Detail of an 1855 plan of Darling Harbour showing the study area in relation to the creek and the proposed railway. This plan provides a different image of the area in relation to the 1853 plan. It suggests it is a much more confused layout. The full plan shows that the surrounding area to the southwest (but north of Ultimo Road) has been reclaimed. The blue line indicates the approximate location of the new high tide line following reclamation of the swampy area. Notes indicate some streets and lanes shown on the plan are 'proposed' and not yet formed (SRNSW AO Map No X1053 pt 3 of 3).

Although the Great Southern Railway was formally opened in September 1855, the Darling Harbour Branch Line took longer to complete; possibly not until 1859 when rates for the transport of goods along the Darling Harbour Branch were advertised.¹⁸ The date of the construction of the Ultimo Road overbridge is not known, however the *Sands Directory* first records a railway bridge over Ultimo Road near the study area in 1867 (See *Sands Directory* Schedule in Appendices). At this time the line extended to a point just short of Pyrmont Bridge.¹⁹ Despite predictions of its usefulness to trade and commerce, the Railway Department mainly used the line to transport coal and ballast from a temporary jetty at the end of the line. A private company had previously used it to transport timber. Most goods continued to be handled through the Redfern terminus. At the time plans to complete the terminus at the end of the line had been abandoned.²⁰

The line's construction brought no advantages to its Ultimo neighbours. In wet weather it wreaked havoc on the environment as the culverts draining the railway embankments (16 ft or 4.8 metres high on one side at Ultimo Rd) silted-up and were not maintained. With the natural drainage patterns at the head of the harbour altered by the embankments, during

¹⁸ *SMH* 27 Sep 1855: 4. 'Four-fifths' of the branch line was completed by November 1859. *SMH* 27 Sep 1859: 4. *SMH* 27 Dec 1859: 6.

¹⁹ 'Plan of Sydney and Portion of Harbour,' *Illustrated Sydney News*, 12 Jan 1866, in Ashton & Waterson, *Sydney Takes Shape: A History in Maps*, Hema Maps, Brisbane, 2000: 29.

²⁰ Fitzgerald & Golder, *Pyrmont & Ultimo Under Siege*, 2007: 45-46; 'Progress Report ...on the Railway through the Ultimo Estate,' NSW Legislative Assembly, 1863-4, 1864[4]: 206, 219.

rain with additional run-off the usually small watercourses inundated buildings.²¹ An enquiry held in 1863-4 by a Select Committee of the Legislative Assembly heard evidence that residents and businesses of Ultimo and Pyrmont had been detrimentally affected. C.E. Langley the surveyor for the City Council testified that the road under the Ultimo Road railway bridge had severe drainage problems. He described it as 'always a bog' and that 'it cannot be made a good road, because it would raise it too high for the bridge.' Access at Ultimo Road, one of few thoroughfares not cut off by the line, was difficult with the low level of the line forming a 'kind of tunnel' through which the road passed with no drainage to move water that accumulated there. The evidence was corroborated by others including George Harris a part owner of the Harris Estate.²²

No records of the exact design of culverts or drains associated with the railway embankment have been located however there is evidence of many complaints made to the Select Committee about their failure. The negative impact of the railway was not limited to the Ultimo Railway Bridge section but about the line in general which it was suggested should be abandoned. Harris stated that some of the culverts were blocked with sand and others were broken in the centre. Robert Pemberton Richardson, an auctioneer, gave evidence that the line was dilapidated, confirming that some of the culverts were 'broken through.' The evidence of auctioneer, John Valentine Gorman, was similar, adding that the railway embankments had 'somewhat sunk.' Land on the western side of the embankment 'was caused to lie in a hollow...[where] there is a large mass of water standing.' Further to this it was suggested that a 'drain through the embankment might carry it [the water] off.'²³

A call for tenders for the supply of wrought iron girders for the Ultimo Road Railway Bridge in April 1879 confirms that changes were being made to the line's infrastructure, although the extent is unknown.²⁴ Reconstruction of the bridge was not without problems and difficulties with flooding continued to be reported in an enquiry into the bridge in 1880-1881.²⁵ Evidence dated from as early as 1874 at which time Ultimo Road was reported to be 66 ft (20.12m) wide, while the overbridge was only 16 ft (4.88m) wide. It was inconvenient for traffic and pedestrians, and a 'nuisance' in wet weather which resulted in flooding. Evidence from J. Harris reported that until recently pedestrian access had been possible by a bridge over the line which had since been removed. Initially refusing to widen the bridge, in 1877 plans were proposed to increase the span to 40 ft (12.19m) providing a footpath for pedestrians. The tender was awarded to Messrs G. H. Royce & Co. Due to problems with the steelwork imported from England, the bridge was not installed until after June 1880.²⁶ It is not known when the new railway bridge over Ultimo Road was finally installed. The Ultimo Bridge Railway Signal Box is thought to date to c.1890.²⁷

²¹ Fitzgerald & Golder, *Pyrmont & Ultimo Under Siege*, 2007: 46; 'Progress Report ...on the Railway through the Ultimo Estate,' NSW Legislative Assembly, 1863-4, 1864[4]: 222; 'Sandstone Culvert and Brick Drain: Mary Ann Street, Ultimo, NSW,' McIntyre-Tamwoy Heritage Consultants, Feb 2004: 10, 12.

²² 'Progress Report ...on the Railway through the Ultimo Estate,' NSW Legislative Assembly, 1863-4, 1864[4]: 208, 210, 211, 222.

²³ 'Progress Report ...on the Railway through the Ultimo Estate,' NSW Legislative Assembly, 1863-4, 1864[4]: 208, 210-11, 215, 219; 'Sandstone Culvert and Brick Drain: Mary Ann Street, Ultimo, NSW,' McIntyre-Tamwoy Heritage Consultants, Feb 2004: 10-11.

²⁴ *SMH*, 5 Apr 1879: 10.

²⁵ 'Girder-Bridge Across Ultimo-Street,' NSW Legislative Assembly, 1880-1, Govt Printer, Sydney, 1881[1]: 563-575.

²⁶ 'Girder-Bridge Across Ultimo-Street,' NSW Legislative Assembly, 1880-1, 1881[1]: 564, 567, 575.

²⁷ The Darling Harbour Branch Line has not been in general use since the 1980s with the exception of activities related to the PowerHouse Museum. The Darling Harbour Rail Corridor and the Signal Box are considered of Local and State cultural significance. 'Ultimo Bridge Railway Signal Box,' NSW Heritage Register, Database No 5012251; 'Darling Harbour Rail Corridor,' SHFA Heritage and Conservation Register.

2.2.3 The Harris Family's Ultimo Estate from 1859 – Partition and Development of Block 8

In 1859 while waiting for compensation for land acquired for the construction of the Darling Harbour line the Harris Estate was subdivided and areas of land divided among the third generation of the Harris family. The title to Block 8 in which the study area is located was among a number of lots allocated to a descendant also named John Harris (1838-1911), described as a gentleman of Ultimo (See 2.2.8).²⁸

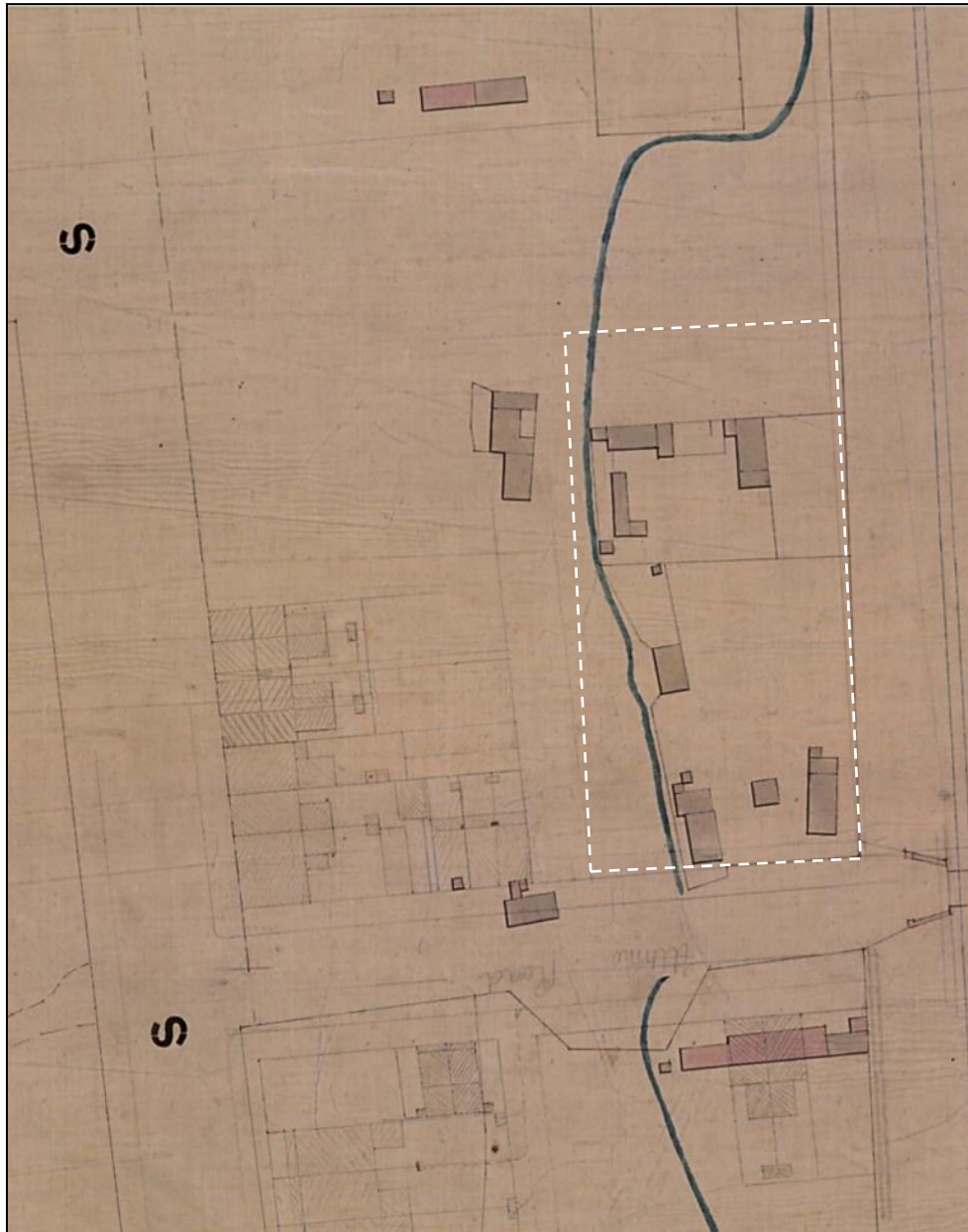


Figure 2.5: Portion of Block V¹ of the Trigonometrical Survey of Sydney, 1855-65, showing a number of timber buildings within the study area. The study area's location is indicated by a broken line (Historical Atlas of Sydney, CCS Archives).

²⁸ See Land Titles Schedule in Appendices.

A Trigonometrical Survey of Sydney prepared between 1855 and 1865 shows the study area and its development in more detail (Fig. 2.5). The plan indicates a number of timber buildings of varying sizes on the site which is divided into irregular allotments. Residences or businesses would have used cesspits or the creek to dispose of waste. The plan shows the creek running under Ultimo Road, through the western side of the study area. The Ultimo Road railway overbridge lies to the east. Comparing the survey to the Council Rate Assessment Records for 1863 it is thought that three of the lessees were Edward Smith, Thomas Crosby and John Plunkett. Landlords included George and John Harris. The buildings were timber, single-storey, 2-roomed, with shingled roofs, and all but Smith's were in 'bad repair'. An unoccupied house next to Smith's was 'unfit for habitation'. A number of other properties listed might well have been located in the study area, but there is insufficient evidence to make a link. They were also owned by John or George Harris, some of the same construction and with a similar number of rooms and in poor condition. If the survey is correct the three brick houses in the Rates Assessment record are not in the study area.²⁹

A memo to the City Surveyor's Office in 1856 noted that the bridge over the watercourse in Ultimo Road was about to collapse, recommending that the channel be cleared and the road be repaired with stone slabs, or with beams and planking. Without details given, the repairs were agreed to, as well as to the filling of the road under the railway bridge with 'ballast'.³⁰

Although plans accompanying Harris family land titles show an ordered layout of streets and laneways, the survey indicates that in reality that the development of Ultimo was haphazard and did not follow planned alignments.³¹ In 1858 a large sum of money was invested by the City Council in the construction of the Ultimo Road which was used to take building stone from Pyrmont to the city.³² At this time Ultimo was still largely open space providing pasture for small dairies at the junction of Ultimo Road and Harris Street.³³

In 1857 following investigations into the increasing problem of sewage disposal the Government authorised the City Commissioners to construct of a number of main outfall sewers in brick and stone. The City Council completed the work and in 1859 the 'Darling Harbour railway sewer' and the Hay St sewer discharged into Darling Harbour. The 5 ft x 4 ft (1.5m x 1.2m) brick structure laid at a depth of about 9 ft (2.7m) carried stormwater, surface drainage and sewage.³⁴ Despite their proximity to the line, it is thought that the sewer did not service Ultimo Road properties west of the railway.

The *Sands Directory* shows 'Ultimo Street' (Ultimo Road) as a city street from 1858/9 edition. It is possible to identify occupants of Block 8 (between Harris Street and the Darling Harbour Railway) from this date, and from the 1870 edition it is possible to identify those in the study area. Prior to 1860 Patrick [Edward?] Smith, a rope maker, and Thomas Crosby, a dairyman, are thought to be linked to Block 8 of the Harris Estate.³⁵

²⁹ See Rates Assessment and *Sands' Directory* Schedules in Appendices.

³⁰ Memo, City Surveyor, 14 Feb 1856, Item 26/21/0128, CCS Archives.

³¹ See Land Titles Schedule in Appendices; SRNSW AO Map No 4923.

³² *SMH* 26 Nov 1858: 3.

³³ Fitzgerald & Golder, *Pyrmont & Ultimo Under Siege*, 2007: 47; See *Sands Directory* Schedule in Appendices.

³⁴ WV Aird, *The Water Supply, Sewerage and Drainage of Sydney*, MWS&DB, Sydney, 1961: 128-9.

³⁵ See *Sands Directory* Schedule in Appendices.

2.2.4 John Harris' Block 8 on Ultimo Road from the 1860s

The *Sands' Directory* for 1865 shows Patrick Ryan, a dairyman (No 31), Alexander McDonald (33), Thomas Crosby, a shoemaker (35), and Edward Smith (37) on Ultimo Street in the location of Block 8 of the Harris Estate. Crosby and Smith had been living in Ultimo from at least 1855 although given the haphazard nature of the surviving records it is difficult to be precise about the location of their dwellings. Dual listings for Smith, with another on Harris Street, suggest that the property was close to the corner of the two roads. The following year George Plunkett a shipwright was living at 31 Ultimo Street, in close proximity to Darling Harbour and employment in his trade.³⁶

It is difficult to identify the tenants living within the study area who were not fronting the main streets such as Ultimo Road or Harris Street using records in the *Sands' Directory* or in Rates Assessments.

Circa 1874-5 the office and depot of the Lithgow Valley Coal Co was located on the north side of Ultimo Road in the vicinity of Block 8 and possibly within the boundaries of the study area given its proximity to the railway. The Council's Rates Assessment records however do not show the company at the site or nearby.³⁷

By 1876 a two-storey terrace of three residences had been built in the study area. The *Sands Directory* for this year records George Plunkett, a shipwright, John Shinnick, an [iron] moulder, and Neville William [Winnett?], a compositor are listed as living at Nos 85, 87 and 89 respectively.³⁸ The terrace corresponds with one shown on a c.1880s sewerage survey shown below (Fig. 2.6).³⁹ Plunkett lived in 'Ultimo Street' as early as c.1865-6; first in No 31 (1866) and later in No 83 (1867-1871) but the exact locations are not known.

In 1877 the two-storey, brick and shingle-roofed dwellings owned by the Harris Family (John Harris) consisted of four rooms each. The tenants, Plunkett (85), Shinnick [sp?] (87), and Winnett (89), each paid £26 annually in rates.⁴⁰ The houses were not connected to the sewer. At this time Ultimo Road was not always a pleasant place to live. In January 1877 it was reported that 'a large quantity of sewage water flows from the covered sewer in Ultimo Road, across the open ground beside a number of houses.'⁴¹ In November 1877 the City Surveyor recommended that kerbing and guttering be installed along Ultimo Road between Harris St and the railway embankment but no mention was made of improving the sewerage system.⁴² The City of Sydney's Rate Assessment Book for 1880 (Denison Ward) lists the terrace as Nos 20, 22 and 24, consistent with the numbering currently used.⁴³

Ultimo was sewered after 1880, with a line running parallel to the railway line, from George Street to Darling Harbour, adjacent to the study area. A Sydney Sewerage Survey first issued in September 1880 shows the creek meandering through the site. Buildings are not plotted (Fig. 2.6).⁴⁴ A stone culvert is shown on the plan in the vicinity of the railway, adjacent to the study area. It is thought to be linked to a stone and brick structure

³⁶ See *Sands Directory* and CCS Rate Assessment Schedule in Appendices.

³⁷ See *Sands Directory* and CCS Rate Assessment Schedule in Appendices.

³⁸ See *Sands Directory* Schedule in Appendices.

³⁹ 'Plan & Sections of Omnibus Lane & Systrum St,' OCP No 373, Sydney Water.

⁴⁰ See CCS Rate Assessment Schedule in Appendices.

⁴¹ *SMH* 9 Jan 1877: 6.

⁴² Memo, City Surveyor, 28 Nov 1877, Item 26/147/1180, CCS Archives.

⁴³ See CCS Rate Assessment Schedule in Appendices.

⁴⁴ 'Sydney Sewerage Works, Extension of Devonshire St Sewer to Darling Harbour', Sydney Water OCP No. 276, 1880.

uncovered during archaeological investigations in 2003.⁴⁵ The sewer line shown on the plan is described on the plan as a 4ft by 2 ft 8 inch (1.2m x 0.8m) 'Oviform brick sewer'. A 12 inch (300 mm) line is shown along Ultimo Road adjacent to the watercourse running through the site. A sewer connection point is also indicated near the junction of the watercourse and Mary Ann Street.

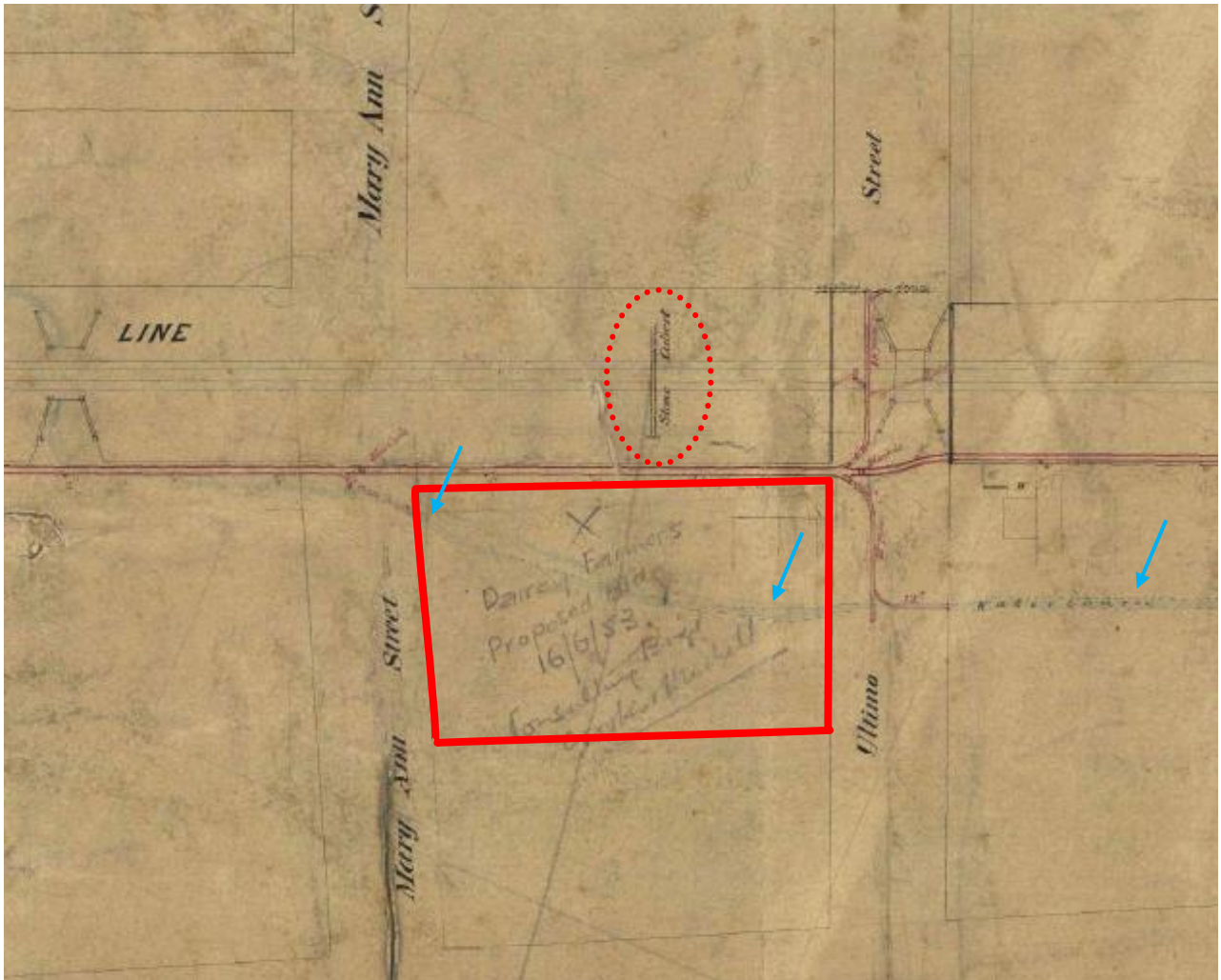


Figure 2.6: Sydney Sewerage Works plan first issued in 1880 showing the sewer line and sandstone culvert (circled) adjacent to the study area (outlined). This plan also shows the alignment of the watercourse through this area apparently as late as 1880. It is unclear if it is being channelized into the red coloured services but it is most likely that this creek disappears at this time. Pencil notes on the study area date to 1953 prior to the construction of the Dairy Farmers building (OCP No 276, first issued 23 Sep 1880, Sydney Water).

Archaeological investigations of the 'Mary Ann St culvert, sandstone bridge and drain' concluded that it appeared to have been constructed in three stages. It extended for an

⁴⁵ 'Sandstone Culvert and Brick Drain: Mary Ann Street, Ultimo, NSW,' McIntyre-Tamwoy Heritage Consultants, Feb 2004.

unknown distance to the west (the study area), and under the railway embankment to the east.⁴⁶ The features identified included: -

- a sandstone walled and floored open drain (not dated, thought to be pre 1853)
- a brick oviform drain cover extending under railway embankment (c.1853-55)
- a sandstone bridge structure abutting the western side of the brick cover (thought to be post 1863)⁴⁷

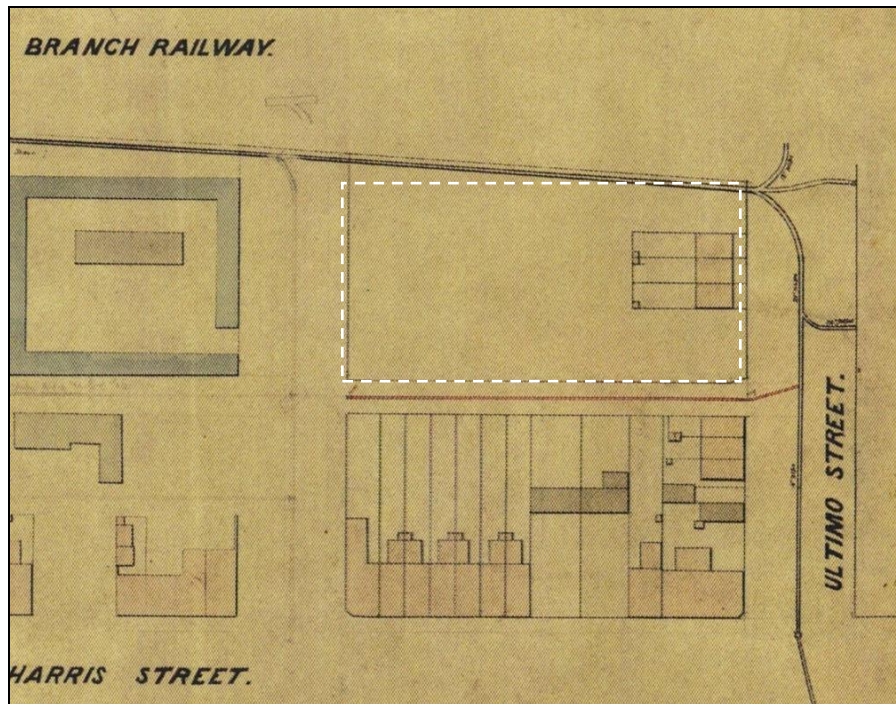


Figure 2.7: An undated (c.1880-82) sewerage plan or 'Old Council Plan' showing dwellings (20, 22 & 24) in the study area facing Ultimo Road (shown as Ultimo Street) (OCP No 373, Sydney Water).

A later undated, (c.1880s) sewerage survey shows a lane (Omnibus Lane) had been formed along the western boundary of the site which was occupied by the brick terrace (20, 22 & 24). Separated from the rest of Block 8 by the lane the area of the site was now 2 roods 31 $\frac{3}{4}$ perches (2826m²). Brick water closets or toilets are shown in the rear of each yard (Figure 2.7).⁴⁸ The creek is not shown on the plan and by 1882 had been diverted to the sewer.⁴⁹

2.2.5 Residential and Commercial Development of 14-28 Ultimo Road from the 1880s-1900

The NSW Shale and Oil Company's Depot took out a lease with John Harris for part of the site soon after December 1883,⁵⁰ though it was not an official lease until 1906. The company operated a railway siding at Ultimo from at least 1885 in conjunction with mines at

⁴⁶ McIntyre-Tamwoy Heritage Consultants, Feb 2004: ii.

⁴⁷ McIntyre-Tamwoy Heritage Consultants, Feb 2004: ii.

⁴⁸ 'Plan & Sections of Omnibus Lane & Systrum St,' not dated, 'Old Council Plan' No. 373, Sydney Water.

⁴⁹ Letter, WM Harris, 31 Mar 1882, Item 26/183/573, CCS Archives.

⁵⁰ Letter, NSW Shale & Oil Company Limited, 10 Dec 1883, Item 26/194/2115, CCS Archives.

Hartley Vale and an oil works at Waterloo or Alexandria.⁵¹ Like other tenants of the site, they experienced problems with flooding and in 1883 requested that the Council address the surface drainage problem from Mary Ann St and cover the sewer running through the property. In June 1885 a request was approved for the lifting of the kerbstone in Ultimo Road near the railway line, allowing access for carts to the grounds and new siding.⁵²

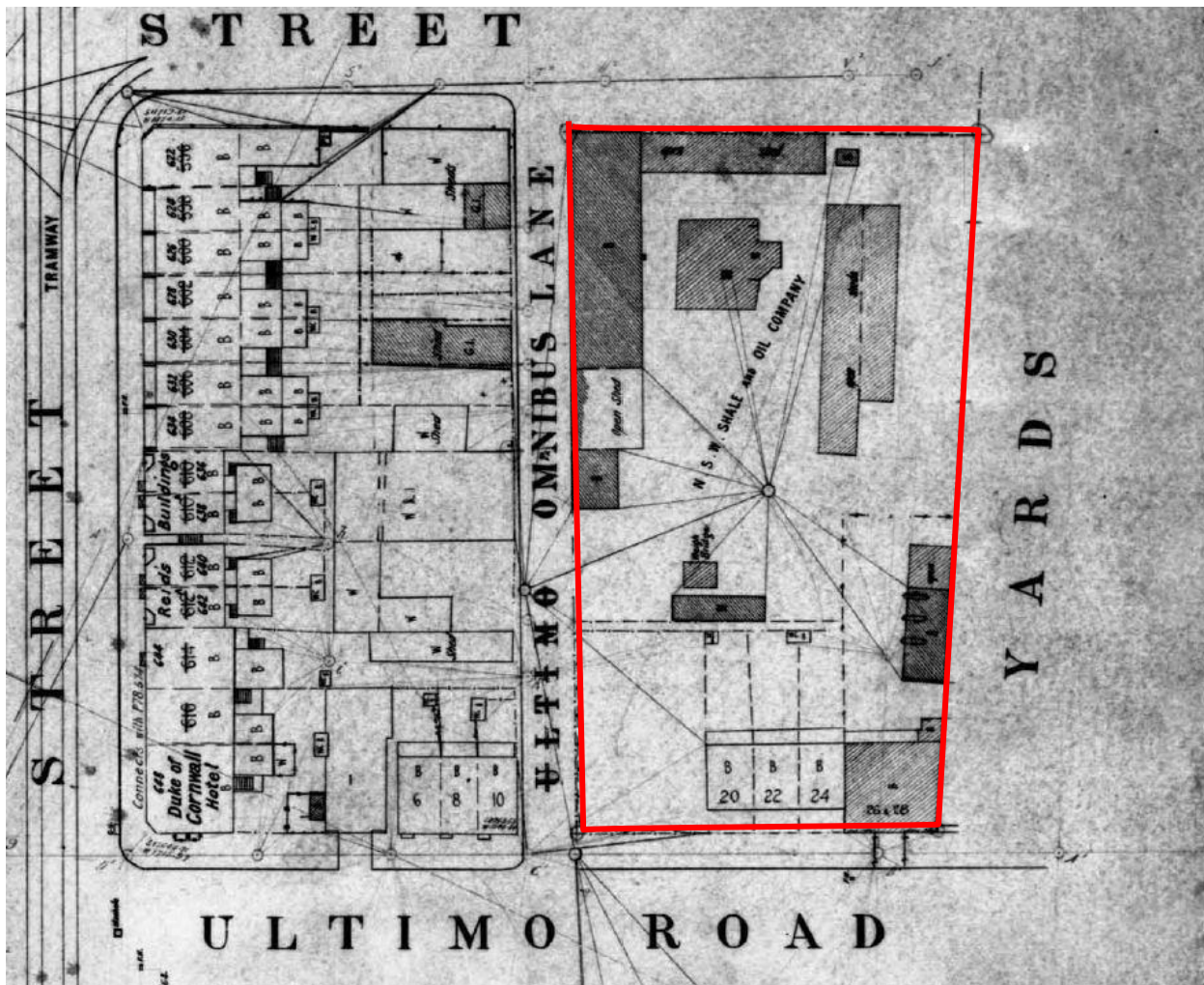


Figure 2.8: Portion of a Public Works Department Survey dated 1886 (amended 1892, 1893 & 1901) showing development in the study area up to May 1901 (PWD City of Sydney Sht D4, No 1544S208, Sydney Water).

A Public Works Department survey dated 12 May 1886 shows the study area in more detail (Fig. 2.8).⁵³ The plan includes additional information plotted in November 1892 and July 1893. Cross-hatching denotes information plotted in May 1901, although differences in hatching suggest stages of development between 1886 and 1901. The brick terrace (20, 22

⁵¹ NSW Shale & Oil Company Limited Half-yearly Reports to Shareholders 1885-1893, ML SLNSW.

⁵² Letter, NSW Shale & Oil Co Ltd, 10 Dec 1883, Item 26/194/2115, CCS Archives; Letter, NSW Shale & Oil Co Ltd, 17 Jun 1885, Item 26/205/977, CCS Archives.

⁵³ Public Works Department Survey, City of Sydney Sheet D4, No 1544S208, [from] 12 May 1886, Sydney Water.

and 24 Ultimo Road) appears unchanged, except for what appears to be a rear verandah. Sharing the site are now numerous large brick buildings, open sheds and a weighbridge, occupied by the NSW Shale and Oil Company and built between 1886 and 1901 (Section 2.2.8). A brick building with a rear verandah has been constructed between 20-24 Ultimo Road and the railway. The three oil tanks adjacent to the railway line appear in the 1886 Surveyor's Fieldbook.⁵⁴ The brick building bordering Omnibus Lane was recorded in 1892-93 surveys.⁵⁵

During the 1880s and 1890s the site, still owned by John Harris, was shared by the small terrace known as 20, 22 and 24 Ultimo Rd, and the NSW Shale and Oil Co. By this time the terraces had several long-term tenants. George Plunkett lived at No 24 from at least 1876 until 1901, and John Shinnick (spelling varies) lived at No 22 between 1877 and 1882. The *Sands Directory* and Council's Rate Assessment track the changes in tenants in the late nineteenth century.⁵⁶ The terrace had a number of long-term tenants despite the location on busy Ultimo Road near the depot and railway.

2.2.6 Residential and Commercial Development of the Study Area, 1901-1929

In 1901 20, 22 and 24 Ultimo Rd were occupied by Henry Chamberlain, William Harris and George Plunkett who were paying annual rates of £23. In the previous decade the terrace had been reroofed in iron. At Nos 26-28 the NSW Shale and Oil Company's office and works, rated annually at £176, was managed by William Hall.⁵⁷ Circa 1902-3 John Harris (1838-1911) built a further three terrace-style residences between Omnibus Lane and 20-24 Ultimo Rd, adding to his rental income (Fig. 2.9). Numbered 14, 16 and 18, the new two-storey brick dwellings with iron rooves had six rooms each. The plan below shows that the new terraces had timber verandahs facing busy Ultimo Road. All the houses were now connected to the sewer. The first tenants are recorded in the *Sands Directory* as Frank Inriff (14), James Little (16) and John McIntyre (18). Although some of the tenants of 14-24 Ultimo Road changed frequently, others like William Webster, Mrs May O'Brien, and the Plunkett and Chamberlain families lived there for decades.⁵⁸

In 1902 a 25-year lease provided some security for the NSW Shale and Oil Company's investment near the increasingly busy Darling Harbour area.⁵⁹ Sydney Water's Blackwattle Sewer Detail Sheet, shown above, documents changes to the site by the Company between 1901 and June 1938 (Fig. 2.9).⁶⁰ One brick building and the weighbridge documented on earlier plans are no longer extant, while a building adjacent to Mary Ann St has been extended. Most of the company's buildings were sewered and an 'unroofed Car Washing Area' near the railway provides an indication of the activities carried out on the site. From 1907 the NSW Shale and Oil Company was also trading from Ultimo Road as the Commonwealth Oil Corporation Limited, adopting this name from c.1911. About 1915

⁵⁴ Surveyor's Fieldbook No 1075, Sht D4 City of Sydney, 3 May 1886, Sydney Water.

⁵⁵ Surveyor's Fieldbook No 3031, Revision Sht D4 City of Sydney, 14 May 1901, Sydney Water.

⁵⁶ See CCS Rate Assessment Schedule in Appendices.

⁵⁷ See CCS Rate Assessment Schedule in Appendices.

⁵⁸ See CCS Rate Assessment and *Sands Directory* Schedule in Appendices.

⁵⁹ Our understanding of the relationship of this site with the shale oil processing is based on Darryl K. Mead, 'The Technology and Operation of the New South Wales Oil-Shale Industry from 1865-1906 with the Inclusion of Hartley Vale, Airly and Torbane Sites to 1913', unpublished PhD, University of New South Wales, June 1986, I, 160, 171; II, 569. Associate Professor Ian Jack undertook research on this project for Casey & Lowe in 2009: *Corridor Options, Historic Heritage Mt Victoria to Lithgow*, for Sinclair Knight Merz on behalf of the RTA, July 2009.

⁶⁰ Sewer Detail Sheet (Blackwattle), not dated (up to 21 June 1936), BW3731, Sydney Water.

John Fell and Co was associated with the Commonwealth Oil Corporation Limited advertised as selling shale candles, oils and greases.⁶¹

Detailed field books from 1901 provide an indication of the various buildings on the study area and generally depict the same buildings shown on earlier figures (Figs 2.8 to 2.11). These buildings are mostly open sided sheds, presumably for storage. Also there is a sketch plan indicating the extent of the NSW Shale and Oil Company's lease (Fig. 2.12). This lease covered most of the property including the eastern street frontage of Ultimo Road and all of the property behind the Ultimo Road terraces.

John Harris, the property's owner died in November 1911 leaving his sons, John Harris (1870-1957), a doctor, and Reginald William Sydney Harris as executors of his Estate. In 1913, 14-28 Ultimo Road was mortgaged to the Bank of NSW for £42,000 and was reconveyed in 1925.⁶²

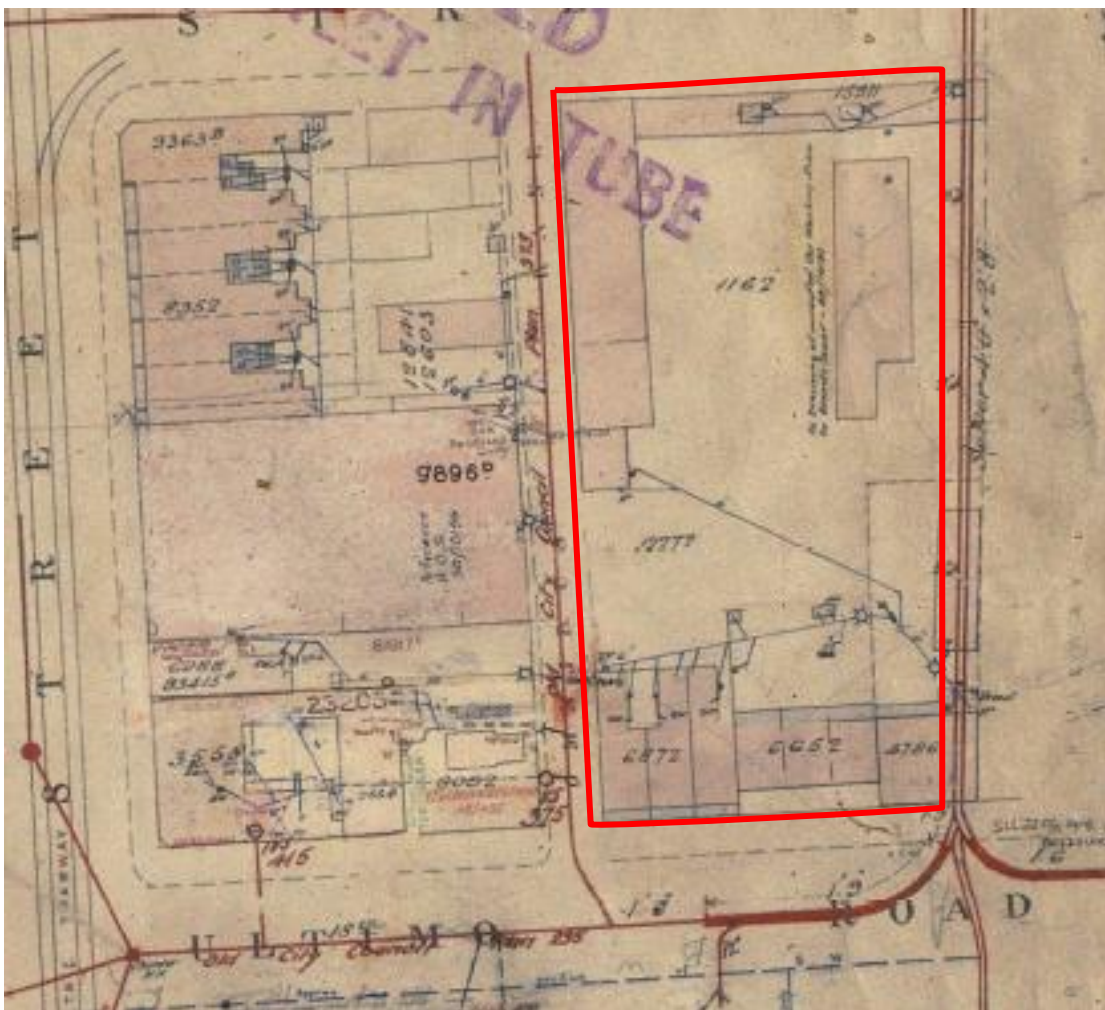


Figure 2.9: During the early twentieth century a group of three terraces were built on the western side of the 1870s terraces, corner of Omnibus Lane. Original terraces are arrowed. The sewer is immediately outside the study area. Part of the Blackwattle Sewer Detail Sheet showing changes to the study area between 1901 and 1938 (Sewer Detail Sheet (Blackwattle), BW3731, Sydney Water).

⁶¹ See *Sands Directory* and CCS Rate Assessment Schedule in Appendices.

⁶² See Land Titles Schedule in Appendices.

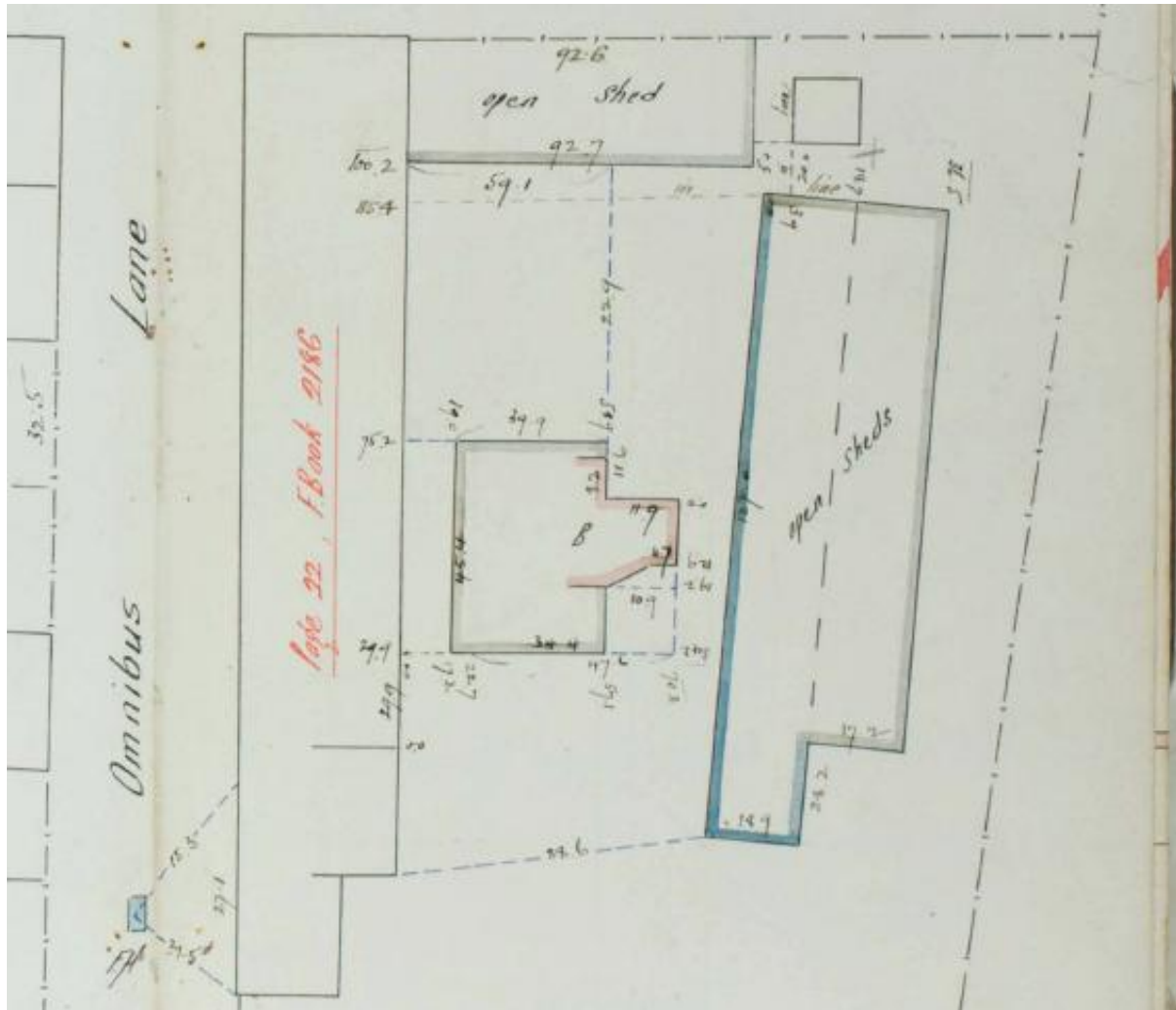


Figure 2.10: Fieldbook sketch of the northern part of the site in May 1901. It shows a series of linear sheds.



Figure 2.11: Fieldbook sketch of the terraces 20 to 24, the large brick building on the street frontage associated with the NSW Shale and Oil Company. There is a weighbridge to the rear of the terrace properties. It is within the NSW Shale and Oil Company land.

The Commonwealth Oil Co held a lease to the greater part of the study area (26-28 Ultimo Rd) until August 1941 but the *Sands Directory* and the Rates Assessment books suggest that they might have vacated the site c.1928. The railway sidings utilised firstly by the NSW Shale and Oil Co and later by the Commonwealth Oil Co in association with John Fell are shown in a City Stormwater Drainage Order Plan dated 1936 (Fig. 2.13).⁶⁶

The Newton Leather Goods Company leased part of 26-28 Ultimo Rd c.1932. The terraces at 14-24 Ultimo Road were leased on casual weekly agreements with no security of tenure. They were occupied until at least c.1932-3 and possibly as late as 1938.⁶⁷ The terraces are shown in an undated photograph in Fig. 2.14 below.⁶⁸

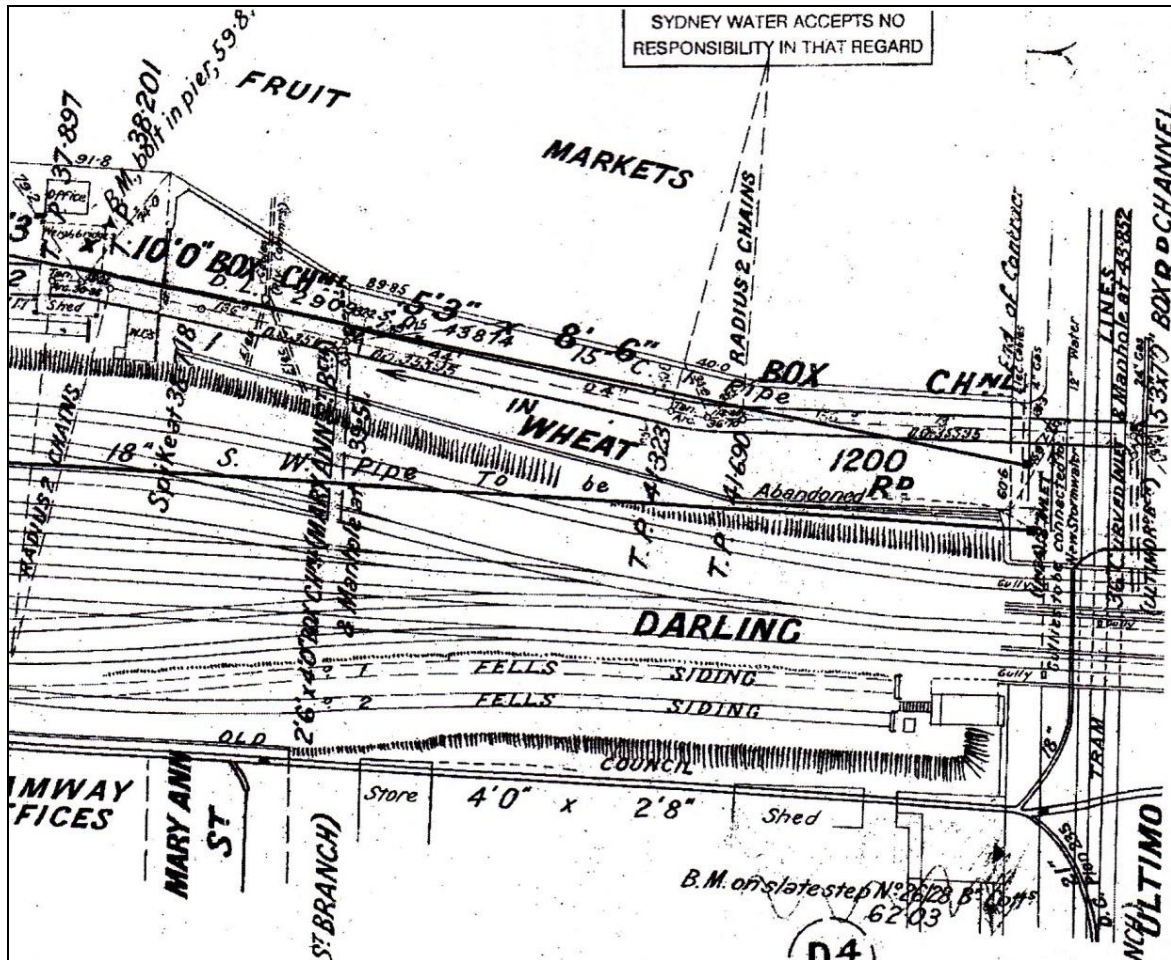


Figure 2.13: Drainage plan dated 1936 showing ‘Fell’s Siding’ and the railway line embankment. The ‘Old Council’ sewer and buildings in the study area are noted on the plan (DO 35595, Sydney Water, in McIntyre-Tamwoy Heritage Consultants, Feb 2004: 37).

⁶⁶ 'Sandstone Culvert Mary Ann Street, Ultimo,' McIntyre-Tamwoy, Feb 2004: 37.

⁶⁷ See *Sands Directory* and CCS Rate Assessment Schedule in Appendices.

⁶⁸ See Land Titles Schedule in Appendices.



Figure 2.14: View looking east from Harris St c.1932-38 showing the terraces at 14-24 and 26-28 Ultimo Rd on the left-hand-side. The Darling Harbour Goods Line and Markets building are visible in the background (File 039/039793, SRC 13396, CCS Archives).

Dairy Farmers Cooperative Milk Company purchased the site in March 1943 (See Associated Individuals and Organisations). A photograph shown in Fig. 2.12 shows the site after the demolition of the terraces and buildings facing Ultimo Rd linked to the Commonwealth Oil Corporation, in preparation for the construction of Dairy Farmers' Transport Building.



Figure 2.15: View looking east from Harris St c.1943-53 showing 14-28 Ultimo Rd on the left-hand-side. The Darling Harbour Goods Line and Markets building can be seen in the background. The new Dairy Farmers building on the corner of Ultimo Rd and Harris St is visible on the right-hand-side of the image (File 039/039794, SRC 13396, CCS Archives).

An aerial photograph dated 1943 shows that most if not all of the terraces had been demolished as had other Commonwealth Oil Company buildings on the site (Fig. 2.16).

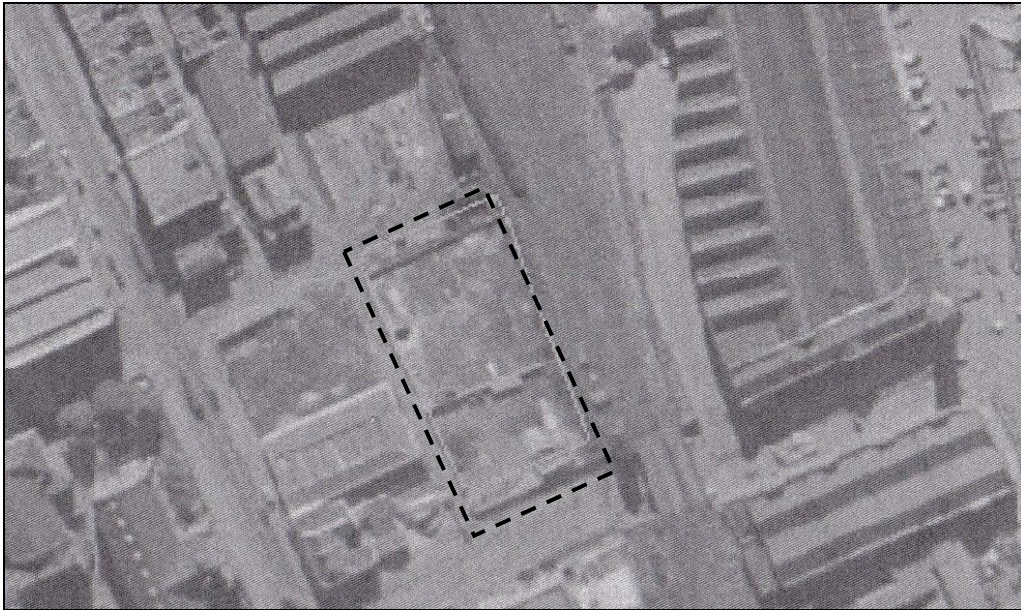


Figure 2.16: Aerial photograph of the site taken in 1943 indicating that most if not all of the terraces and some of the Commonwealth Oil Company's buildings had been demolished (RTA Photography Sydney Suburbs 1943, six.nsw.gov.au, NSW LPMA).

A City of Sydney Aerial Survey dated 1949 confirms that all the terraces had by this time been demolished (Fig. 2.17).

Building Application files submitted by Dairy Farmers indicate that in 1953 there were three buildings on the site. Two brick garages with galvanised iron rooves were to be demolished, and the piers and roof of a car cleaning shed, toilets and store were to be demolished.⁶⁹

Dairy Farmers' Transport Building, a single-storey brick building with a galvanised saw-toothed roofed was built on the site in 1955. Prior to construction the City Council acquired portions of land at the north and south corners of Omnibus Lane, creating splayed corners at its junction with Ultimo Road and Mary Ann St.⁷⁰

In 2004 the University of Technology purchased the site (Lot 1 DP 76938) and in 2009 it was occupied by Energy Australia. A narrow strip of land on the site's eastern boundary abutting the rail corridor is owned by TransGrid. In 2003 a sandstone culvert and brick drain were exposed on Transgrid's Mary Ann Street site during excavation for the MetroGrid Tunnel. Assessed as of high local significance, and as previously discussed, the features including a sandstone culvert and drain were located below the Darling Harbour Goods Line, and adjacent to the study area and the Ultimo Road railway underbridge.⁷¹

⁶⁹ BA File, Item 1171/53 Series 59, Dairy Farmers 14-28 Ultimo Rd, Ultimo, CCS Archives; Specification [1953], Dairy Farmers Transport Building, 14-28 Ultimo Rd, Ultimo, Kenwood & Hoile Assoc Architects, Series 126, Item 18098, CCS Archives.

⁷⁰ BA File, Item 1171/53 Series 59, Dairy Farmers 14-28 Ultimo Rd, Ultimo, CCS Archives; See Land Titles Schedule in Appendices.

⁷¹ 'Former Dairy Farmers Site, 14-28 Ultimo Road, Ultimo: Preliminary Heritage Advice', Godden Mackay Logan Pty Ltd, July 2009: 2.



Figure 2.17: Aerial survey dated 1949 showing the study area. The terraces have been demolished however a few buildings remain on the site (Historical Atlas of Sydney, CCS Archives).

2.2.8 Associated Individuals and Organisations

John Harris (1754-1838), surgeon, public servant and landholder, was born in County Londonderry, Ireland, a son of John and Ann Harris. As surgeon's mate in the NSW Corps he reached Port Jackson in June 1790 and in 1791 Harris was promoted to surgeon. From 1793 he led a busy life as both a surgeon and farmer, receiving land grants and purchasing a farm. By the early 1800s he owned 315 acres (127 ha) of land, including Ultimo Farm, and was one of the colony's foremost 'officer-farmers'.⁷²

His work in the colony earned him the admiration of Governor King who described him as 'the most respectable character as a gentleman', appointing him as deputy judge advocate. His civil activities led to conflict with traders and fellow officers. After a period of being debarred from civil duties due to questionable conduct, King reinstated him as a naval officer and magistrate in 1804. Despite Governor William Bligh dismissing Harris from his

⁷² B. H. Fletcher, 'John Harris, (1754 -1838)', *Australian Dictionary of Biography*, Volume 1, [Melbourne University Press](#), 1966: 519-520.

posts in 1807, in 1808 after the Rum Rebellion Major George Johnston reappointed him as magistrate. He lost favour after criticising John Macarthur, but in 1809 he was reappointed by Governor Paterson. Three months later he left for England, where in 1811 he gave evidence at Johnston's court martial.⁷³

In 1814 Harris returned to the colony having been granted permission to become a private settler. He devoted his time to farming and public affairs. In 1819 he was again made a magistrate, retaining the office until his death on 27 April 1838. He left property valued at about £150,000.⁷⁴

John Harris (1838-1911), a relative of Surgeon John Harris, arrived in Sydney with his parents John Harris Senior (d.10 Sep 1846) and Nancy Ann McKee in 1842. John Harris (1838-1911) and his siblings each inherited part of the Harris Estate. He lived at Bulwarra House, Ultimo, and was an alderman representing Denison Ward in the Sydney City Council (1874-83 & 1886-1911). Harris was appointed as a magistrate in 1875 and represented West Sydney in the Legislative Assembly in 1877-80. He died on 7 November 1911 and was survived by five sons (one named John Harris) and three daughters, leaving an estate of £97,000 including extensive land at Ultimo.⁷⁵

NSW Shale and Oil Company Limited is linked to the history of the extraction of kerosene oil and other products from bituminous shale in New South Wales in the late nineteenth century. The company was connected to the shale industry at Hartley Vale, run in the 1870s by the Western Kerosene and Hartley Kerosene Companies. With the advent of the Main Western Line of the railway the company constructed a siding at their works at Hartley Vale from which to transport oil to their refinery in Sydney. Mr A.M. Fell, connected with the industry in Scotland, was responsible for designing a new manufactory at Hartley Vale, therefore localising production.⁷⁶ By 1885 the company operated a depot and siding at Ultimo on the Darling Harbour Branch of the railway, making full use of the expanding rail network. The site at 26-28 Ultimo Road was leased from John Harris.⁷⁷

The **Commonwealth Oil Corporation** formed in London c.1906 with a capital of £2 million began mining shale oil at Newnes in the Wolgan Valley in 1906. In 1908 **John Fell & Company** acquired the company's assets including property at Camellia in Sydney, near the junction of the Duck and Parramatta Rivers. The experience of John Fell, a Scotsman, in distilling oil and his ability to keep-pace with demand for higher-octane motor fuel, contributed to the company's expansion.⁷⁸ First the Commonwealth Oil Corporation and later John Fell & Company utilised the Darling Harbour Goods Line and the railway sidings at Ultimo to transport products from their refineries to the city.

Hugh Victor McKay of **HV McKay Pty Ltd** is linked to the Sunshine Harvester Works established in Victoria. McKay was credited with the design in 1887 of the Sunshine

⁷³ B. H. Fletcher, 'John Harris, (1754 -1838)', *Australian Dictionary of Biography*, Volume 1, [Melbourne University Press](#), 1966: 519-520.

⁷⁴ B. H. Fletcher, 'John Harris, (1754 -1838)', *Australian Dictionary of Biography*, Volume 1, [Melbourne University Press](#), 1966: 519-520.

⁷⁵ Martha Rutledge, 'John Harris (1838-1911),' *Australian Dictionary of Biography*, Vol 4, Carlton, Vic, MUP, 1972: 351-352.

⁷⁶ *SMH* 6 Mar 1872: 7; *SMH* 15 Apr 1887: 4.

⁷⁷ See Land Titles Schedule in Appendices.

⁷⁸ 'Camellia,' John McClymont, 2008, *Dictionary of Sydney*, www.dictionaryofsydney.org/entry/camellia.

combine harvester and the company he established was well-respected for their farm machinery.⁷⁹

Dairy Farmers Co-operative Milk Company was formed on 15 January 1900 by dairy farmers from the New South Wales Illawarra region. The goal of the Co-operative was to assist farmers in marketing their milk products to city consumers. By the 1920s Dairy Farmers Co-operative was 'receiving, processing and selling nearly 23 million litres (five million gallons) of milk a year'.⁸⁰ Dairy Farmers set up operations in Ultimo c.1911, quickly expanding their operations in the area, and leasing and purchasing a number of sites. By c.1930 they had consolidated their business operations on Harris Street, Ultimo, on the corner of Thomas Street, as well as in Ultimo Road.⁸¹ National Foods acquired Dairy Farmers Co-operative Milk Company in 2008.⁸²

⁷⁹ *SMH* 22 May 1926: 16.

⁸⁰ 'National Foods: Our History,' www.natfoods.com.au/company/our-history, accessed 21 Nov 2010.

⁸¹ CCS Rate Assessment Books, Denison and Phillip Wards, CCS Archives.

⁸² 'National Foods: Our History,' www.natfoods.com.au/company/our-history, accessed 21 Nov 2010.

3.0 **Archaeological Context**

3.1 **Excavations by Casey & Lowe**

3.1.1 **Pymont and Ultimo**

- **CSR Site, Pymont (Jacksons Landing)⁸³**

During October to December 1996 Casey & Lowe undertook the archaeological excavation and testing of areas within the then CSR site. This site was acquired by Lend Lease for development into residential accommodation and is now called Jackson's Landing.

The potential archaeological remains of the whole of the CSR site were addressed in an archaeological assessment written by Casey & Lowe in August 1996, 'Archaeological Assessment CSR Site, Pymont', for Howard Tanner & Associates on behalf of Civil & Civic. This report identified the potential survival of archaeological remains in a number of areas throughout the CSR site. Those sections where the remains were considered to have the greatest potential for survival and were accessible were tested. Three areas were found to have considerable remains and were excavated. Two other areas were found to have limited archaeological remains and were also excavated.

Area A contained the remains of four houses, Houses 15 to 21 New Street, Pymont.

Area B contained the remains of three houses, Houses 67 and 69 Bowman Street and 2 New Street, Pymont.

Area C contained the remains of four houses, Houses 1 to 7 McCredie Street, a footpath and roadway, Pymont.

Area D contained limited remains associated with a dairy, 69 John Street.

Area E contained the remains of a single terrace house, 17 Mount Street. Other potential remains in Area E did not survive twentieth-century use as a truck parking area.

- **50-72 Union Street, Pymont⁸⁴**

The main archaeological findings were the lower floors of three terrace houses (Nos 62 – 66) along Union Street. These houses were occupied by various tenants from the 1840s and 1850s through to the early twentieth century. Some of the houses functioned as boarding or lodging houses.

- Houses 64 and 66 Union Street both contained small areas of underfloor deposits within some of the rooms and both had an external building (presumably a kitchen) at the back of each house. Remains of stone footings, a fireplace, drains, and floor and yard surfaces were all identified, planned and recorded.
- Little remained of No. 62 Union Street apart from the sandstone footings of two basement rooms and a partial yard surface.

In the highly impacted areas of Edward and Alma Streets three sets of double cesspits were investigated in case they contained quantities of artefacts. The cesspits belonged to:

⁸³ Extract from Casey & Lowe 2000, Report Summary, 'Archaeological Investigations, CSR site, Pymont (Jacksons Landing)', for Lend Lease Development, 4 volumes. <http://www.caseyandlowe.com.au/reptcsr.htm>

⁸⁴ Extract from Casey & Lowe 2010, Report Summary 'Archaeological Investigation, 50-72 Union Street, Pymont, Vols 1-4. <http://www.caseyandlowe.com.au/siteunion.htm>

- 38/40 Edward Street. This double sandstone cesspit would have serviced these two houses. It was excavated by hand in 100mm spits and contained the largest quantity of artefacts of all three cesspits.
- 31/33 Alma Street. Another stone cesspit was excavated containing a black, sandy, artefact rich deposit, 300mm deep at the base of the cesspit sitting directly on the bedrock.
- 5/37 Alma Street was a similar structure to the cesspit at 31/33 Alma Street. Both were excavated by machine due to contamination in the ground with the fill then skimmed for finds.

A large quantity of artefacts was recovered during the archaeological investigation at Union Street, a total of 3106 items. These were made up of building materials (66), ceramics (608), glass (520), metal (616), miscellaneous (1166) and organic (130) objects. The largest numbers of artefacts came from the underfloor deposits: the kitchen at No. 66 Union Street, and the small room just off the kitchen at the rear of No. 64 Union Street. The date range of artefacts in these deposits indicates a gradual accumulation of materials over the entire occupation period of the houses. Animal bones were quantified separately due to the fragmentary nature of these objects and most of the 2046 fragments recovered were also found in underfloor deposits. Much higher quantities of animal bone were found at No. 64 Union Street and in almost all contexts sheep bones were the predominant species represented. The largest number of items from the cesspits came from the Edward Street cesspit fill. The date range of objects within this fill and the presence of conjoining artefacts throughout the deposit indicate that it was a primary deposit of direct household refuse used to backfill the cesspit after its abandonment as a water closet c.1870-1880 prior to the introduction of citywide rubbish removal.

None of the artefacts could be linked directly to any individuals or families who occupied the houses but the artefact assemblage is typical of the types of objects found on working-class urban sites in Sydney. The houses contained artefacts from the mid to late nineteenth century and are representative of occupation deposits from a typically domestic environment. Detailed analysis of the artefacts and their distribution within the houses reveal to us aspects of the lifeways of the occupants of these houses. They provide an insight into the diet, health, activities, interests and gender of household occupants and are a direct link with life in a working-class neighbourhood in Pyrmont during the second half of the nineteenth century and the early decades of the twentieth century.

Research Questions

▪ Research Questions from the CSR site and Union Street, Pyrmont

In 1996 Casey & Lowe designed a series of research questions to address the range of archaeological evidence likely to be found in the archaeological investigation of the CSR site. The type of remains being uncovered included post-1860 housing, and possibly earlier remains associated with shipbuilding and dairying. Relevant questions are reproduced below:

Only those questions relevant to the current Ultimo project are listed below:

1. What evidence survives of housing in this part of Pyrmont?
2. What evidence is there for the standard of living enjoyed by the residents? Does the artefactual evidence assist us in the analysis of different standards of living along the street frontages?
3. Where houses were connected with the same family for extended periods are there discrete domestic assemblages that can be attributed to their occupation, or used to reconstruct the family's standard of living, access to markets, interest and activities?

4. Is there evidence for cottage crafts or other unrecorded professions or works in the area?
5. Can the material culture provide additional information on the construction of gender identity and the nature of childhood activities?

The material culture of the site should add to our understanding about the social and economic influences on the residents of Pyrmont and how these influences affected their behaviour, as manifested through their choices about:

- what type of activities were undertaken within a house,
- where were activities undertaken within a house,
- what people chose to buy with regard to:
 - what, how and where to eat,
 - what to wear,
 - what types of recreation activities were considered suitable for adults and children within working-class homes?

Overarching Research Questions for Pyrmont/Ultimo

Additional Concerns

- Processes and patterns of urbanisation and how they impacted upon topography and the living and working conditions of the various social classes.
- Examination of the role of gender relations and how it structured nineteenth-century life.
- Identification, analysis and interpretation of living conditions and class structure within nineteenth-century society and how this evidence is structured within the archaeological resource.
- Ethnicity within the archaeological resource.
- The development of an economic and social neighbourhood.
- The development of an industrial urbanised working class in Australia and the patterns and processes of urbanisation.
- Other relevant questions.

Urbanisation

- How do the archaeological remains from this site relate to current perspectives on Sydney's urbanisation? Do they challenge, redefine or support them?
- How does the nature of the urban environment – the streets and houses in which people live influence their lives? Some recent work has undertaken a landscape approach to urban archaeology. This sees the landscape of the urban environment as constraining and contested by the creators of the environment and by those who lived in the houses.

The research questions mostly examine issues regarding urbanisation, material culture of consumerism and gender identity, attitudes to childhood and women's work in the home. The theoretical underpinnings of this research were initially discussed in the Archaeological Assessment and are summarised in Section 6 of the Unions Street report. These are currently important questions feeding archaeological research designs in Sydney and internationally.

Sydney CBD & Inner Suburbs

• Old DMR Site, Campbell, Pitt and Castlereagh Streets, Sydney

Land to the east of the study area was the subject of a detailed archaeological program in 1995 and 1996 (Casey 1999). The area was found to be variously disturbed with much of

the site cut down to shale. In the Pitt Street area (Area A) this was mostly by the early brickfield activity. The areas with most potential were along Pitt Street and at the rear of the Campbell Street properties. One small area retained remnant topsoil. Shale was immediately beneath the ground level with a drain cut into the shale, a well and footings for a c1840s house at 418 Pitt Street. The drain and well are interpreted as belonging to Hutchinson's occupation of the house and the use of this area as part of the garden but they were built over in the 1840s. Photo 4.1 shows the drain leading to the south under 420 Pitt Street, the wall of which is visible in the top of the photo. Photo 4.2 shows the stone footings of 418 Pitt Street cut into shale and at a reasonably shallow depth. No remains of 416 and 414 Pitt Street were found in the north part of this area having been removed by the construction of a substantial twentieth-century building.

One of the small pockets of archaeological remains, Area B, contained brickfield-period remains which were interpreted as being associated with early dairying in the brickfields (Casey 1999). Much of this area was cut down to clay and only service trenches survived. Only about one tenth of this area had any surviving archaeological remains. The archaeological deposits in this area were shallow and highly disturbed but because they were sources of early pottery they had a high level of research potential.

1. Residential Occupation, Part of Town, from c1830

This phase of occupation should contain considerable archaeological evidence. The main focus of these questions will relate to processes of Immigration, Urbanisation, the Economy and Consumerism, Gender and Ethnicity. Specific questions that address this phase of the site are:

- i The type and nature of early private houses built in Sydney. This site contained a range of houses that were built between 1830 and 1854. There are differences in layout, size, and orientation which reflect the transformation of early Sydney by the processes of urbanisation.
- ii What can the artefacts, deposits and features associated with these houses tell us about the living standards of the residents of the early Colony? What changes are happening by the mid-nineteenth century to domestic markets and their relationship to trade with overseas countries and how are they reflected by the occupants of this site?
- iii This site should contain intact remains associated with a number of houses and yards. Comparison of the archaeological remains from these houses will provide a valuable insight into the variation between different people living in the one location in early Sydney.

2. Chinese Occupation, from 1880s

At issue during this phase is the extensive xenophobic view held of the Chinese in Australia. Petitions were often sent to Parliament requesting the prohibition of Chinese immigration. There was a Royal Commission on the Chinese living in Sydney which focused upon the issues of gambling and opium smoking. It is only now that a history is being written on the Chinese in Sydney, the first BA history thesis on the Chinese in the Haymarket was written in 1994 and a Masters on the Chinese in the Rocks was completed in 1998 and published in 1999.⁸⁵ This suggests that we are only beginning to gain an understanding of the early occupation of the Chinese in Sydney. The opportunity provided by the excavation of this site will add considerably to the picture we have of the Chinese in late nineteenth-century Sydney.

⁸⁵ Shirley Fitzgerald; Jan Woods; Jane Lydon (1999).

Questions that will be asked of the archaeological material include:

- i The eventual occupation of the houses and shops by Chinese immigrants are expected to have significantly altered the patterns of use of the structures. Were Chinese men crowding into the dwellings? Were they used as gambling houses and opium dens?
- ii Does the material culture confirm that they were, in the main, poor men who sent most of their income back to China and therefore did not spend it on expensive consumer items?
- iii How does the changing ethnic mix of this part of the town fit into the theories of urbanisation held about nineteenth-century Sydney? McCarty believes that: 'In North America, but not in Australian cities, ghettos in the inner zone [of the city] housed new migrants with low social as well as economic status'.⁸⁶ This appears to be extensively contradicted by the history of study area.

• **420–426 Pitt Street & 36–38 Campbell Street, Sydney City**⁸⁷

In March 2005 an excavation was undertaken here within an L-shaped property behind the extant Chamberlain Hotel, located on the corner of Pitt and Campbell Streets. On the basis of historical research the excavation had the potential to produce remains associated with the early brickfield period, some remains of William Hutchinson's house, gardens and stable buildings, as well as two c1845 houses with later Chinese occupation.

William Hutchinson achieved considerable commercial success in the colony, after first arriving in Sydney in 1799 from England following his conviction and transportation for stealing food. After another theft, he was sent to Norfolk Island during the first settlement of that island. While on the island he was appointed overseer of government stock, an Acting Superintendent of Convicts in 1803 and Superintendent in 1809. Clearly Hutchinson made good on the island and accrued wealth through land and trading in pork. On his return to Sydney, following the evacuation of Norfolk Island in 1813–14, he was appointed Principal Superintendent of Convicts and Public Works by Governor Macquarie. Hutchinson retired in 1829 due to ill health. His commercial activities included involvement in the establishment of the Bank of NSW, part owner of Samuel Terry's flour mill at Waterloo and considerable pastoral interests on the South Coast of NSW.⁸⁸ Hutchinson had a large sandstone house, with associated gardens and stable buildings, built on the corner of Pitt and Campbell Street by 1830, the land first being granted to him in 1823 by Governor Brisbane.

Due to impacts from the construction of the Hazel & Moore building, located at 36 to 38 Campbell Street, no evidence of the two c1845 houses, and associated later Chinese occupation, remained. Also the extant buildings at 420 to 426 Pitt Street meant that the study area covered an area of 470 square metres, and the site was heavily disturbed in both the northwest corner and central area by impacts associated with a motor garage that occupied a large part of the site in the twentieth century.

No clear evidence was found associated with the early brickfields, although evidence of site preparation activities, thought to pre-date Hutchinson's usage of the area was found. Also revealed was evidence of Hutchinson's stables area and footings of his house. The site also revealed in the area of the stables, both pre-dating and dating to their use, evidence of

⁸⁶ McCarty 'Australian Capital Cities in the Nineteenth Century' in C.B. Schedvin & J.W.

McCarty *Urbanization in Australia, The Nineteenth Century*, SUP, Sydney 1974:17.

⁸⁷ Casey & Lowe 2003 *Archaeological Assessment, 420-426 Pitt Street & 36-38 Campbell Street, Sydney City*.
<http://www.caseyandlowe.com.au/sitepittcampbell.htm>

⁸⁸ ABD Vol 1:575.

attempts to alleviate drainage problems that plagued this naturally sloping site, with large amounts of locally manufactured lead-glazed and slipped earthenware found in association with specific deposits relating to drainage. The presence of such large quantities of this ware is thought to be unequivocal proof that this ware was sourced from nearby pottery(s) in the immediate vicinity of the Brickfield, allowing for easy access and availability to the site, and an affordable drainage option. The ceramics do not relate to items purchased by the site's occupants that were used and then discarded, but instead were brought onto site in large quantities to be dumped in areas as drainage material in an effort to alleviate drainage problems. They were used much like pebbles or broken pieces of ceramic flower pots added to potted plants prior to aid drainage prior the production of modern commercial potting mixes.

- **20 Albion Street, Surry Hills⁸⁹**

In 1996 Casey & Lowe undertook an archaeological excavation at 20 Albion Street. The aim of this excavation was to record significant archaeological remains associated with the post 1840s residential occupation of the site and, if they existed, any remains associated with the likely brickfield use of the area.

This excavation resulted in uncovering substantially intact remains from both periods of the site's historical land use. This was the first time that a site with brickfield remains was identified within the Sydney CBD. These remains dated to the pre-1840s use of the site. The remains were part of the base of a brick clamp kiln. The results were considered to be a significant archaeological find.

The survival of the brickfield remains at 20 Albion Street was perhaps surprising. The remains were found at the rear of the site where there had been minimal later activity. This activity consisted of filling the site, above the brickfield remains, with a layer of sand up to 500mm deep. During the later residential occupation this area was little used other than for the disposal of rubbish. This involved the excavation of a series of rubbish pits into the thick sand layer. The impacts from the twentieth-century building was limited to a single pier and perimeter walls towards the rear of the site.

The brickfield remains were located immediately above shale. The clay had been removed from the area, presumably for brick making, prior to the use of the area for the brick kiln. Part of the reason for the location of the brick kilns in this area was ready access to water and diminishing clay resources to the northwest and west.

The remains in the western part of the site had been removed by the 1920s building that cut substantially into the site.

- **242 Elizabeth Street, Surry Hills (between Reservoir and Albion Street)**

The archaeological testing on this block found that there were footings from the 1880s terraces but that they were below the nineteenth-century ground level. None of the deposits identified during the testing were deemed to belong to the brickfield period.⁹⁰

⁸⁹ Casey & Lowe 1997 *Archaeological Assessment, 242 Elizabeth Street & 19-33 Reservoir Street, Surry Hills*, p.22.

⁹⁰ Casey & Lowe 1997c:20.

- **19–23 Reservoir Street, Surry Hills**

The archaeological testing on this site identified that there were remains associated with the 1870s terraces which required excavation. Parts of the southern side of the site was tested for archaeological remains. This area, adjacent to Wright Lane, contained the rear yards of nineteenth-century terraces. The reason for focusing on this area was that it was likely to be less disturbed by footings than the front of the property. The testing revealed several fill layers above a layer of clean sand up to 15 cm in depth. The sand covered natural clay. Impressed into the clay were numerous marks which were interpreted as cart and possible wheelbarrow tracks and horse hoof impressions. Other than these marks and areas of later disturbance the clay was clean without any trace of humic build up, which suggests that the sand was deposited very soon after the marks had been made. There was no evidence of more substantial remains such as the base of a brick kiln found at 20 Albion Street.⁹¹

It is thought that the cart marks, the depth of which imply heavy loads, may have been connected to moving materials to and from the brick-making areas that appear to have been closer to Albion Street.

- **Silknet House, Mary Street, Surry Hills⁹²**

In the northwest corner of the site (Area A), *in situ* archaeological deposits, including a stone drain with timber capping, were left in place at a depth of 2.5 m below street level. Archaeological deposits removed during excavation included a sealed pre-1860s deposit and remains associated with the Chinese residential occupation during the later nineteenth century. There were ephemeral brickfield remains, cart marks and the impressions of horses' hooves, beneath the distinctive clean sand layer which denotes the sealing and levelling of the brickfields site prior to residential construction.

In the southern end of the site (Area B), archaeological testing revealed some remains of brickfield-period activity, such as cart marks and marks of horses' hooves. The topsoil and clay had been removed from the whole area under investigation and there were a number of shallow features cut into the clay. As with Area A, a sealed pre-1860s rubbish deposit was found. The archaeological evidence generally confirms the extension of brickfield activities into this area. The bulk excavation of this area down to 1.8 m below street level involved the removal of all archaeological deposits.

- **20 Poplar Street, Surry Hills**

Excavations at 20 Poplar Street in 1996 found remains of three houses. This included the rear yards of two houses on Pelican Street and the house and yard area of a house in the notorious Robin Hood Lane. The deposits from the Robin Hood Lane were extensive and included an early twentieth-century bottle dump which was placed inside the abandoned house. The underfloor deposit of the house was extensive and contained many artefacts.

- **710-722 George Street, Haymarket⁹³**

Archaeological work commenced at 710-722 George Street on 18 August 2008 when monitoring works started and fieldwork was finalised on 16 October, 2008. During the archaeological program a series of remains were found relating to the identified occupation of the study area from c1800 and 1900. Most importantly were the remains of waster pits

⁹¹ Casey & Lowe 1997c:20.

⁹² For details see Casey & Lowe 2003. Report in draft stage.

⁹³ Extracted from <http://www.caseyandlowe.com.au/site710.htm>

associated with the potter Thomas Ball which were found within 718 George Street and also at the rear of 722 George Street.

The archaeological zoning plan identified that 720-722 George Street would have no archaeological potential and therefore no assessment or further work was required. As discussed with the Heritage Branch this was found to be inaccurate but other parts of the site were found to be more highly impacted than anticipated. In many ways the identification of potential for the subject site was the reverse of what was predicted with areas identified as having high potential having limited potential or deeper subsurface features. The rear of 720-722 was substantially impacted by large concrete footings and little other than waster pits, cesspit and fragments of drains survived.

710 George Street

Found half the front room of the house shown on the 1865 plan which was terraced into the slope – part of this should survive beneath George Street. The rear room survived as well but only the front room had a shallow underfloor deposit. Remains of earlier footings partially survived but had been impacted by the footings of the house built by 1865 (Fig. 3). A well backfilled with quantities of artefacts was found and a cesspit with a sterile backfill (Fig. 4). No other substantial remains were found in the yard areas.

712, 714 and 716 George Street

Shallow footings of the houses shown on the 1865 plan were found but no significant occupation deposits survived nor any underfloor deposits (Figs 1, 5). Cesspits were found at the rear of the properties once the spoil heap was removed from the centre of the site but there were substantial impacts from concrete footings throughout the yard areas and no other structures or occupation deposits survived. These areas basically had low archaeological potential, being the deeper sub-surface features identified in the zoning plan. Some ephemeral brickfield deposits lay beneath these footings.

There was a right-of-way between 716 and 718 George Street with a stormwater drain running out to George Street. It was a sandstock brick box drain with a shallow arch capping, very similar to one of the drains found beneath the roads at the Conservatorium of Music site and on display in that foyer.

718 George Street

This was a triangular piece of land which contained the remains of a house shown on the 1865 plan (Figs 1, 6). The mid to late nineteenth-century occupation was represented by the house footings and a triangular stone cesspit backfilled with glass bottles and other household refuse. There were no yard deposits associated with this structure. Remains of an early house which was on plan by 1822 was also found within the footprint of this house, consisting of a brick fireplace, a few post holes and some occupation deposits mixed into the top of a waster pit buried beneath the c1822 house (Fig. 7). This waster pit contained approximately 50 boxes of sherds of locally-manufactured lead-glazed earthenware (Fig. 7). To the north within this area were some remnant brickfield/pottery manufacturing deposits which continued into the area of no. 716 George Street.

720-722 George Street

This contained some of the remains of the Woolpack Inn (c1830-1890) cut through by a large sewer (Fig. 8). As with other areas of the site there were archaeological remains in the lower parts, adjacent to the street frontage, but only deeper features 10m to 15m from the street frontage. In addition there were substantial concrete footings from twentieth-century buildings cutting through the rear of this property. Footings of the Woolpack were quite deep as it was built above a clay extraction pit (Fig. 9). Three pottery waster pits were found at the rear of this property which contained 1000s of pottery sherds: pottery manufacturing artefacts such as stilts, clay wedges for supporting pottery during firing in the

kiln; exploded brick fragments and fragments of roofing tiles (Fig. 10). No evidence of the pottery kiln was found on this property and it is likely that it was nearby on the land to the east which has an underground carpark which has presumably removed any surviving remains of the kiln.

3.2 Other Archaeological Sites

As part of analysing the archaeological context for the site it is relevant to review the results of nearby archaeological excavations.

3.2.1 Archaeological Excavations⁹⁴

There have been a number of excavations in the general vicinity of the study area. These include:

- former AGL site excavations in 1988
- the Family Court site on the corner of Castlereagh and Goulburn Street in 1989
- the Paddy's Market excavations in 1990/91
- excavation on the Capitol Theatre site
- former Mark Foy's warehouse, Goulburn Street, Surry Hills, between Commonwealth and Brisbane Streets.
- 2–4, 4A (6A) and 12 Cunningham Street, Haymarket

Please note that this is not an exhaustive list of sites excavated in Surry Hills, the Haymarket or the southern part of the city.

In addition, in 1996–1997–1998 and 2005 Casey & Lowe undertook excavations at:

- 20 Poplar Street, Surry Hills, about 1 km to the east of the study area
- Silknet House site, corner Mary and Reservoir Streets, Surry Hills
- 16–20 Albion Street, Surry Hills
- 420–426 Pitt Street & 36–38 Campbell Street, Haymarket

- **Quadrant Site**

This was a large urban excavation on Parramatta Road, Broadway east of Mountain Street. It recorded evidence of a number of different industries as well as extensive housing. While an excavation report has been substantially completed it is not yet available.

- **AGL Site, Pitt Street, Haymarket⁹⁵**

Evidence from this site, between Barlow and Hay Streets, shows that it was part of the Brickfields. It shows evidence for Chinese merchants and some Chinese occupation. In addition there was mid to late nineteenth-century residential and industrial occupation.

- **Family Court Site⁹⁶**

This site is located on the corner of Castlereagh and Goulburn Streets not far from the study area. Early deposits and ceramics were found in the western part of the site. The Rectory

⁹⁴ This discussion is based on the experiences of the author of this assessment who supervised on many of these excavations and talks with Jane Lydon who reviewed much of this material for the Historic Houses Trust (MOS) in the early 1990s.

⁹⁵ Annable 1989.

⁹⁶ Higginbotham 1991.

on Castlereagh Street had an extensive cellar backfilled with demolition material from the Rectory. There were two deep wells on this site that contained extensive archaeological deposits. The well on Catherine Lindsay's property had been filled with large quantities of bone from a boiling down works. There was no documented Chinese occupation on this site. The site's integrity was fairly intact with substantial sub-surface remains across the site.

- **Paddy's Markets Site**⁹⁷

This was a large urban excavation dealing with mostly mid to late nineteenth-century residential occupation with some industrial areas. It was built on reclaimed land at the head of Cockle Bay. The integrity of the northern and western parts of the site was high. A number of the houses had floors below ground level and these were mostly intact and resulted in substantial archaeological remains associated with the occupation of this area. There was no known Chinese occupancy of this area. It was resumed in the early twentieth century as part of slum clearance. The Belmore Markets were removed to this site about 1909.

The reclamation of the Paddy's Market site commenced with the establishment of Dickson's Mill in 1815 and his establishment of a fresh water dam. The Paddy's Market area was on land granted to surgeon John Harris in 1818. They suggest that Ultimo Road was built along a small creek. Some reclamation within the site appears to have happened by 1822. This report suggests that the reclamation of the headwaters of Darling Harbour was associated with the 1837 cutting down of Brickfield Hill. The shifting of one million cubic feet of material was used to raise the lower swampy ground of Darling Harbour. An 1840s plan shows that the swampy land at the southwestern headwaters of the harbour were reclaimed. Dickson's mill pond was infilled by 1855.⁹⁸ It is noted that it is suggested that there was more reclamation in the 1860s when the area between Hay Street and the railway was reclaimed. Following this reclamation the area was subdivided.⁹⁹

- **Capitol Theatre**¹⁰⁰

The excavation of part of the western block between George and Pitt Street was undertaken by Dana Mider in 1994. This exposed some of the remains of the Corn Market structures. There was 3m of fill placed in the creek bed to level the site. Much of this fill related to Brickfield deposits although no *in situ* Brickfield deposits were excavated in this area. Soil test and pollen samples were taken but when this review was undertaken no results were available. A layer of silty sludge caused by natural water run-off down Brickfield Hill was found here and Dana Mider correlates this deposit to one found by Rosemary Annable at the AGL site. Remains of mangroves were identified in the area of the creek bed.

Ted Higginbotham undertook monitoring of areas underneath the Capitol Theatre. He cut a series of five monitoring trenches and only one contained deposits that were associated with the pre-Manning Building deposits. This deposit was 85 to 170 cm in depth and contained lead-glazed earthenware, stoneware, glass, drain pipe, roofing tiles, and bricks.¹⁰¹ This deposit was found just north of Hay Street. This block has had extensive late nineteenth and early twentieth-century disturbance caused by the construction of the

⁹⁷ Godden Mackay Pty Ltd 1990a, 1990b; Godden Mackay Pty Ltd in association with Wendy Thorp 1993.

⁹⁸ Godden Mackay with Wendy Thorp 1993: 39, 48-49,

⁹⁹ Fitzgerald & Golder 1994:41

¹⁰⁰ Mider 1994, pers. comm; Higginbotham 1993, 1994.

¹⁰¹ Higginbotham 1994:7.

Manning Building and the Capitol Theatre. Anne Bickford has since undertaken some archaeological monitoring on this property.

- **School of Arts Site¹⁰²**

This was a small urban site in Pitt Street with early to late nineteenth-century residential occupation. Bairstow believes that the European occupation of this site began as early as 1810–1815 although there are no historical records for this site prior to 1823. The sub-surface remains had a medium level of integrity.

- **Mark Foy's Warehouse, Commonwealth and Goulburn Street**

The results of the excavation at this site have not yet been seen by the present writers. The backyards of houses fronting Goulburn Street were excavated and a large retaining wall was found.

- **Cumberland/Gloucester Street site, The Rocks**

This extensive archaeological excavation in the Rocks was the site of late eighteenth/early nineteenth-century buildings as well as mid to late nineteenth-century housing which were declared slum sites following the plague. There is not really any industrial activity on this site though there are a number of commercial premises, and a number of pubs and a butcher.

- **2–4, 4A (6A) and 12 Cunningham Street, Haymarket¹⁰³**

This archaeological excavation was located directly northeast and behind 710–722 George Street, to the east. Cunningham Street runs in a dog leg shape from Goulburn Street in the north to Pitt Street in the east with the study area covering approximately 0.3 hectares with street frontages to Cunningham Street on the northwest and south. Cunningham Street currently provides access into the car park to the rear of 710–722 George Street. No excavation report is currently available on the results of the archaeological program at this site. An extract is included below of some information that was provided in 2004.

CRUCIBLES, CERAMICS & EVIDENCE OF EARLY CHINESE OCCUPANTS IN CUNNINGHAM STREET, HAYMARKET¹⁰⁴

The archaeological evidence shows that this area has been a hive of activity over the last 170 years. It is located on the western margin of the brickfields that provided much of the raw material for the construction of the colony's earliest buildings. This excavation is starting to reveal rare, and some intact archaeological remains associated with the earliest occupation of the Haymarket area. While it is well known amongst historians and archaeologists that domestic and commercial areas co-existed in years gone by, the remains being uncovered at Cunningham St are showing almost no demarcation. The guided viewings, to be led by Excavation Director, Charles Parkinson, and the site's head archaeologist, Kevin Hickson, will provide visitors with an exciting glimpse into an early urban environment where serious industrial activity occurred next door to family homes. Some locations within the study area contain evidence of serious

¹⁰² D. Bairstow & G. Wilson 1990.

¹⁰³ Austral Archaeology Pty Ltd 2003 Archaeological Assessment, 2-4, 4A (6A) and 12 Cunningham Street, Haymarket; Austral Archaeology Pty Ltd 2003 Research Design – Archaeological Testing, 2-4, 4A (6A) and 12 Cunningham Street, Haymarket.

¹⁰⁴ This is a copy of a 'post' to the AUSARCH list on 19/5/2004 identifying the results of the archaeological excavation at the Cunningham Lane Site. This post was by Charles Parkinson, then Manager NSW, Austral Archaeology.

industrial activity, such as foundry & forge works happening within a metre or two of domestic housing. The team has found a number of crucibles littering the site which are evidence of assaying.

It looks like the site may also lead to confirmation of early occupation of the area by Chinese, as indicated in 1860s plans of the domestic structures. Subsequent archaeological excavation of structural remnants associated with these houses has revealed a number of artefacts that are Chinese in origin. This is particularly exciting for a number of reasons. Firstly, it shows a direct correlation between the historical and archaeological evidence, something that is often not possible to prove. Secondly, it supports and promotes the understanding that multicultural Australia is not a modern construct. Australia has always had a diverse ethnic makeup.

The historical research outlined within the archaeological assessment for the Cunningham Street Site indicated that it was initially within the area identified as Brickfield Hill, with the area likely to have been characterised by small houses and gardens and industrial brickmaking activities. In 1831 the area was divided into three grants, with these grants being further subdivided over the ensuing years. During the 1860s much of the area was taken over by a coach factory, marking a move away from residential usage towards industrial complexes. The early 1900s saw the site located within the quarantine and cleansing operations associated with the plague and Durands Alley, and following this the study area was mainly utilised as an industrial area, containing bulk stores and workshops. Prior to redevelopment the study area contained offices and commercial businesses. The assessment predicted that little archaeological evidence would survive but it was found to have a considerable level of archaeological potential.

4.0 Archaeological Potential

4.1 Analysis of Archaeological Potential

4.1.1 Reclamation of the study area

Prior to subdivision of the Ultimo Estate in 1859 there was some use of the land within the study area (Fig. 2.3). The presence of Ultimo Road and Harris Street as a Crown road providing access to the peninsula, and its closeness to Darling Harbour meant that this area was more immediately useful than many other parts of the Estate. This area of the Estate was on the foreshores of, or potentially within, a swampy area at the southwestern end of Darling Harbour (Fig. 2.2). This indicates that the study area was low-lying land probably with drainage problems and was inundated at high tide or when heavy rain fell in the surrounding catchment. It is likely that between the survey of the 1837 plan and the 1853 and 1855 plans there was considerable reclamation of this area to make it habitable. A lot of this work may have been undertaken prior to the proposal to build the Darling Harbour Branch Line (Figs 2.3, 2.5). This reclamation was presumably undertaken by the Ultimo Estate. The reclamation would have covered the swampy mudflats which are 'quaternary river delta' deposits'.¹⁰⁵ The extent of fills used in the reclamation process was approximately 1.2m to 3m in the western part of the site to 2.2m to 3m in the eastern part (Fig. 4.5).



Figure 4.1: Overlay plan of the four versions of the creek line, two cross east-west through the study area and two run north-south along the western edge of the study area.

¹⁰⁵ Broadbent, 2010:43

As part of the reclamation process a creekline which would have fed into Darling Harbour via the swampy area was presumably channelized. The section between the back of the Parramatta road properties to the southern side of Ultimo Road (Fig. 2.3) appears to have been channelized but on the 1855 plan it has not been undertaken (Fig. 2.4). The various historical plans show four different alignments of the creek line between 1837 and 1865 (Fig. 4.1). The 1837 alignment dates prior to the reclamation, the east-west creek across the study area is probably the approximate alignment prior to construction of the railway embankment and 1865 alignment is subsequent to the construction of the embankment and shifts it away from buildings and the railway. When we factor in the culvert excavated in 2003 beneath the railway the presence of east-west alignment would probably relate more to that structure although this is not certain. The culvert was still present in 1880 (Fig. 2.6) and as shown on this plan was outside the study area. The creek line was probably later channelized along the Omnibus Lane alignment or possibly immediately adjacent to the railway line (Fig. 2.7). The creekline is not shown on any of the later detail plans and was presumably buried within a stormwater drain (Fig. 2.7, 2.8 and 2.9). This suggests it was probably buried in the 1870s prior to the NSW Shale & Oil Company leasing this property in 1883. It is noted that there is a masonry sewer line running along the eastern boundary of the site.¹⁰⁶

4.1.2 Occupation of the study area

The earliest buildings within the study area are shown on the 1855 plan (Fig. 2.4, 4.2). These are located on the eastern and western sides of the Ultimo Road frontage. By 1865 the two earlier buildings are still extant with a few other smaller structures. In addition there was another building to the north with an entrance across the creekline. Another separate fenced area further to the north has three additional groups of structures around the yard area. The northern block on the Mary Ann Street alignment is still unoccupied at this time.



Figure 4.2: Overlay of the structures shown on the 1865 plan (orange coloured, Fig. 2.4) on the 1887 Metropolitan Detail Series plan showing the three terraces built c1874 (ML, SLNSW).

¹⁰⁶ Ghery 2010, Arup section of report, page 6 (pg 110 on pdf)

It is quite difficult to determine the uses of the structures behind the Ultimo Road frontage as they are not typically listed in the rate assessments or Sands Directories. We searched a variety of fields to determine if they could be identified on other street frontages but were unable to identify other residents. Also the identification of the early tenants on Ultimo Road is premised on the presence of John Harris as the identified owner. The 1865 plan indicates that these structures were timber. The 1865 Assessment Books suggests they were occupied by lessees Edward Smith, Thomas Crosby and John Plunkett. The timber houses were typically shingled, single-storey and with one or two rooms. There is no clear identification of the use of the properties behind but the northern group of three structures is possibly a dairy while the middle structure could be a house or some other unknown activity such as a foundry. Dairying is still quite common in Ultimo at this time as there was still grazing land available. Possibly the dairy was occupied by Thomas Crosby a dairyman associated with the study area. There were small dairies known to be located near the intersection of Ultimo Road and Harris Street in the 1870s. At this period there had been an increase in small workshops, usually forges or brickworks in Ultimo but much of the land was still used for grazing.¹⁰⁷

Circa 1874 the earlier timber houses had been demolished and replaced with three new terraces on Ultimo Road (Fig. 2.7). As well the buildings to the north of the terraces were also demolished by 1880/1882. Likely residents of the three Ultimo Road terraces were: George Plunkett, a shipwright, John Shinnick, an [iron] moulder, and Neville William [Winnett?], a compositor are listed as living at Nos 85, 87 and 89 respectively. The new terraces were two-storey, brick and shingle-roofed dwellings.

While Harris Family papers indicate that the 50 year lease for the leasehold of the most of the study area commenced in 1883 Sands Directories suggest that the Lithgow Valley Coal CO was already occupying the block by 1874-75. By 1883 the NSW Shale and Oil Company occupied the northern and eastern part of the study area and by 1886 had built a considerable suite of buildings including open sheds, a weighbridge, a large brick structure on the Ultimo Road frontage (Figs 2.8 to 2.12). Their use of the property appears to relate to the use of Fell's Siding associated with Darling Harbour branch line (Fig. 2.13). The specific use of the various buildings within the area are not specified. What is clear is that a number of them are open shed. The position of the NSW Shale and Oil Co on the siding indicates that this was probably part of the transportation system for moving the process and/or unprocessed shale from Hartley Vale on the railway line down to Ultimo then transferring the shale/oil to carts for shipping out to Alexandria/Waterloo for further processing etc. It may also have been used in association with shipping and wharfage for moving the oil through coastal shipping. There is no known processing within this property.

New terraces were added to the western section of the western part of the Ultimo Road frontage c1902-03, next to Omnibus Lane (Fig. 2.9). Numbered 14, 16 and 18, the new two-storey brick dwellings with iron roofs had six rooms each. The plan below shows that the new terraces had timber verandahs facing busy Ultimo Road. All the houses were now connected to the sewer. The first tenants are recorded in the *Sands Directory* as Frank Inriff (14), James Little (16) and John McIntyre (18). Although some of the tenants of 14-24 Ultimo Road changed frequently, others like William Webster, Mrs May O'Brien, and the Plunkett and Chamberlain families lived there for decades.

In the 1920s a number of the occupants of the houses were identified as being overseas Chinese. From c.1928-29 lessees of 20 and 22 Ultimo Road included Wing Con, Ah Goon, Tow Bong and Charlie Cooley.¹⁰⁸ The Ultimo Road buildings were still standing in the 1930s but

¹⁰⁷ Fitzgerald & Golder 1994:41-42.

¹⁰⁸ See *Sands Directory* and CCS Rate Assessment Schedule in Appendices.

by 1943 when the property was purchased by Dairy Farmers Co-Op most of the buildings had been demolished and by 1943 it was being used for garaging of trucks (Figs 2.16, 2.17).



Figure 4.3: Aerial photo showing the Dairy Farmers warehouse with sawtooth roof.

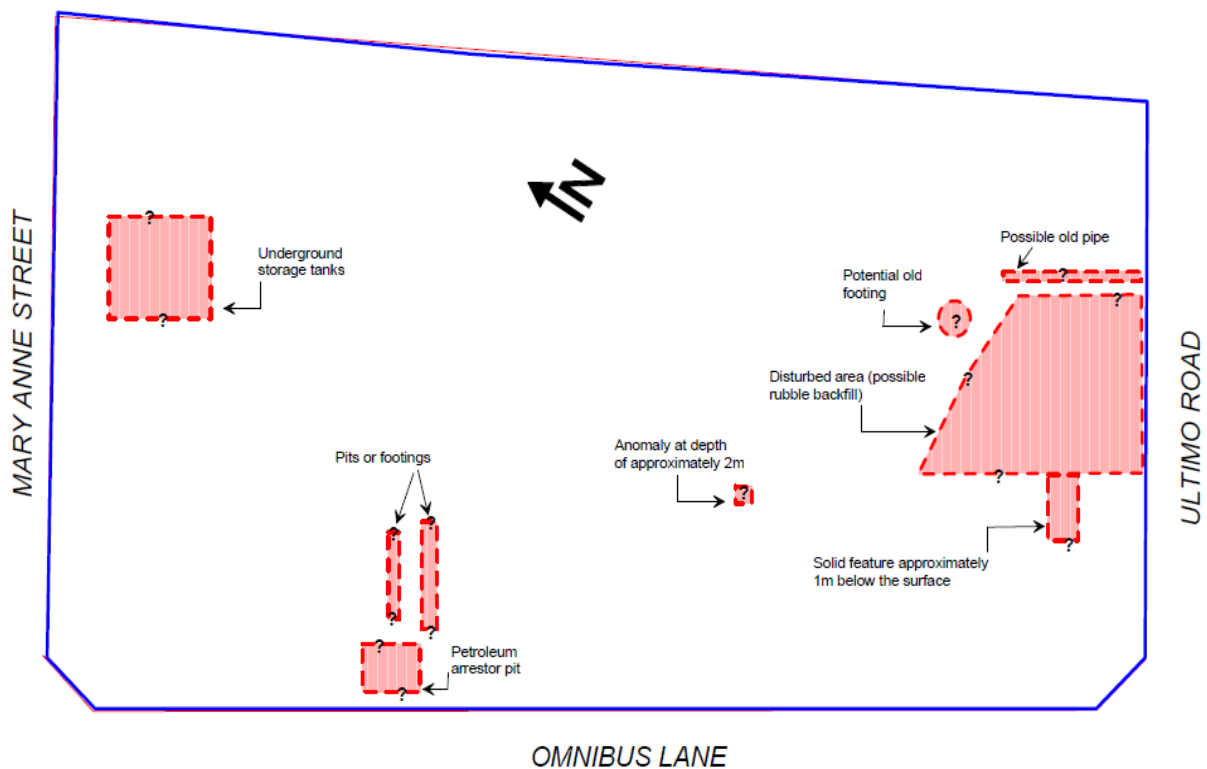


Figure 4.4: Plan based on Ground Penetrating Radar. The rubble on the Ultimo Road frontage is presumably associated with the demolished terraces. Two underground storage tanks are indicated. Environmental Investigation Services 2010: Figure 7.

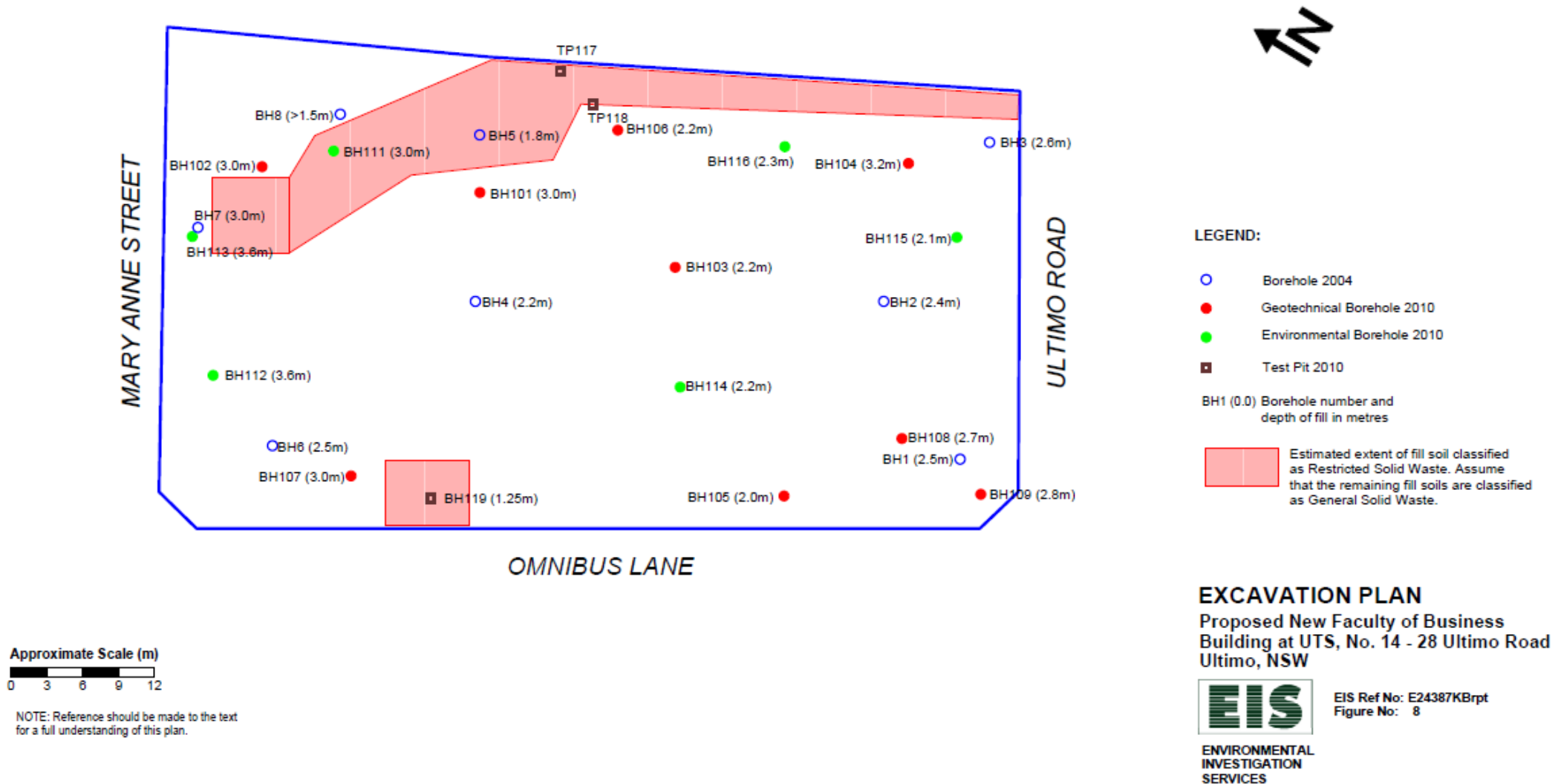


Figure 4.5: Plans showing position of Restricted Solid Waste and the depth of fill above natural at each borehole.

Figure 4.6: Plan showing location of wash and greasing ramps and the 2000 gallon tanks. EIS 2010

In 1953 Dairy Farmers erected a single-story warehouse covering the whole of the study area (Fig. 4.3). The contamination report indicates that as part of the Dairy Farmers use of the site there was one or two underground petrol tanks located within the property where it functioned as a garage (Figs 4.4, 4.5, 4.6). The Geotechnical report also indicates the level of fill above natural. Most of this fill is probably the pre-1850 reclamation of the swampy ground. The geotechnical report (EIS 2010) describes the natural soil within the study area as 'fine to medium grained sand'. The fill in most of the bore holes was typically described as two separate deposits. The upper was a 'silty sand, medium grained, dark grey, with fine to coarse grained gravel', and occasionally there would be two separate sand deposits. The lower fill deposit was often a 'silty clay, medium plasticity, mottled grey, dark grey and red brown, with fine to coarse grained sand and ironstone gravel'. Sometimes there were three layers of sands and clay. All the fill deposits were poorly compacted.¹⁰⁹ A number of fills contained brick fragments and pieces of timber were also identified. Bore hole no. 113 had slag in two of the deposits. Natural sand deposits typically hovered within 300mm either side of RL 2m.

The standing water levels at the site are relatively high, being approximately 2.18m to 5.93m (EIS 2010:8) below current ground levels. Rygate's survey of the site indicates the RLs on the current concrete slab are RL 4.80m to RL 5.49m. RLs on Mary Ann Street are 4.89 to 5.01m and Ultimo Road RL 4.06m to 4.38m. The slab on the study area is approximately between 400 to 600mm above Mary Ann Street and Ultimo Road. This may indicate the raising of the site for the construction of the Dairy Farms building to obtain a level surface.

4.2 Potential Archaeological Remains

The potential archaeological remains within the study area are identified from the above analysis of the historical evidence and the research in Section 2. The predictive model of the potential archaeological resource is based on our extensive experience and familiarity with the type of sites discussed in Section 3.

- Phase 1: Natural Landscape - swampy ground
- Phase 2: Aboriginal Occupation
- Phase 3: 1803–c1837: Part of the Ultimo Estate
- Phase 4: 1837–c1850: Reclamation of Swampy Ground
- Phase 5: c1850–c1870s: Subdivision and initial occupation of the study area.
- Phase 6: c1870s–1940s: New Housing and NSW Shale & Oil Company
- Phase 7: 1950s–2010: Dairy Farmers Garage
- Phase 8: 2010: Demolition of Dairy Farmers Garage

4.3 Assessment of Archaeological Potential

Phase 1: Natural Landscape - swampy ground

There will be considerable evidence for this phase such as sand levels, evidence for plants and pollen, possible shell species and such. Darling Harbour foreshore evidence has been found at Paddy's Market site and Darling Walk, Darling Harbour, and will be sampled in the Barangaroo project during 2011.

Phase 2: Aboriginal Occupation

This report does not address the potential archaeological evidence for Aboriginal occupation.

¹⁰⁹ EIS 2010: bore logs 3, 4, 5, 6, 101, 102, 103

Phase 3: 1803–c1837: Part of the Ultimo Estate

During this period there was little use of the study area by the residents of the Ultimo Estate. Probably only used for grazing or similar passive activities. It is possible that parts of this area were used but such a use is undocumented.

Potential archaeological remains associated with this period include:

- Evidence of the swampy landscape and possible undocumented uses of the area by the Harris family or others.
- Environmental evidence, such as shell species and organic or pollen evidence of plant species.
- Evidence associated with early European impact on the pre-1788 environment.

Phase 4: 1837–c1850: Reclamation of Swampy Ground

The swampy ground was reclaimed during this period, possibly c1837 but definitely by 1855. The presence of two layers of fill deposits may mean this work was undertaken in two stages or it just may mean finer deposits were placed at the top of the lower fill consisting of more water resistant clay to cap off the top of the natural sands.

Potential archaeological remains associated with this period include:

- Evidence for how the pre-1788 landscape was modified to make it suitable for subdivision and housing so as to make the land more valuable.
- Bands of reclamation deposits and possible artefacts associated with areas from which the fills came. Often deposits of municipal rubbish are thrown into reclamation events or waste material from nearby industries.
- How the alignment of the creekline line was modified during this period.

Phase 5: c1850–c1870s: Subdivision and initial occupation of the study area.

By 1855 there were two timber houses built by the Harris family to provide income to the family. By 1865 there was another timber structure, probably a house, on Ultimo Road. To the north were two separate fenced areas with structures. The one in the northern areas was quite extensive. The use of these two northern areas is unknown. The most northerly group of buildings may be a dairy and residence but this is only a possibility. All of these structures were demolished in the 1870s and new structures were built (Fig. 4.7).

Potential archaeological remains associated with this period include:

- Remains of timber houses and structures with associated underfloor deposits.
- Evidence for layout of the properties, including cesspits, outbuildings and yard surfaces.
- Range of artefact deposits.
- Possible well(s).
- Possible dairy in the northern areas would have evidence such as remains of structures, and possibly a house associated with the dairy.

Phase 6: c1870s–1940s: New terraces and NSW Shale & Oil Company

Remains of the new terraces are likely to have limited archaeological potential. Archaeological excavation of similar sites in Pymont and Darlington have found limited archaeological remains, mostly footings of terrace houses with little or no significant artefact-bearing deposits. These later houses have limited potential for underfloor deposits due to the typical use of tongue-and-groove floorboards in post-1870 houses. This flooring system inhibits the collection of such deposits. Frequently the cesspits from such houses have been found to have sterile backfills rather than artefact-rich deposits when cesspits

were backfilled earlier.¹¹⁰ It is noted that Chinese residents occupied the terraces at 20 and 22 Ultimo Road in the early twentieth century and this may have altered the typical pattern of deposition and therefore have left some significant deposits.

The exact nature of the use of this site by the NSW Shale and Oil Company is not clear. We know the major processing of shale oil was undertaken on site in the Hartley Vale area or at the Alexandria/Waterloo processing plant. The absence of any major contamination that could be associated with their use of the site suggests that it probably functioned more as offices (Ultimo Road building), with storage of coal for their train engines or other material in the large open sheds. It may have been used as a stage in the transshipment of the shale oil, either linking into the nearby Darling Harbour wharfage or the Alexandria/Waterloo refinery. This site appears to have had timber or brick framed sheds to provide storage as part of this system. There is limited potential for archaeological remains other than for remains of structures, yard surfaces, activity areas, with reduced likelihood of substantial artefact-bearing deposits.

The historical research suggests that the sewer line along the eastern boundary was constructed by c. 1880, during this phase of the site's development.

Phase 7: 1950s–2010: Dairy Farmers Garage

The construction of a garage typically with a flat concrete floor but including in ground petrol tanks as well as grease traps and grease ramps (Fig. 4.6) means that there is some impact on the potential for subsurface remains. These various subsurface penetrations and the associated hydro-carbon contamination will have impacted on the archaeological resource.

Phase 8: 2010: Demolition of Dairy Farmers Garage

The demolition of the Dairy Farmers Garage in 2010 should have had no impact on the subsurface remains. The existing floor is more than 300mm above the surrounding street levels

4.4 Impacts from Proposed Development

The proposed development of the Dr Chau Chak Wing building will require the bulk excavation of the site down a single basement levels for carparking (Figs 1.8, 1.9).

¹¹⁰ Casey 2004, also see Casey & Lowe 2010 and some of the sites in Section 3.

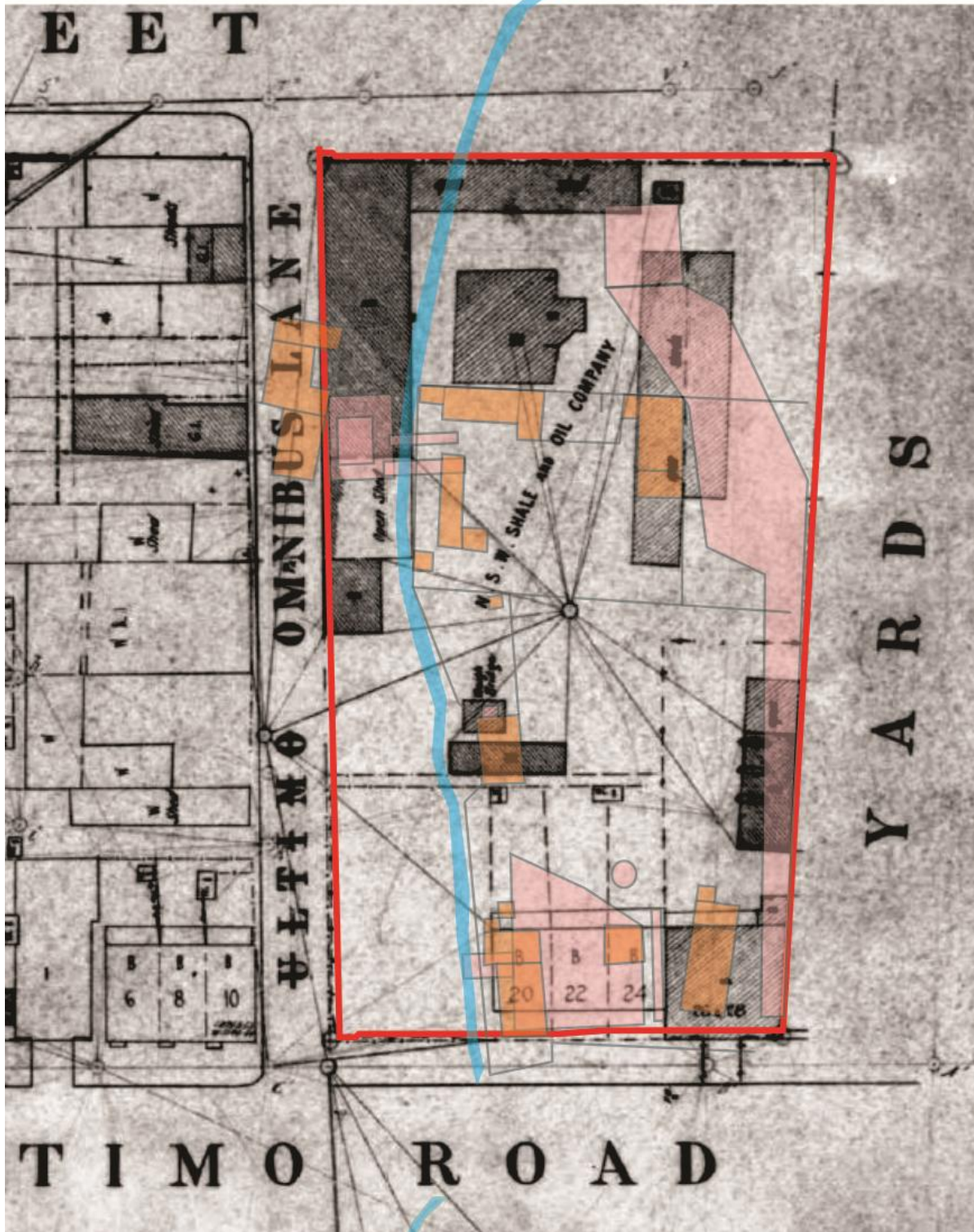


Figure 4.7: Overlay of the GPR results (pink), the 1865 plan (orange) onto an historical plan. Portion of a Public Works Department Survey dated 1886 (amended 1892, 1893 & 1901) showing development in the study area up to May 1901 (PWD City of Sydney Sht D4, No 1544S208, Sydney Water).

5.0 Heritage Significance

5.1 Heritage Significance Criteria

5.1.1 Basis of Assessment of Heritage Significance

To identify the heritage significance of an archaeological site it is necessary to discuss and assess the significance of the study area. This process will allow for the analysis of the site's manifold values. These criteria are part of the system of assessment which is centred on the *Burra Charter* of Australia ICOMOS. The Burra Charter principles are important to the assessment, conservation and management of sites and relics. The assessment of heritage significance is enshrined through legislation in the *NSW Heritage Act 1977* and implemented through the *NSW Heritage Manual, Assessing significance for historical archaeological sites*, and the *Archaeological Assessment Guidelines*.¹¹¹

The various nature of heritage values and the degree of this value will be appraised according to the following criteria:¹¹²

5.1.2 Nature of Significance Criteria

Criterion (a): *Historic Significance - (evolution)*

an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (b): *Associative Significance - (association)*

an item has strong or special association with the life or works of a person, or group of persons, or importance in NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (c): *Aesthetic Significance - (scenic qualities / creative accomplishments)*

an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the cultural or natural history of the local area);

Criterion (d): *Social Significance - (contemporary community esteem)*

an item has a strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the cultural or natural history of the local area);

Criterion (e): *Technical/Research Significance - (archaeological, educational, research potential and scientific values)*

an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (f): *Rarity*

an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);

Criterion (g): *Representativeness*

¹¹¹ NSW Heritage Office 1996:25-27.

¹¹² NSW Heritage Office 2001, 2009.

an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places of cultural or natural environments (or the cultural or natural history of the local area).

To be assessed as having heritage significance an item must:

- meet at least one of the one of the seven significance criteria
- retain the integrity of its key attributes

Items may also be ranked according to their heritage significance as having:

- Local Significance
- State Significance

A relic must be of local or State significance (Section 5.3).

5.1.3 Research Potential

Research potential is the most relevant criterion for assessing archaeological sites. However, assessing research potential for archaeological sites can be difficult as the nature or extent of features is sometimes unknown, therefore judgements must be formed on the basis of expected or potential attributes. One benefit of a detailed archaeological assessment is that the element of judgement can be made more rigorous by historical or other research.¹¹³

Assessment of Research Potential

Once the archaeological potential of a site has been determined, research themes and likely research questions identified, as addressed through archaeological investigation and analysis, the following inclusion guidelines should be applied:

Does the site:

- (a) *contribute knowledge which no other resource can?*
- (b) *contribute knowledge which no other site can?*
- (c) *is the knowledge relevant to general questions about human history or other substantive problems relating to Australian History, or does it contribute to other major research questions?¹¹⁴*

If the answer to these questions is yes then the site will have archaeological research potential.

It should be noted that the discussion of heritage significance is informed by the assessment of archaeological potential as outlined in Section 5.

¹¹³ NSW Heritage Office 1996:26.

¹¹⁴ Bickford, A. & S. Sullivan 1984:23.

5.2 Discussion of Heritage Significance

Criterion (a): Historic Significance - (evolution)

The potential archaeological remains within the study area relate to activities on the Ultimo Estate. Initially associated with the alienation of the land by Surgeon John Harris. As the study area was on or at the edge of swampy land it had no particular use to its European occupants other than grazing until it was reclaimed, possibly c1837 or c1850. By 1855 the then John Harris had probably erected three timber houses which were leased to various tenants. By 1865 there were other structures in the northern part of the study area, possibly including a dairy.

The Harris family ownership of the freehold of the study area continued until 1925. They leased most of Block 8 from the 1870s to the NSW Shale and Oil Company who demolished the structures in the northern area and replaced them with an office on Ultimo Road and with a series of open sheds to the north. Chinese residents associated with the Paddy's Markets resided in some of the terrace houses during the early twentieth century. This appears to be a transshipment area associated with the railway or the nearby wharves.

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### **Criterion (b): Associative Significance - (association)**

The development of the study area is associated with the Harris family ownership of the property, notably John Harris until 1925. It was also associated with the NSW Shale and Oil Company.

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Criterion (c): Aesthetic Significance - (scenic qualities / creative accomplishments)

This criterion is not especially relevant to the current project.

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### **Criterion (d): Social Significance - (contemporary community esteem)**

While no consultation has been undertaken to identify the social significance of these potential remains they are likely to have significance to residents of Sydney interested in the history and archaeology of Ultimo and Darling Harbour.

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Criterion (e): Technical/Research Significance - (archaeological, educational, research potential and scientific values)

The study area has the potential to contain remains associated with and representative of the mid-nineteenth-century development of Ultimo and Sydney generally. These include reclamation of the headwaters of Darling Harbour, realignment of a fresh water creekline, occupation by tenants in timber housing in poor conditions owned by John Harris, a possibly dairy with residence. By 1874 the houses had been replaced by three new terraces and by 1880s the NSW Shale & Oil Company demolished the northern structures and replaced them with their complex of buildings, including open sheds. In the early twentieth century three more terrace houses were erected. Chinese tenants, presumably associated with Paddy's Markets were living in the terraces and may have left specific deposits associated with their occupation. Similar period remains at 19-41 Reservoir Street, Surry Hills did not leave substantial remains while contemporary Chinese-associated deposits have been

found at Parramatta.¹¹⁵ By the 1940s most of the later nineteenth-century structures were demolished with Dairy Farmers using the land as a parking area for large trucks.

The potential archaeological remains within the study area which this report addresses includes:

Phase 3: 1803–c1837: Part of the Ultimo Estate

- Evidence of the swampy landscape and possible undocumented uses of the area by the Harris family or others.
- Environmental evidence, such as shell species and organic or pollen evidence of plant species.
- Evidence associated with early European impact on the pre-1788 environment.

Phase 4: 1837–c1850: Reclamation of Swampy Ground

- Evidence for how the pre-1788 landscape was modified to make it suitable for subdivision and housing so as to make the land more valuable.
- Bands of reclamation deposits and possible artefacts associated with areas from which the fills came. Often deposits of municipal rubbish are thrown into reclamation events or waste material from nearby industries.
- How the alignment of the creekline line was modified during this period.

Phase 5: c1850–c1870s: Subdivision and initial occupation of the study area.

- Remains of timber houses and structures with associated underfloor deposits.
- Evidence for layout of the properties, including cesspits, outbuildings and yard surfaces.
- Range of artefact deposits.
- Possible well(s).
- Possible dairy in the northern areas would have evidence such as remains of structures, and possibly a house associated with the dairy.

Phase 6: c1870s–1940s: New terraces and NSW Shale & Oil Company

- Remains of terrace housing with limited potential for archaeological deposits. The occupation of some of the terraces by Chinese residents in the early twentieth century does mean they require some attention.
- Structures, yard areas and deposits associated with the operations of the NSW Shale and Oil Company. These have more potential than the terrace housing.



Criterion (f): Rarity

The archaeological remains within the study area are not considered to be rare as other similar sites in Pyrmont and Ultimo have been excavated or still survive undisturbed. Though with the redevelopment of the peninsula there are few sites surviving. In the case of the current study area and the Phase 5 structures, these are rarer as occupation of Ultimo was limited at this period. These types of structures were apparently found at the Quadrant site and also possibly at Mountain Street, Ultimo. Phase 5 or early structures are likely to survive along Parramatta Road sections of the Ultimo Estate.



¹¹⁵ Casey & Lowe, Archaeological Investigation George & Charles Streets, Parramatta.

Criterion (g): Representativeness

The issue of representativeness is contentious in historical archaeology. While sites can be seen to be representative of working class or upper class sites or a particular industrial technology they are always different within that class and each site furthers and extends our knowledge of these types of sites and the differences between them. If we do not have representative collections from similar sites we cannot do comparative analysis. Therefore the Phase 5 potential archaeological remains within the study area are seen to be representative of mid-nineteenth-century leasehold housing. While the Phase 6 housing is seen to be replicated in many inner-city suburbs and typically would not warrant further investigation the presence of Chinese tenants does mean they are a site less commonly found within urban site in Sydney. The Phase 6 buildings associated with the NSW Shale and Oil Company is less common but are part of a suite of semi-industrial premises which lined the Darling Harbour foreshores.



Integrity

The archaeological integrity or potential at this site is considered to vary between high across the site except for the identified in-ground petrol tanks and the Restricted Solid Waste. Limited archaeology is likely to survive in these areas.

Research Potential

Does the site:

(a) contribute knowledge which no other resource can?

Written historical documents present the official and semi-official picture about the alienation and division of land, who was buying and selling, and how the land was being used. The descriptions of working class, commercial and industrial areas are documents that bear the imprint of androcentric, Anglo-Saxon interpretation of nineteenth-century life. This material presents a partial image of the occupants who lived and worked in the area. The archaeological material can supply evidence provided by the occupants of the site regarding the conditions in which they lived, worked, and procreated. Material culture provides an avenue into the daily life of groups of people.

The potential archaeological remains identified within the study area can provide knowledge that is available from no other resources. The excavation and study of material culture provides access to deposits, structures, and relics that contains knowledge on a scale that is found in no other resources.

The ability of a site to produce knowledge that no other resource can is dependent upon the Research Questions posed and the methodology employed to investigate the archaeological resource.

The main areas of research that this site can contribute to are the development of working-class lives and culture, notably as leaseholders on the Ultimo Estate and the making of the urban landscape. It can also add to our understanding of the commercial activities of the NSW Shale and Oil Company.

(b) contribute knowledge which no other site can?

As the discussion identified this is a representative site rather than a rare site therefore it is likely to contribute knowledge which can be found at other sites but the evidence for Phase 4 and Phase 5 are important to add to our understanding of the urbanisation of Ultimo.

(c) is the knowledge relevant to general questions about human history or other substantive problems relating to Australian History, or does it contribute to other major research questions.

The knowledge to be gained from the analysis of the archaeological material excavated from the study area is relevant to general and substantive problems relating to the archaeology and history of Australia. Some of these research questions include:

1. Nature of early landscape, how it was modified and affected during early European occupation.
2. General questions addressed to all phases of the site relating to processes of Immigration, Urbanisation, the Economy and Consumerism, Class, Gender and Ethnicity.
 - An examination of the archaeological material from all phases of the site's occupation should help us understand the process of urbanisation in this part of the city. The identified phases should relate to changes in the urbanisation of the city and the archaeological evidence of these phases should provide insight into how these process altered the material behaviour of the occupants of the site. These processes include changes in sanitary practices, access to markets, domestication of the topography and other areas of evidence.
 - The processes of urbanisation are also closely connected to questions relating to the economy and consumerism. How and when people bought ceramics and other artefacts can help us begin to understand the behaviour of these early European occupants.
 - How does the evidence from this part of the city relate to other sites in the Haymarket, the Rocks and the Pyrmont-Ultimo peninsula?
3. Other relevant questions as they arise and as suggested from the results of the archaeological program.

5.3 Guidelines for identifying the level of Significance for Archaeological Relics

New criteria have recently been developed to identify whether the archaeological resource is of local or State significance.¹¹⁶ In terms of this site the assessment of levels of significance the following criteria were seen as the most relevant:

- *Archaeological Research Potential (current NSW Heritage Criterion E).*
- *Aesthetic or technical significance (NSW Heritage Criterion C).*
- *Ability to demonstrate the past through archaeological remains (NSW Heritage Criteria A, C, F & G).*

The new significance guidelines were designed to assess significance in light of the amendments to the definition of relics needing to be of either local or State significance. Unfortunately the guidelines do not really address how to determine if a site is of local or State significance. Where is the threshold between these two types of sites. This means that it is basically down to the skill and expertise of the archaeologist assessing the site.

The new guidelines identified a series of questions that could be asked to address this issue:

¹¹⁶ Heritage Branch, Dept of Planning 2009.

Criterion E: Archaeological Research Potential

- **To which contexts (historical, archaeological and research-based) is it anticipated that the site will yield important information?**

The site generally is considered to have a moderate ability to yield archaeological information but this can also be relevant to both historical, archaeological and research based contexts as outlined in the above discussion.

- **Is the site likely to contain the mixed remains of several occupations and eras, or is it expected that the site has the remains of a single occupation or a short time-period?**

As demonstrated in Section 5.2 the site should contain archaeological evidence from a number of distinct phases of occupation: pre and post-1788 natural landscape, reclamation, beginnings of urbanisation, rebuilding and commercial or semi-industrial activity.

- **Is the site rare or representative in terms of the extent, nature, integrity and preservation of the deposits (if known)?**

The above discussion of significance identified that the archaeological resource is a mixture of levels of representativeness which should be relatively intact.

- **Is this type of site already well-documented in the historical record?**

As outlined in Section 2 there are many gaps in the historical information about the early phases of the site's occupation.

- **Has this site type already been previously investigated with results available?**

Yes, this type of site has previously been investigated at the Quadrant site and the KENS site. Typically this early phase of occupation does not survive outside The Rocks and Parramatta CBD and is sometimes found in the Sydney CBD.

- **Is the excavation of this site likely to enhance or duplicate the data set?**

The archaeological remains from Phases 3, 4 and 5 are considered to enhance the data set. The Phase 6 terrace housing has limited potential to enhance the data set but the presence of Chinese residents in some of the houses does mean it can enhance the dataset if substantial deposits survive. The Phase 6 Shale and Oil Company occupation is part of the semi-industrial and industrial use of the Darling Harbour foreshore which has been explored on some scale at Darling Walk. The type of sites investigated there were all associated with a range of commercial activities. Therefore it is considered likely that the excavation of the company's site will enhance the data set.



Criterion C – technical or aesthetic significance:

- **Does the site/is the site likely to have aesthetic value?**

All archaeological sites can have incidental aesthetic values, notably in relation to the process of ruination but this cannot be determined until a site is excavated. We consider this to be an incidental part of any site, meaning there is no intentionality involved in such an aesthetic outcome.

- **Does the site/is the site likely to embody a distinctive architectural or engineering style or pattern/layout?**

Not especially.

- Does the site demonstrate a technology which is the first or last of its kind?

No.



Criterion A, C, F & G: Ability to demonstrate the past through archaeological remains

- Does the site contain well-preserved or rare examples of technologies or occupations which are typical of particular historic periods or eras of particular significance?

As outlined in Sections 4 and 5.2 the site is considered to contain relatively well-preserved occupation typical of particular historic periods or eras of particular significance.

- Was it a long-term or short-term use?

The site was occupied intensively by the 1850s and had a long-term use although Phase 5 occupation was only for approximately 20 years.

- Does the site demonstrate a short period of occupation and therefore represents only a limited phase of the operations of a site or technology or site? Or does the site reflect occupation over a long period?

The site reflects changing occupation and ownership over a 100 year period.

- Does the site demonstrate continuity or change?

The site is expected to demonstrate change as well as continuity in the lives of the various residents. The Chinese occupation represents a distinct change in the ethnicity of the area following the construction of Paddy's Markets. Also the expected shift from dairying to the Shale and Oil Company use presents a distinct change.

- Are the remains at the site highly intact, legible and readily able to be interpreted?

Remains of timber structures are not especially legible in the ground. The reclamation fills can only be excavated in trenches or as part of monitoring and therefore are mostly legible to the trained eye. This site is anticipated to have a low legibility and therefore limited ability to be interpreted *in situ*.

5.4 Statement of Heritage Significance

This study area has the potential to contain archaeological remains that are historic, associative, technical and representative of life in Sydney for approximately 100 years. The significant remains include:

- The original landform and the impacts on it prior to the reclamation by c1850.
- The nature of the reclamation and the modification of the creekline through the site.
- The initial construction of timber houses and leasing of them by the Harris family and the range of tenants.
- The problems of flooding caused by the Darling harbour branch line embankment and culvert.
- The quick replacement of the original houses by 1874 and the eventual occupation of some of them by Chinese tenants in the 1920s and 1930s.

- The operation of a probable dairy and its demolition by c1883.
- The lease of most of the study area by the NSW Shale and Oil Company from the 1870s into the 1920s.

The deposits, relics, structures, features and artefacts associated with this site have the potential to reveal much about the beginnings of urbanisation and industrialisation of Sydney, the evolving relationship between the working lives of individuals and families who resided there. The potential archaeological resource is considered to be representative of archaeological sites found elsewhere in urban Sydney but can still add to our understanding of the past through comparative analysis. The high archaeological potential of this site means that it has the ability to answer a range of research questions. While there are some impacts on this site the nature of any surviving archaeological evidence is considered to have high archaeological potential outside the petrol tanks and contaminated area. The majority of the potential archaeological remains of this site are assessed as having local heritage significance. The c1874 housing is not considered to reach this threshold other than nos 20 and 22 which had some Chinese tenants in the early twentieth century.

6.0 **Results and Recommendations**

6.1 **Results**

The study area may contain potential archaeological remains of local significance. These remains may include:

- Pre and post-1788 natural environment - a swampy headwater of Darling Harbour.
- Reclamation of the area by c1850 and modification of the course of a creekline.
- 1850s timber housing, possible dairy and other structure.
- Replacement of early housing with terrace housing by c1874 with Chinese occupation in the early twentieth century at nos 20 and 22.
- Occupation of most of the study area by the NSW Shale and Oil Company from the 1870s to 1920s.
- Demolition of early buildings and construction of the Dairy Farmers Garage in 1953.
- The culvert known from the adjacent Energy Australia site and identified in the DGRs is outside of the current study area. This culvert was dismantled in 2003.
- The existing sewer line running along the eastern side of the site is separate to the culvert as it is part of c. 1880 Sydney council infrastructure. The proposed development retains this sewer line in its current location.

6.2 **Recommendations**

1. A program of archaeological investigation should be undertaken and an excavation director appointed to manage this program. The archaeological program should be undertaken prior to commencement of other site works, or in a co-ordinated program, such as with site remediation. The archaeological program is likely to take between 4 to 8 weeks.
2. Enough flexibility in the development timetable must be allowed to enable remains to be recorded in appropriate detail.
3. A Research Design report needs to be written to guide this investigation (Section 7). This report needs to draw on a range of Heritage Branch, Department of Planning guidelines.
4. Archaeological testing of the site is a way to clarify the nature of the archaeological resource so as to determine more accurately the nature and depth of archaeological remains. This can be undertaken as part of the Environmental Assessment or following Project Approval. Under Section 75U, Part 3A of the EP&A Act it is not necessary to apply for a S140 application if the works are undertaken as part of the Environmental Assessment.
5. Based on the archaeological integrity and significance of the remains, a program of archaeological salvage and recording will be required. Salvage would include sampling sections of the site, such as:
 - Evidence for the early topography and natural landform and how this was modified through time.
 - The nature of the site's reclamation fills should be investigated – these will be present throughout the study area.
 - Reclamation across the study area.
 - The timber houses and associated yard and occupation deposits and features, such as, wells, cesspits, rubbish pits and underfloor deposits.
 - The two groups of structures in the northern part of the site, one a possible dairy and the other whose use is unknown.
 - Sections of the NSW Shale and Oil Company buildings to clarify their function.

- Limited excavation of the c1874 terraces, nos 20 and 22, which had some Chinese occupation. The other terraces do not reach the local significance threshold and do not require further investigation.
6. The archaeological sampling and recording need to be undertaken according to Heritage Branch guidelines and best practice archaeological methodologies. This will then feed into future interpretation and produce a detailed record of the site.
 7. The results of the archaeological program should be interpreted within the new development. The archaeologists need to have a central role in the development of ideas and themes and interpretative concepts.
 8. In accordance with standard Heritage Branch, Department of Planning guidelines and conditions, all artefacts recovered during excavation will need to be cleaned, labelled, bagged, boxed and catalogued and entered into a database. A detailed excavation report will need to be written including responses to the identified research design. Significant artefacts need to be conserved. UTS will need to provide permanent archival storage for artefacts recovered from the excavation.
 9. If the nature of the proposed works in any of the area changes then the impact on the archaeological resource should be reassessed.

7.0 Research Design

7.1 Aims of Excavation

The aim of the excavation is to implement the above recommendations so as to record the significant archaeological resource surviving within the study area. This significant resource consists of:

- Evidence for the early topography and natural landform and how these were modified through time.
- The nature of the site's reclamation fills – these will be present throughout the study area.
- Reclamation across the study area.
- The timber houses and associated yard and occupation deposits and features, such as, wells, cesspits, rubbish pits and underfloor deposits.
- The two groups of structures in the northern part of the site, one a possible dairy and the other whose use is unknown.
- Sections of the NSW Shale and Oil Company buildings to clarify their function.
- Limited excavation of the c1874 terraces, nos 20 and 22, which had some Chinese occupation. The other terraces do not reach the local significance threshold and do not require further investigation.

7.2 Standard Conditions of Approval

Heritage Branch, Department of Planning Guidelines and Standard Conditions identify the following as standard conditions to undertake an excavation:

1. The Applicant must ensure that the Excavation Director takes adequate steps to record in detail relics, structures and features discovered on the site during the archaeological works in accordance with the approved research design and current best practice guidelines. This work must be undertaken in accordance with published guidelines, 'How to prepare archival records of heritage items' and 'photographic recording of heritage items using film or digital capture, (2006). Records must be made in permanent archive formats as well as in digital formats.
2. The Applicant must ensure that the Excavation Director and the archaeological team are given adequate resources to allow full and detailed recording to be undertaken to the satisfaction of the Heritage Council.
3. The Applicant must ensure that the unexcavated artefacts, structures and feature are not subject to deterioration, damage or destruction.
4. The Applicant is responsible for the safe-keeping of all relics recovered from the site. The Applicant must ensure that the nominated Excavation Director or an appropriate specialist, cleans, stabilises, identifies, labels, catalogues and stores any artefacts uncovered from the site in a way that allows them to be retrieved according to both type and provenance.
5. The Applicant must ensure that the approved interpretation plan is implemented and any on-site interpretations are completed prior to the occupation of the new development.
6. The Applicant must ensure that the final report is prepared by the nominated Excavation Director, to publication standard, within one (1) year of the conclusion of the project unless an extension of time is approved by the Heritage Council of NSW. Two hard copies of this report must be submitted to the Department of Planning. At least one copy should also be submitted in CD-ROM format. A further copy must be lodged in the Local Council local library or another appropriate repository.
7. The final report shall include:
 - a. An executive summary.
 - b. Due credit to the client paying for the excavation on the title page.
 - c. An accurate site location and site plan.

- d. Historical research, references and bibliography.
- e. Detailed information on the excavation including the aim, the context for the excavation, procedures, analysis, cataloguing, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale drawings, photographs, repository).
- f. Nominated repository for the items.
- g. Detailed response to the research questions and a reassessment of the significance of the site.
- h. Details of how this information about this excavation has been publicly disseminated.

7.3 Archaeological Methodology

The archaeological program will use open area stratigraphic excavation in the areas to be focused on. These areas are outlined on Figure 7.1. The purple outlines indicate the main areas of archaeological remains, notably the pre-1865 structures, the NSW Oil & Shale Company buildings. It is intended that the archaeological works will avoid areas or contamination, such as the arrestor pit and the underground petrol tanks.

7.3.1 Open Area Stratigraphic Excavation Methodology

The basic principles of open area stratigraphic excavation to be employed on this site are:

- use of machinery to open up areas and to undertake testing.
- where remains are found undertake open area stratigraphic excavation and recording.
- use of context recording forms and context numbers to record all archaeological information.
- use of Harris matrix as part of the recording program.
- underfloor deposits will be recorded within a 50cm grid, 5cm spits and 100% sieved.
- well and cesspits will be excavated in 20cm spits or tip lines (if identifiable), with changes of context numbers where relevant. These deposits will be sieved.
- all structural remains, post holes, and features will be planned.
- detailed survey and GIS mapping of the area.
- detailed photographic and video recording.
- generally all artefacts will be collected except from unstratified fills; samples of bricks and mortar will be collected from the structures.
- collection, labelling, safe storage, washing, sorting and boxing of artefacts.

7.3.2 Archaeological Monitoring Methodology

Archaeological monitoring is a methodology we would use where testing has had no substantive result and there is a low expectation that archaeological remains are present but because there is still some possibility that isolated features such as structures, features or deposits may survive and if they did would be of significance. This is the most feasible way to recover them. Monitoring involves an archaeologist or archaeologists being present during bulk excavation of the upper layers (those which may have potential to contain remains) of the site. If relics are found then the work will need to stop in that area so that the archaeologists can investigate the area to determine what has been found. Some use of machinery may be required to assist in this process. Bulk excavation of this isolated area can only recommence once the archaeologists are satisfied that they have completed excavation and recording of the remains. Meanwhile bulk excavation can continue in other areas.

7.3.3 Recording Methodology

- establish 20 m grid for site.
- use of digital surveying techniques for locating remains and producing large scale plans and sections.

- detailed archaeological scale plans for main areas.
- photographic and video recording.
- analysis of fabric and detailed recording of the remains on context sheets according to best practice standards.

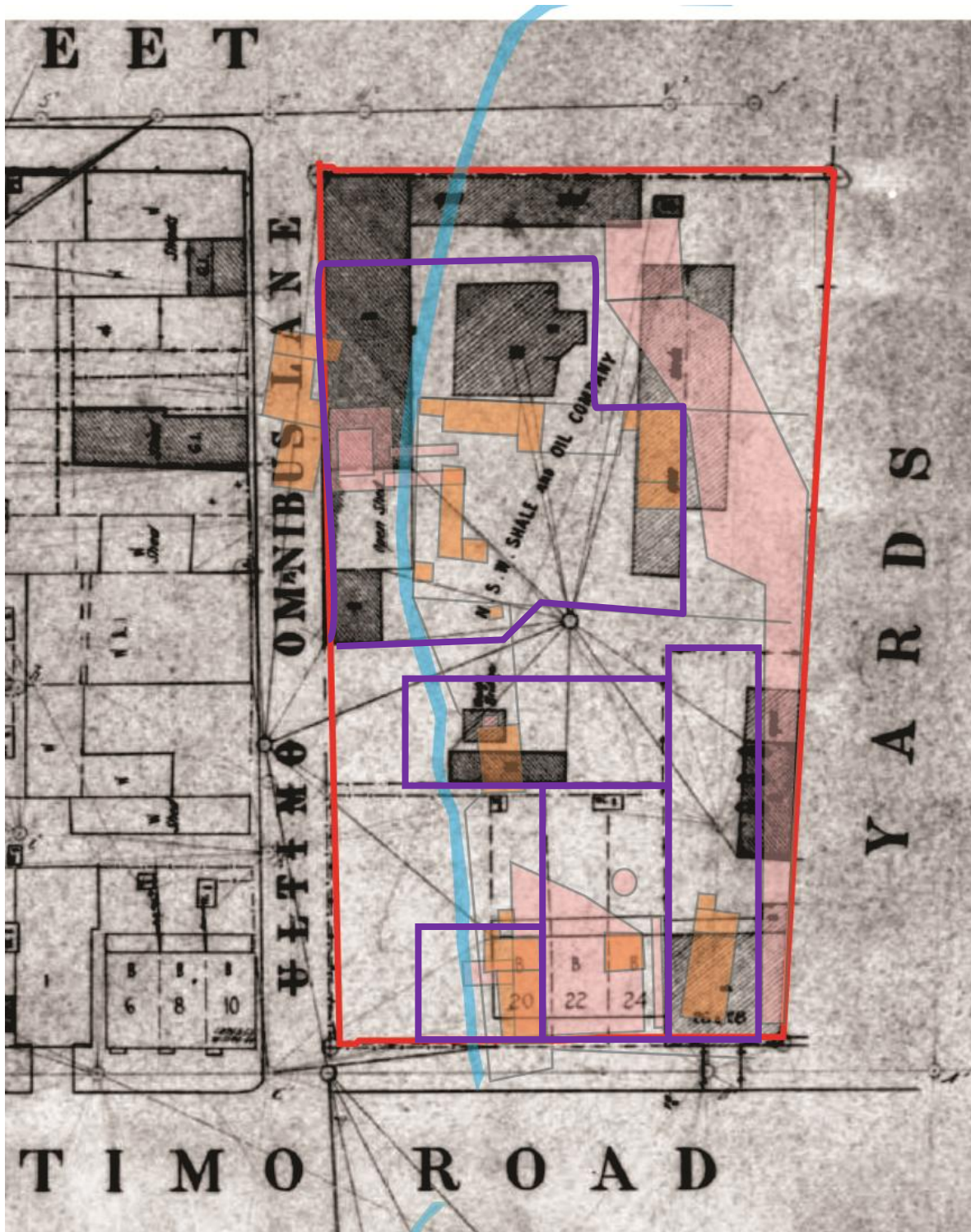


Figure 7.1: Overlay of the GPR results (pink), the 1865 plan (orange) onto an historical plan. Purple boundaries outline the main areas of archaeological potential. Portion of a Public Works Department Survey dated 1886 (amended 1892, 1893 & 1901) showing development in the study area up to May 1901 (PWD City of Sydney Sht D4, No 1544S208, Sydney Water).

7.3.4 Personnel

Appropriately qualified personnel to be involved in the excavation stage of the project include:

- Co-Directors: Mary Casey and Abi Cryerhall
- Main site team: Mike Hincks, Nick Harrop, Jennie Winnett, Amanda Dusting, Beau Spry, Rowan Ward, and others

Artefact specialists: Rowan Ward, Robyn Stocks, Jeanne Harris and others.

7.3.5 Artefact Cataloguing Methodology

The artefacts from the site will be the subject of a detailed cataloguing and analysis program in line with Casey & Lowe's current practices. All artefacts will be catalogued by specialist cataloguers in the system designed by Casey & Lowe and used on all their excavation sites. An example of this has been published and spreadsheet versions are available on our webpage.¹¹⁷ An important component of the cataloguing is the use of minimum item or minimum vessel counts. The faunal material will be entered into a database designed by Dr Sarah Colley for Casey & Lowe. Where relevant, specialists will produce reports on the artefacts outlining issues of importance. These typically are: ceramic, miscellaneous, building materials, glass and bone and shell.

In addition, important artefacts will be the subject of materials conservation. This would include gluing of important and/or early pottery and conservation of important metal artefacts and where there are significant leather materials.

7.3.6 Excavation Report

Casey & Lowe are well aware of the importance of producing excavation reports that respond to the conditions of the excavation permit and add to general knowledge. We are aware of current research trends in history and archaeology and regularly attend conferences where these issues are discussed. We have an extensive archaeological reference collection and read widely in these areas.

- Excavation reports have to conform to the conditions of consent as outlined in Section 7.2 above.
- The excavation report needs to be well structured and consist of three main stages:
 - **Description** of the archaeological remains including both structures and contexts and phases of occupation. This should include a stratigraphic matrix of the archaeological contexts.
 - These are typically presented in a series of trench reports which present the detailed information collected during excavation.
 - Overall synthesis of the results based on the information in the trench reports but presenting an overview of the results.
 - **Analysis** of the artefacts utilising a computer database for the catalogue. Analytical techniques used should reflect the research questions and be presented graphically. Analysis needs to respond to the archaeological contexts in a meaningful way. If the site includes residential occupation then the households must be analysed individually and then compared to each other.
 - Artefact specialist reports presenting a detailed overview of what has been found with analysis of this work. This is essential for further research by students or academics or for publication as well as for the response to the Research Design.

¹¹⁷ Casey 2004; <http://www.caseyandlowe.com.au/sydney.htm> - Click on specific projects as well as the Parramatta group.

- **Interpretation** of the description and analysis should address the research questions and with a detailed response to the research design. Excavation reports are usually written by one of the principal consultants in association with the site supervisors and artefact specialists and reviewed by the other principal consultant. Where both principal consultants are responsible for writing a report there is considerable discussion during the analysis and interpretation phases.

8.0 Research Questions

8.1 Research Questions

This section provides a preliminary indication of the type of research questions that might be pursued to investigate the archaeological remains at the site.

8.1.1 Landscape Archaeology

The exploration of how the landform of Darling Harbour was altered between c.1810 and 1980s is fascinating as it testifies to the need for more land in specific locations and to provide adequate drafts for shipping. This represents the development of urban pressures as early as the 1830s and the need to make 'waste' land usable. The alteration and manipulation of the landform of Darling Harbour has been part of its story for the last 212 years. The methods and means by which the landform was altered can tell us much about attitudes to waste and rubbish disposal, deposition of waste from other construction projects.

- What was the nature of the original landform, evidence for shells, such as cockles and oysters, and what plant species were found in this area?
- How has this part of Darling Harbour evolved over time?
- How many times was the landform been remade within the study area?
- What different materials and means were used, and what was the depth of the reclamation at each stage? How different was it to the practices at the nearby Darling Walk and KENS Sites.
- Were the phases of reclamation successful or not?
- Where did the reclamation fill come from?
- How was the new landform used?
- Other relevant questions as they arise.

8.1.2 General Questions about Pymont/ Ultimo

1. What evidence survives of pre-1870s housing on the site?
2. What evidence is there for the standard of living enjoyed by the residents? Does the artefactual evidence assist us in the analysis of different standards of living or class and/or ethnicity?
3. Where houses were connected with the same family for extended periods are there discrete domestic assemblages that can be attributed to their occupation, or used to reconstruct the family's standard of living, class, access to markets, interest and activities?
4. Is there evidence for cottage crafts or other unrecorded professions or works in the area?
5. Can the material culture provide additional information on the construction of gender identity and the nature of childhood activities?
6. Evidence and nature of dairying on the peninsula.
7. Where semi-industrial or commercial properties are excavated, what can we learn about their layout, approach to technology and the viability of the establishment in difficult times.

The material culture of the site should add to our understanding about the social and economic influences on the residents of Ultimo and how these influences affected their behaviour, as manifested through their choices about:

- what type of activities were undertaken within a house.
- where were activities undertaken within a house.
- what did people chose to buy with regard to:
 - what, how and where to eat,
 - what to wear,

- what types of recreation activities were considered suitable for adults and children within what are most likely working-class homes?

8.1.3 Overarching Research Questions for Pymont/Ultimo

Additional Concerns

- Processes and patterns of urbanisation and how they impacted upon topography and the living and working conditions of the various social classes.
- Examination of the role of gender relations and how it structured nineteenth-century life.
- Identification, analysis and interpretation of living conditions and class structure within nineteenth-century society and how this evidence is structured within the archaeological resource.
- Evidence for ethnicity within the archaeological resource.
- The development of an economic and social neighbourhood.
- Other relevant questions.

Urbanisation

- How do the archaeological remains from this site relate to current perspectives on Sydney's urbanisation? Do they challenge, redefine or support them?
- How does the nature of the urban environment – the streets and houses in which people live influence their lives? Some recent work has undertaken a landscape approach to urban archaeology. This sees the landscape of the urban environment as constraining and contested by the creators of the environment and by those who lived in the houses.

The research questions mostly examine issues regarding urbanisation, material culture of consumerism and gender identity, attitudes to childhood and women's work in the home. These are currently important questions feeding archaeological research designs in Sydney and internationally.

8.1.4 Twentieth-century Chinese Occupation

At issue during this phase is the extensive xenophobic view held of the Chinese in Australia. Petitions were often sent to Parliament requesting the prohibition of Chinese immigration. There was a Royal Commission on the Chinese living in Sydney which focused upon the issues of gambling and opium smoking. It is only in recent years that a history was written on the Chinese in Sydney, the first BA history thesis on the Chinese in the Haymarket was written in 1994 and a Masters on the Chinese in the Rocks was completed in 1998 and published in 1999.¹¹⁸

Many of the above questions in Section 8.1.2 can be examined in relation to the Chinese residents of Nos 20 and 22.

¹¹⁸ Shirley Fitzgerald; Jan Woods; Jane Lydon (1999).

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Appendices

Appendix 1: Council Rates and Assessments

Appendix 2: *Sands Directory*

Appendix 3: Land Titles Schedule

Appendix 1: Council Rates and Assessments

14-28 Ultimo Road, Ultimo NSW
City of Sydney Council Assessment Books (Phillip and Denison Wards)

1845– Ultimo– Phillip Ward

Note: Ultimo listed. No street names. Sites linked to study area **not** able to be identified

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. Floors	No. Rooms	Gross Annual Value £	Remarks
				John Harris							

1848– Ultimo Road – Phillip Ward

Note: Two properties in Ultimo Road listed as ‘Estate of Harris.’ Sites linked to study area **not** able to be identified

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. Floors	No. Rooms	Gross Annual Value £	Remarks
		Ultimo Road		Estate of Harris							

1855– Ultimo Road – Phillip Ward

Note: Listings for ‘Ultimo Road’ included in Assessments. Few properties numbered. Railway Bridge and Railway Co noted on some properties. Ultimo Road sites possibly linked to Block 8 of Ultimo Estate and study area listed below. The highlighted entries more likely to be located in or near the study area.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
2204		Ultimo Road	Wm Stephens	Mrs Harris	House	Wood	Shingled	1	2	£25	Near 1 st Railway Bridge
2205		Ultimo Road	John Moseley	Mrs Harris	House	Wood	Bark	1	1	£6	Old Runnell’s Huts
2206		Ultimo Road	John Barker	Mrs Harris	House	Wood	Bark	1	1	£6	Old Runnell’s Huts
2207		Ultimo Road	John Topp	Mrs Harris	House	Wood	Bark	1	1	£6	Old Runnell’s Huts
2208		Ultimo Road	Mrs Stephens	Mrs Harris	House	Wood	Shingled	1	2	£60	
2209		Ultimo Road	Mrs Stephens	Mrs Harris	House	Wood	Bark	1	2		
2210		Ultimo Road	Edward Smith	Mrs Harris	2 Houses & Rope Walk	Brick & Wood	Shingled	1	4	60	
2211		Ultimo Road	Elijah Butler	Mrs Harris	2 Houses & Rope Walk						Partners
2212		Ultimo Road	Valentine Bullen	Mrs Harris	House and	Brick	Shingled	1	1	12	[Sands Directory]

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
					Brick Yard						places Bullen and lessees shown below on Harris St north of Ultimo Rd c.1860s]
2213		Ultimo Road	Wm Hallett	Mrs Harris	House	Brick	Shingled	1	2	30	
2214		Ultimo Road	Benjn Hannon	Mrs Harris	House	Brick	Bark	1	1		Partners
2215		Ultimo Road	Mrs O'Hare	Mrs Harris	House	Brick	Bark	1	1	20	
2216		Ultimo Road	Thomas Halloran	Mrs Harris	House & corn field	Plaster	Shingled	1	3	40	
2217		Ultimo Road	John Gorman	Mrs Harris	House & Ground	Stone	Shingled	1	2	50	Near Harris Street
2218		Ultimo Road	Wm Evans	Mrs Harris	House	Stone	Shingled	1	2	20	
2219		Ultimo Road	Gabriel Thompson	Mrs Harris	House & Garden	Brick	Shingled	1	2	30	
2220		Ultimo Road	Mrs O'Brien	Mrs Harris	House	Brick	Shingled	1	2	10	
2221		Ultimo Road	Patk McGrath	Mrs Harris	House	Brick	Shingled	1	2	30	
2222		Ultimo Road	Patk McGrath	Mrs Harris				1	2		Purchased by Railway to be thrown down
2223		Ultimo Road	John Lutton	Mrs Harris	House	Stone	Shingled	1	2	16	
2224		Ultimo Road	Danl Hogan	Mrs Harris	House	Stone	Bark	1	1	15	
2225		Ultimo Road	James McClerkin	Mrs Harris	House	Stone	Bark	1	2	15	
2226		Ultimo Road	John Quin	Mrs Harris	House & Ground	Brick	Shingled	1	3	18	
2227		Ultimo Road	Michl McMahon	Mrs Harris	House	Brick	Shingled	1	1	15	
2228		Ultimo Road	James Genworthy	Mrs Harris	House	Brick	Shingled	1	2	15	
2229		Ultimo Road	Thos Austen	Mrs Harris				1	2		Purchased by Railway Co
2230		Ultimo Road	Thos Austen	Mrs Harris	House	Wood	Shingled	1	2	15	

1856– Ultimo Road – Phillip Ward

Note: Listings for 'Ultimo Road' included in Assessments. Few properties numbered. Railway Bridge and Railway Co noted adjacent to some properties. Ultimo Road sites possibly linked to Block 8 of Ultimo Estate and study area listed below. The highlighted entries are thought to be more likely to be located in Block 8 and the study area. It is not possible to confirm if the properties are on the north or south side of Ultimo Road, or at the west end of Ultimo Road near Harris Street or at the east end near Quay Street.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
2204		Ultimo Road	Wm Stephens	Mrs Harris	House	Wood	Shingled	1	2	£25	Near 1 st Railway Bridge
2205		Ultimo Road	John Moseley	Mrs Harris	House	Wood	Bark	1	1	£6	Old Runnell's Huts
2206		Ultimo Road	John Barker	Mrs Harris	House	Wood	Bark	1	1	£6	Old Runnell's Huts
2207		Ultimo Road	John Topp	Mrs Harris	House	Wood	Bark	1	1	£6	Old Runnell's Huts
2208		Ultimo Road	Mrs Stephens	Mrs Harris	House	Wood	Shingled	1	2		
2209		Ultimo Road	Mrs Stephens	Mrs Harris	House	Wood	Bark	1	2	£60	
2210		Ultimo Road	Edwd Smith	Mrs Harris	2 Houses & Rope Walk	Brick & Wood	Shingled	1	4	£60	[shown in <i>Sands Directory</i> 1860s as corner Harris St & Ultimo Rd/St]

1858– Ultimo Road – Denison Ward

Note: Ultimo Road and Ultimo Street included in Assessments. Sites linked to study area or Harris Estate difficult to identify as Harris family rarely shown as property owner. Side of the road and cross-streets not indicated, and landmarks such as the railway or creek not shown. Ultimo Road and Harris Street properties possibly linked to study area are listed below. Highlighted properties linked to Block 8 or study area through *Sands Directory* listing 1858/9.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1614	49	Ultimo Street	Thomas Crosby	Thomas Crosby	House	Wood	Shingled	1	2		
1615	51	Ultimo Street	James Selby	McDonald	House	Wood	Shingled	1	2	£20	
1616	53	Ultimo Street	John Thorp	John Thorp	House	Wood	Shingled	1	2		
1617	55	Ultimo Street	Richard Puckridge	Richard Puckridge	House	Slabs	Bark	1	1		
1618	57	Ultimo Street	John Moses	John Moses	House	Slabs	Iron	1	1		
1619	59	Ultimo Street	Jane Stephens	Jane Stephens	House	Slabs	Shingled	1	2		
1564	36	Harris Street	Mary O'Hare	Mary O'Hare	House	Wood	Bark	1	2		
1565	38	Harris Street	Benjamin Hanmore	Benjamin Hanmore	House	Brick	Bark	1	2		
1566	40	Harris Street	Michael Taylor	Benjamin Hanmore	House	Brick	Bark	1	2		
1567	42	Harris Street	John Clark	John Clark	House	Wood	Shingled	1	2		
1568	44	Harris Street	Valentine Bullon	Valentine Bullon	House	Brick	Bark	1	2		
1569	46	Harris Street	Mrs Cartwright	Mrs Cartwright	House	Brick	Bark	1	1		

1861– Ultimo Street – Denison Ward

Note: Ultimo Road listed as Ultimo Street. Properties 'off Harris St' in ownership of Mrs Harris could be linked to study area but **not** readily identifiable. Some properties not owned by Harris family are problematic but might indicate subletting. Side of the road and cross-streets not indicated, and landmarks such as the railway or creek not shown. Highlighted properties linked to Block 8 or study area through *Sands Directory* listing in 1860s.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1303	47	Ultimo Street	Empty	Mrs Harris	House	Wood	Shingled	1	2	£20	
1304	49	Ultimo Street	Thomas Crosby	Mrs Harris	House	Wood	Shingled	1	2	26	Vacant ground on following allotment
1305	59	Ultimo Street	Rafe Holden	Mrs Harris	House	Wood	Shingled	1	2	26	
1316	off 36	Harris Street	Mrs O'Hare	Mrs Harris	House	Wood	Shingled & Tin	1	2	£10	
1317	off 38	Harris Street	Benjamin Anmore	Benjamin Anmore	House	Brick	Bark	1	2	14	
1318	off 40	Harris Street	Michael Taylor	Benjamin Anmore	House	Brick & Wood	Bark	1	2	20	
1319	off 42	Harris Street	Bridget Gavan	John Clark	House	Slabs	Shingled	1	2	16	
1320	off 44	Harris Street	Valentine Bullen	Mrs Harris	House	Wood	Bark	1	2	10	
1321	off 48	Harris Street	John Thorp	John Thorp	House	Wood	Tin	1	1	7	
1322	off 50	Harris Street	Elizabeth Puckridge	Mrs Harris	House	Wood	Slabs	1	1	10	
1323	off 51	Harris Street	John Selby	Mrs Harris	House	Wood	Shingled	1	2	16	
1324	off 53	Harris Street	Edward Smith	John Thorp	House	Wood & Tin	Slabs	1	3	16	
1325	off 55	Harris Street	Richard Puckridge	Mrs Harris	House	Wood	Slabs	1	3	12	
1326	off 57	Harris Street	empty	Mrs Harris	House	Slabs	Tin	1	1	6	

1863 – Ultimo Street – Denison Ward

Note: Ultimo Road listed as Ultimo Street. Some properties not numbered. Line of railway identified. Properties possibly linked to Block 8 or the study area listed below. Highlighted properties more likely to be linked to study area due to association with John Harris and/or *Sands Directory* listings in the 1860s.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
386		Ultimo Street	Patk Ryan	Mr Clancy [<i>Sands Directory</i> indicates this property is to the east of the railway]	House	Brick	Shingled	1	3	£15	Cow sheds in rear, railway line here.
387	47	Ultimo Street	John Plunkett	Alexr McDonald	House	Wood	Shingled	1	2	12	In bad repair
388	49	Ultimo Street	Thomas Crosby	George Harris	House	Wood	Shingled	1	2	12	In bad repair
389	51	Ultimo Street	John Smith	George Harris	House	Wood	Shingled	1	2	12	Sheds in rear all in bad repair
390		Ultimo Street	John Thorpe	George Harris	House	Wood	Shingled	1	2	10	In very bad repair
391		Ultimo Street	Patrick Cane	John Harris	House	Wood	Shingled	1	2	5	In very bad repair
392		Ultimo Street	Ben Anmore	John Harris	House	Brick	Bark	1	2	5	In very bad repair
393		Ultimo Street	Michael Taylor	John Harris	House	Brick	Bark	1	2	5	
394		Ultimo Street	John Brown	John Harris	House	Brick	Bark	1	2	6	
395		Ultimo Street	Eliz'th Puckeridge	John Harris	House	Wood	Wood	1	2	5	
396		Ultimo Street		John Harris	House	Wood	Tin etc	1	1	3	Unfit for habitation
397	59	Ultimo Street	Edward Smith	John Harris	House	Wood	Shingled	1	2	10	

1867 – Ultimo Road /Harris Street – Denison Ward

Note: Ultimo Road properties possibly linked to study area through cross-referencing to *Sands Directory* are shown below. Not clear if properties listed are on the north or south side of Ultimo Road. Landmarks such as the railway or creek are not shown. Highlighted properties more likely to be linked to study area due to association with John Harris and/or *Sands Directory* listings in the 1860s.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1150a		Ultimo Road	Vacant space								
1151	83	Ultimo Road	George Plunkett	Alexr McDonald	House	Wood	Shingle	1	2	£18	
1152	85	Ultimo Road	Thomas Crosbie	Thomas Crosbie	House	Wood	Shingle	1	2	18	
1152a		Ultimo Road	Vacant Space								
1153	91	Ultimo Road	Edward Smith	John Harris	House	Wood	Shingle	1	2	18	

Ultimo Estate properties on Harris Street shown as Pymont and include properties along railway owned by John Harris. Properties thought to be linked to study area listed below. Might include properties north of the study area and Mary Ann Street. Highlighted properties are more likely to be linked to study area based on location on Harris Street and link to previous assessment records.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
960	234	Harris St Pymont	Eliza Callinan	John Harris	House	Stone	Iron	1	2	£14	All these houses stand back near to the Railway. Vacant space.
961	240	Harris St Pymont	John Mackay	John Harris	House	Brick	Iron	1	2	14	All these houses stand back near to the Railway. Vacant space.
962	242	Harris St Pymont	Michael McMahon	John Harris	House	Brick	Iron	1	2	14	All these houses stand back near to the Railway. Vacant space.
963	250	Harris St Pymont		John Harris	House	Wood	Iron	1	1	7	All these houses stand back near to the Railway. Vacant space.
964	254	Harris St Pymont	Thomas Moore	John Harris	House	Stone	Iron	1	2	14	All these houses stand back near to the Railway. Vacant space.
965	256	Harris St Pymont	William H Simon	John Harris	House	Stone	Iron	1	3	17	All these houses stand back near to the Railway. Vacant space.
966	268	Harris St Pymont	James McClure	John Harris	House	Stone	Zinc	1	2	14	All these houses stand back near to the Railway. Vacant space.
967	270	Harris St Pymont	William Drennan	John Harris	House	Stone	Bark	1	2	14	All these houses stand back near to the Railway. Vacant space.
968	272	Harris St Pymont	James McLachlan	John Harris	House	Stone	Zinc	1	2	14	All these houses stand back near to the Railway. Vacant space.
969	274	Harris St Pymont	John Cahoun	John Harris	House	Stone	Zinc	1	3	17	Stands back near to the Railway. Vacant space.
978	360	Harris St Pymont	Mary O'Hare	John Harris	House	Brick	Palings	1	2	£14	Stables. Vacant space.
979	370	Harris St Pymont	Benjm Anmore	John Harris	House	Brick	Bark	1	2	14	Cow house & stable

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
980	372	Harris St Pyrmont	Michael Taylor	John Harris	House	Brick	Bark	1	2	14	Cow house & stable
981	374	Harris St Pyrmont	Patrick Cane	John Harris	House	Wood	Shingle	1	2	14	Stables.
982	376	Harris St Pyrmont	John Burk	John Harris	House	Brick	Iron	1	1	10	Shed. Vacant space.
983	382	Harris St Pyrmont	John Quigley	John Harris	House	Wood	Iron	1	2	14	Shed

1871 – Ultimo Road – Denison Ward

Note: Properties that might correspond to the study area and which are linked to John Harris are listed in Assessment records as on the east side of Harris Street. Properties possibly linked to the study area are shown below. Highlighted properties more likely to be linked to study area. Tenants named George Plunkett and Mrs Crossly [Crosby?] correspond to *Sands Directory* listing for same period.

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1430	off 5	Harris Street Ultimo	Mrs O'Hehir	John Harris	House	Stone	Shingled	1	2	£8	Empty. In ruins
1431		Harris Street Ultimo	M McQueen	John Harris	House	Wood	Shingled	1	2	13	
1432		Harris Street Ultimo	Edward Smith	George Harris	House	Wood	Shingled	1	2	13	
1433		Harris Street Ultimo	Edward Smith	George Harris	House	Wood	Shingled	1	6	20	
1434	386	Harris Street Ultimo	Mrs Cane	McDonald	House	Wood	Shingled	1	2	13	
1435		Harris Street Ultimo	George Plunkett	McDonald	House	Wood	Shingled	1	2	15	
1436		Harris Street Ultimo	Mrs Crossly [Crosby?]	McDonald	House	Wood	Shingled	1	2	13	

Note: Listed from West to East

1877 – Ultimo Road – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1156	89	Ultimo Road	Neville Winnett	Harris Family	House	B & S	Shingled	2	4	£26	
1157	87		John Shinnick	Harris Family	House	B & S	Shingled	2	4	£26	
1158	85		George Plunkett	Harris Family	House	B & S	Shingled	2	4	£26	

1880 – Ultimo Road – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
708	20	Ultimo Road	Neville Winnett	John Harris	House	Brick	Shingled	2	4	£25	
709	22		John Shinnick	John Harris	House	Brick	Shingled	2	4	£25	
710	24		George Plunkett	John Harris	House	Brick	Shingled	2	4	£25	

1882 – Ultimo Road – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1187				John Harris Junior	Land	Tree & Weed					40 feet at £15 per foot
1188	20	Ultimo Road	Edward Smith	John Harris	House	Brick	Shingled	2	4	£33	
1189	22		John Shinnock	John Harris	House	Brick	Shingled	2	4	£28	
1190	24		George Plunkett	John Harris	House	Brick	Shingled	2	4	£28	Here Railway Bridge

1891 – Ultimo Road North Side – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
2279		Ultimo Road North Side		John Harris	Land 45 ft					£67	45 feet at £25 foot
2280	20		H Chamberlain	John Harris	House	Brick	Shingle	2	4	£36	
2281	22		Wm Harris	John Harris	House	Brick	Shingle	2	4	£31	
2282	24		Geo Plunkett	John Harris	House	Brick	Shingle	2	4	£28	

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
2283			NSW Shale & Oil Co	John Harris	Yard					£420	Railway Line

1896 – Ultimo Road – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1098		Ultimo Road	W. Hall	John Harris Jr	Office Shale Works	Brick	Iron	1	6	£166	Omnibus Lane
1099				John Harris Jr	Land						44 feet @ £12
1100	20		Henry Chamberlain	John Harris Jr	House	Brick	Iron	2	4	£26	
1101	22		William Harris	John Harris Jr	House	Brick	Iron	2	4	£26	
1102	24		George Plunkett	John Harris Jr	House	Brick	Iron	2	4	£26	

1901 – Ultimo Road – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
26369		Ultimo Road	44ft at £12	John Harris Jr	Land					£26	
26370	20		Henry Chamberlain	John Harris Jr	House					£23	
26371	22		William Harris	John Harris Jr	House					£23	
26372	24		George Plunkett	John Harris Jr	House					£23	
26373	26/28		W Hall Manager	John Harris Jr	Office & C.					£176	Railway

1907 – Ultimo Road – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
											Here Omnibus Lane
370	14	Ultimo Road	Norah George	John Harris	House	Brick	Iron	2	6	£39	
371	16		John McCrink	John Harris	House	Brick	Iron	2	6	£39	
372	18		M Dwyer	John Harris	House	Brick	Iron	2	6	£39	
373	20		Henry Chamberlain	John Harris	House	Brick	Iron	2	4	£28	
374	22		James Wm Plunkett	John Harris	House	Brick	Iron	2	4	£28	
375	24		John O'Heiher [sic]	John Harris	House	Brick	Iron	2	4	£28	
376	26 & 28		James William Hall Manager	John Harris	Office & Works	Brick	Iron	1	4	£350	

1911 – Ultimo Road – Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
											Here Omnibus Lane
246	14	Ultimo Road	William Webster	John Harris	House	Brick	Iron	2	7	£39	
247	16		William Mason	John Harris	House	Brick	Iron	2	7	£39	
248	18		May O'Brien	John Harris	House	Brick	Iron	2	7	£39	
249	20		H Chamberlain	John Harris	House	Brick	Iron	2	4	£28	
250	22		William Plunkett	John Harris	House	Brick	Iron	2	4	£28	
251	26 & 28			John Harris	Store	Brick	Iron	1	1	£65	Here Railway Bridge

1914 - Ultimo Road - Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
											Here Omnibus Lane
202	14	Ultimo Road	William H Webster	Estate late John Harris	House	Brick	Iron	2	6	£39	
203	16		Mary Gibson	Estate late John Harris	House	Brick	Iron	2	6	£39	

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
204	18		O'Brien	Estate late John Harris	House	Brick	Iron	2	6	£39	
205	20		Henry Chamber	Estate late John Harris	House	Brick	Iron	2	4	£28	
206	22		William Plunkett	Estate late John Harris	House	Brick	Iron	2	4	£31	
207	24		David McPherson	Estate late John Harris	House	Brick	Iron	1	4	£41	
208	26 & 28		Commonwealth Oil Corporation	Estate late John Harris	Office	Brick	Iron	4	2	£85	Here Railway Bridge. Here Markets. Here Quay St.

1921 - Ultimo Road - Denison Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
											Here Omnibus Lane
194	14	Ultimo Road	William H Webster	Estate late John Harris	House	Brick	Iron	2	6	£52	
195	16		Mary Gibson	Estate late John Harris	House	Brick	Iron	2	6	£52	
196	18		May O'Brien	Estate late John Harris	House	Brick	Iron	2	6	£52	
197	20		Elizabeth Chamberlain	Estate late John Harris	House	Brick	Iron	2	4	£41	
198	22		Mary O'Toole	Estate late John Harris	House	Brick	Iron	2	4	£41	
199	24		Florence Fisher	Estate late John Harris	House	Brick	Iron	2	4	£41	
200	26 & 28		Commonwealth Oil Corporation	Estate late John Harris	Office, Works & Land	Brick	Iron	1	4	£624	Here Railway Bridge. Here Municipal Markets. Here Quay St.

1930 - Ultimo Road - Phillip Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
											Here Omnibus Lane
1460	14	Ultimo Road	M Webster	HV McKay Pty Ltd	Residential	Brick	Iron	2	5	£61	
1461	16		Rose Wallace	HV McKay Pty Ltd	House	Brick	Iron	2	5	£61	
1462	18		Margaret Stewart	HV McKay Pty Ltd	House	Brick	Iron	2	5	£61	
1463	20		Tow Bong	HV McKay Pty Ltd	House	Brick	Iron	2	3	£46	
1464	22		Charlie Cooley	HV McKay Pty Ltd	House	Brick	Iron	2	3	£46	
1465	24		Henry Phillips	HV McKay Pty Ltd	House	Brick	Iron	2	3	£46	

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1466	26 & 28			HV McKay Pty Ltd	Factory	Brick	Iron	1	1	£624	

1931 - Ultimo Road - Phillip Ward

Assessment No	No of House	Street	Name of Person Rated	Name of Owner or Landlord of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
											Here Omnibus Lane
1954	14	Ultimo Road	Mrs Webster	HV McKay Pty Ltd	House	Brick	Iron	2	5	£61	Here Railway Bridge. Here Wheat Road. Here Markets. Here Quay St.
1955	16		Harold Chapman	HV McKay Pty Ltd	House	Brick	Iron	2	5	£61	
1956	18		Miss Stewart	HV McKay Pty Ltd	House	Brick	Iron	2	5	£61	
1957	20		Jow Bong	HV McKay Pty Ltd	House	Brick	Iron	2	5 [3?]	£46	
1958	22		Jimmy Gorley	HV McKay Pty Ltd	House	Brick	Iron	2	5 [3?]	£46	
1959	24		Harry Phillips	HV McKay Pty Ltd	House	Brick	Iron	2	5 [3?]	£46	
1960	26 & 28			HV McKay Pty Ltd	Factory	Brick	Iron	1	1	£312	

1939, 1945 & 1948 Ultimo Road - Phillip Ward

Year	Assessment No	No of House	Street	Name of Person Rated	Name of Owner or of property	House, Warehouse or Shop	Brick, Stone, Wood or Iron	Slated, Shingled or other	No. of Floors	No. of Rooms	Gross Annual Value £	Remarks
1939	34618	14/28	Ultimo Road		H V McKay Massey Harris Pty Ltd	Sheds, Yards & Land	Brick				£762	& Systum St. Here Railway Bridge. Here Wheat Road. Here Markets. Here Quay St.
1945	34438	14/28	Ultimo Road	Dairy Farmers Co-op Milk Co Ltd	Dairy Farmers Co-op Milk Co Ltd	Sheds, Yards & Land					£875	Here Railway Bridge. Here Wheat Road. Here Markets. Here Quay St.
1948	34425	14-28	Ultimo Road	Dairy Farmers Co-op Milk Co Ltd	Dairy Farmers Co-op Milk Co Ltd	Sheds, Yard, Land					£875	& Systum St. Here Railway Bridge. Here Wheat Road. Here Markets. Here Quay

Appendix 2: *Sands Directory*

14-28 Ultimo Road, Ultimo (north side between Omnibus Lane and Railway Bridge)
Sands Sydney and Suburban Directory

Persons thought to be located within the study area are shaded.

1858/9		Ultimo St [Road] 'Glebe Boundary to George St'. Properties not numbered & side of road not shown.		Smith, Patrick ropemaker [location along Ultimo St [Rd] not identifiable]	Crosby, Thomas dairyman [location along Ultimo St [Rd] not identifiable]				
1861		Ultimo St [Rd] 'Glebe Boundary to George St'. Properties not numbered & side of road not shown.			Crosby, Thomas dairyman [location along Ultimo St [Rd] not identifiable]				
1863		Ultimo St [Road] 'off Bay St'. Properties not able to be linked to Study Area		Smith, Edward ropemaker [location along Ultimo St [Rd] not identifiable]					
1864	<i>Harris St</i>			Smith, Edward ropemaker					
1865	<i>Harris St</i>			37 Smith, Edward	35 Crosby, Thomas shoemaker	33 McDonald, Alexander	31 Ryan, Patrick dairyman	[23-29 not linked to Study Area and not recorded here]	<i>Valentine Lane</i>
1866	<i>Harris St</i>			37 Smith, Edward rope maker		33 Crosby, Thomas bootmaker	31 Plunkett, George shipwright	[23-29 not linked to Study Area and not recorded here]	<i>Valentine Lane</i>
1867	<i>Harris St</i>	<i>Vacant land</i>	91	<i>Vacant land</i>		85	83		<i>Railway Bridge</i>

			Smith, Edward Gardener [also Edward Smith ropemaker 384 Harris St nr corner Ultimo Rd]			Crosby, Thomas shoemaker	Plunkett, George shipwright		
1868	<i>Harris St</i>	<i>Vacant land</i>							<i>Railway Bridge</i>
1869	[No houses above No 67]								
1870	<i>Harris St</i>					85 Crosby, Thomas bootmaker	83 Plunkett, George shipwright	<i>Vacant land</i>	
1871	<i>Harris St</i>	<i>Vacant land</i>				85 Crosby, Mrs Theresa	83 Plunkett, George shipwright		<i>Railway Bridge</i>
1873	<i>Harris St</i>	<i>Vacant land</i>					Plunkett, George shipwright	<i>Vacant land to Railway Bridge</i>	<i>Railway Bridge</i>
1875	<i>Harris St</i>			Lithgow Valley Coal Co Office & Depot [location east of Harris St not known]				[Properties not numbered above No 67 which is east of Railway Bridge]	[Railway Bridge not shown]
1876					82 [sic] Winnett, Neville [sp?] printer	87 [sic] Shinneck, John iron moulder	85 [sic] Plunkett, George shipwright		<i>Here Railway Bridge</i>
1877				<i>Vacant land</i>	Winnett, Neville [sp?]	Shinnock [sp?], John	Plunkett, George		<i>Railway Bridge</i>

					printer	moulder	shipwright		
1879					89 William, Neville compositor	87 Shinnick [sp?], John moulder	85 Plunkett, George shipwright		<i>Railway Bridge</i>
1880	<i>Vacant land and creek</i>				89 Smith, Edward ropemaker Keane, John William, Neville compositor	87 Shinnick, John	85 Plunkett, George shipwright		<i>Railway Bridge</i>
1882					20 Smith, Edward	22 Shinnick, John	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1883					20 Smith, Mrs Sarah A	22 Shumick [sp?], John ironmoulder	24 Plunkett, George shipwright		
1884					20 Smith, Mrs Sarah A mid wife	22 Shumick [sp?], John ironmoulder	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1885					20 Smith, Mrs Sarah A mid wife	22 Shinnick, John ironmoulder	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1886					20 Smith, Mrs Sarah A mid wife	22 Shinnick, John ironmoulder	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1887					20 Chamblin [sp?], Henry blacksmith	22 Shinnick, John ironmoulder	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1888					20 Chamblin	22 Shinnick,	24 Plunkett,		<i>Railway Bridge</i>

					[sp?], Henry blacksmith	John ironmoulder	George shipwright		
1889					20 Chamblin [sp?], Henry blacksmith	22 Shinnick, John ironmoulder	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1890					20 Chamblin [sp?], Henry blacksmith	22 Davies, John tailor	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1891					20 Chamblin [sp?], Henry blacksmith	22 Harris, William	24 Plunkett, George shipwright		<i>Railway Bridge</i>
1892					20 Chamblin [sp?], Henry blacksmith	22 Harris, William	24 Plunkett, George shipwright	26-28 NSW Shale and Oil Co's depot	<i>Railway Bridge</i>
1893					20 Chamblin [sp?], Henry blacksmith	22 Harris, William	24 Plunkett, George shipwright	26-28 NSW Shale and Oil Co's depot	<i>Railway Bridge</i>
1894					20 Chamblin [sp?], Henry blacksmith	22 Harris, William	24 Plunkett, George shipwright	26-28 NSW Shale and Oil Co's depot	<i>Railway Bridge</i>
1895					20 Chamblin [sp?], Henry blacksmith	22 Harris, William	24 Plunkett, George shipwright	NSW Shale and Oil Co's depot	<i>Railway Bridge</i>
1896					20 Chamblin [sp?], Henry blacksmith	22 Harris, William	24 Plunkett, George shipwright	NSW Shale and Oil Co's depot	<i>Railway Bridge</i>
1897					20 Chamblin [sp?], Henry blacksmith	22 Harris, William	24 Plunkett, George shipwright	NSW Shale and Oil Co's depot	<i>Railway Bridge</i>

1898					20 Chamblin [sp?], Henry blacksmith	22 Cooper, Major tea agent	24 Plunkett, George shipwright	NSW Shale and Oil Co's depot	<i>Railway Bridge</i>
1899					20 Chamblin [sp?], Henry blacksmith	22 Plunkett, William J	24 Plunkett, George shipwright	NSW Shale and Oil Co's depot	<i>Railway Bridge</i>
1900					20 Chamberlain, Henry blacksmith	22 Plunkett, William J	24 Plunkett, George shipwright	NSW Shale and Oil Co	<i>Railway Bridge</i>
1901					20 Chamberlain, Henry blacksmith	22 Plunkett, William J	24 Plunkett, George shipwright	NSW Shale and Oil Co William Hall, manager	<i>Railway Bridge</i>
1902					Chamberlain, Henry blacksmith	22 Plunkett, William J	24 Plunkett, Mrs G	NSW Shale and Oil Co William Hall, manager	<i>Railway Bridge</i>
1903		14 Inriff, Frank	16 Little, James	18 McIntyre, John	20 Chamberlain, Henry blacksmith	22 Plunkett, William J	24 McGrath, William	26-28 NSW Shale and Oil Co William Hall, manager	<i>Railway Bridge</i>
1904		14 Cole, G H	16 Little, James	18 McIntyre, John	20 Chamberlain, Henry blacksmith	22 Plunkett, William J	24 O'Hehir, John	26-28 NSW Shale and Oil Co William Hall, manager	<i>Railway Bridge</i>
1905		14 Peoples, John	16 Little, James	18 McIntyre, John	20 Chamberlain, Henry blacksmith	22 Plunkett, William J	24 O'Hehir, John	26-28 NSW Shale and Oil Co William Hall, manager	<i>Railway Bridge</i>
		14	16	18	20	22	24	26-28	
1906	<i>Omnibus Lane</i>	14 Emerson, W horse clipper	16 McCrink, James	18 Dwyer, Mrs Elizabeth	20 Chamberlain, Henry blacksmith	22 Plunkett, William J	24 O'Hehir, John	26-28 NSW Shale and Oil Co William Hall, manager	<i>Railway Bridge</i>
1907	<i>Omnibus Lane</i>	George, Mrs Nora	McCrink, James	Dwyer, Mrs Elizabeth	Chamberlain, Henry	Plunkett, William J	O'Hehir, John	NSW Shale and Oil Co Commonwealth Oil	<i>Railway Bridge</i>

					blacksmith			Corporation Ltd Delivery Office William Hall, manager	
1908	<i>Omnibus Lane</i>	Bloomfield, Mrs M	Mason, W piano tuner	Dwyer, Mrs Elizabeth	Chamberlain, Henry blacksmith	Plunkett, William J	Barnett, William	NSW Shale and Oil Co Commonwealth Oil Corporation Ltd Delivery Office William Hall, manager	<i>Railway Bridge</i>
1909	<i>Omnibus Lane</i>	Webster, William	Mason, W piano tuner	Dwyer, Mrs Elizabeth	Chamberlain, Henry blacksmith	Plunkett, William J	Barnett, William	NSW Shale and Oil Co Commonwealth Oil Corporation Ltd Delivery Office William Hall, manager	<i>Railway Bridge</i>
1910	<i>Omnibus Lane</i>	Webster, William	Mason, W piano tuner	Dwyer, Mrs Elizabeth	Chamberlain, Henry blacksmith	Plunkett, William J	Drew, William A	NSW Shale and Oil Co Commonwealth Oil Corporation Ltd Delivery Office	<i>Railway Bridge</i>
1911	<i>Omnibus Lane</i>	Webster, William	Mason, W piano tuner	O'Brien, Mrs May	Chamberlain, Henry blacksmith	Plunkett, William J	Taylor, Edward	Commonwealth Oil Corporation Ltd Delivery Office	<i>Railway Bridge- Quay St</i>
1912	<i>Omnibus Lane</i>	Webster, William	Mason, W piano tuner	O'Brien, Mrs May	Chamberlain, Henry blacksmith	Plunkett, William J	Taylor, Edward	Commonwealth Oil Corporation Ltd Delivery Office	<i>Railway Bridge- Quay St</i>
1913	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry blacksmith	Plunkett, William J	Clark, Joseph	Commonwealth Oil Corporation Ltd Delivery Office	<i>Railway Bridge</i>
1914	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry blacksmith	Plunkett, William J	White, -	Commonwealth Oil Corporation Ltd Delivery Office	<i>Railway Bridge</i>
1915	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry blacksmith	Joseph, William	Fisher, Charles	Commonwealth Oil Corporation Ltd Depot for greases, shale, candles etc Telephone M.1162	<i>Railway Bridge</i>
		14	16	18	20	22	24	26-28	
1916	<i>Omnibus Lane</i>	14 Webster, William	16 Gibson, Mrs Mary	18 O'Brien, Mrs May	20 Chamberlain, Henry	22 Reed, William	24 Fisher, Charles	26-28 Fell, John Co (Commonwealth Oil Corporation Ltd) depot for	<i>Railway Bridge</i>

					blacksmith			oils & greases etc	
1917	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	Webster, Armie [sp?]	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Railway Bridge</i>
1918	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	Parmenton, William	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Railway Bridge</i>
1919	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	O'Toole, Mrs Mary	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Railway Bridge</i>
1920	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	O'Toole, Mrs Mary	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Wheat Road Railway Bridge</i>
1921	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	Gimley, William	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Wheat Road Railway Bridge</i>
1922	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	Gimley, William	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Wheat Road Railway Bridge</i>
1923	<i>Omnibus Lane</i>	Webster, William	Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	Gimley, William	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Wheat Road Railway Bridge</i>
1924	<i>Omnibus Lane</i>	Webster, William	Fullerton, Sidney Gibson, Mrs Mary	O'Brien, Mrs May	Chamberlain, Henry	Gimley, William	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Wheat Road Railway Bridge</i>
		14	16	18	20	22	24	26-28	
1925	<i>Omnibus Lane</i>	Webster, William	Bowers, Walter H	O'Brien, Mrs May	Chamberlain, Henry	Gimley, William	Fisher, Charles	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Wheat Road Railway Bridge</i>

1926	<i>Omnibus Lane</i>	Webster, William	Bowers, Walter H	Kershaw, -	Chamberlain, Mrs Eliza	Gimley, William	Phillips, Harry	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Wheat Road Railway Bridge</i>
1927	<i>Omnibus Lane</i>	Webster, William	Wallace, Mrs Rose	Renshaw, Frederick	Peterson, Benjamin	Gimley, William	Phillips, Harry	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Railway Bridge</i>
1928	<i>Omnibus Lane</i>	Webster, William	Wallace, Mrs Rose	Renshaw, Frederick	Lee, Mrs Florence	Goon, Ah	Phillips, Harry	Fell, John Co (Commonwealth Oil Corporation Ltd) depot for oils & greases etc	<i>Railway Bridge</i>
1929	<i>Omnibus Lane</i>	Webster, William H	Wallace, Mrs Rose	Renshaw, Frederick	Con, Wing	Goon, Ah	Phillips, Harry		<i>Railway Bridge</i>
1930	<i>Omnibus Lane</i>	Webster, William H	Wallace, Mrs Rose	Stewart, Miss G	Con, Wing	Goon, Ah	Phillips, Harry		<i>Railway Bridge</i>
1931	<i>Omnibus Lane</i>	Webster, William H	Chapman, Henry	Stewart, Miss G	Con, Wing	Goon, Ah	Phillips, Harry		<i>Railway Bridge</i>
1932/3	<i>Omnibus Lane</i>	Webster, William H	Chapman, Henry	Stewart, Miss G	Con, Wing	Goon, Ah	Phillips, Harry	Newton Leather Goods Co	<i>Railway Bridge</i>

Notes: -

Ultimo Road recorded as Ultimo Street – 1858/9, 1861, 1863, 1864, 1865, 1869, 1870 & 1871.

Relevant side of the road variously labelled as East, North or West side.

Sands Directory not issued – 1860, 1862, 1872, 1874, 1878 & 1881.

Appendix 3: Land Titles Schedule

14-28 Ultimo Rd, Ultimo NSW (Lot 1 DP76938)
Land Titles Schedule

DATE	REAL PROPERTY DESCRIPTION		INSTRUMENT OF TRANSFER	FROM	TO
	Lot & DP	CT/V & F			
31 Dec 1803	* 34 acres in District of Sydney [Ultimo Farm]	Ser 3 p 124(1)	Grant	* Note: Pencil note in PA that this grant is linked to 14-28 Ultimo Rd	John Harris Esq [1754-1838]
1 Jan 1806	135 acres in District of Sydney bounded on the south by present farm Ultimo	Ser 3 p 196(2)	Grant	Phillip Gidley King	John Harris Esq [1754-1838]
1 Jan 1841 & 1842	135 acres known as Ultimo Farm [and other areas of land in Ultimo not listed here]	Bk 62 No 617	Lease and Release	William Harris of Ireland, J Harris Esq of Shanes Pk, NSW [per will of John Harris late of Shanes Park d. 27 Apr 1838]	George Kenyon Holden, solicitor of Sydney
18 Jul 1842		Bk 44 No 500	Lease [for a year]	George Harris, John Harris, both of Ireland, & Nancy Ann Harris	James Fullerton of Sydney Minister of the Scottish Church
19 Jul 1842		Bk 44 No 501	Release [to the use & benefit of John Harris]	G Harris & J Harris of Ireland, Nancy Ann Harris otherwise McKee wife of John Harris, Thomas Harris of Parramatta	John Harris [Snr d.10 Sep 1846]
29 Jul 1859	Ultimo Estate, subdivided and including Block No 8	Bk 62 705	Indenture of Partition [parts of deed illegible]	James Fullerton of Sydney, Doctor of Laws etc [executor of the will of John Harris Snr late of Ultimo Cottage], & John Harris, Shanes Pk South Creek	Henry Burton Bradley [solicitor]
7 Feb 1860	Ultimo Estate including Block No 8 in Lot 2	Bk 65 No 445	Indenture of Conveyance	James Fullerton of Sydney, Doctor of Laws etc, George Henry Hamilton, druggist presently of Kiama [re will of John Harris the Elder, late of Ultimo]	John Harris [1838-1911] of Ultimo, gentleman
7 Feb 1860	Ultimo Estate including Block No 8 in Lot 2	Bk 66 No 189	Indenture of Partition [confirmation]	GH Hamilton, Jas Fullerton & Henry Burton Bradley	John Harris [1838-1911]
28 Nov 1894	Lot 2 of Ultimo Estate including Block No 8 [allocated 7 Feb 1860]	Bk 548 No 108	Register of Subdivision under Trusts of the Will of the late John Harris Senior of Ultimo 29 Aug 184[?]	GH Hamilton, Jas Fullerton	John Harris [1838-1911] [Recipient of John Harris Snr's Will]
20 Jun 1906	Part of Block 8 of the Ultimo	[Vol 3851 Fol 201]	Lease (from 1 Oct 1902 for 25	John Harris [1838- 1911]	NSW Shale & Oil Co Ltd

DATE	REAL PROPERTY DESCRIPTION		INSTRUMENT OF TRANSFER	FROM	TO
	Lot & DP	CT/V & F			
	Estate 2 r 31 ¾ p (2826.5m ²)		years. Exp 22 Aug 1941)		
30 Sep 1913	Lot 2 of Ultimo Estate including Block No 8	Bk 1010 No 279	Mortgage £42,000	John Harris [1870-1957], Medical Practitioner of Sydney, & Reginald WS Harris, of Paddington Esq [executors of Will of John Harris (d.1911)]	Bank of NSW
19 Jun 1925	2r 31 ¾ p of Ultimo Estate including Sections 2 & 3 of subdivision of Block 8	Bk 1389 No 779	Reconveyance	Bank of NSW	J Harris & Reginald WS Harris
23 Jun 1925	2 r 31 ¾ p including Sections 2 & 3 of subdivision of part of Block 8 £23,925	Bk 780 No 1389	Conveyance	John Harris and Reginald William Sydney Harris	HV McKay Pty Ltd
22 Jul 1925	2 r 31 ¾ p incl. Sections 2 & 3 of subdivision of part of Block 8	PA No 26938	PA No 26938		Samuel McKay of Sunshine, Victoria for HV McKay Pty Ltd in Sydney
22 Jul 1925		PA No 26938	Weekly tenancy	HV McKay Pty Ltd	Mr Webster 14 Ultimo Rd
22 Jul 1925		PA No 26938	Weekly tenancy	HV McKay Pty Ltd	Mr Bowers 16 Ultimo Rd
22 Jul 1925		PA No 26938	Weekly tenancy	HV McKay Pty Ltd	Mr S. Anshaw 18 Ultimo Rd
22 Jul 1925		PA No 26938	Weekly tenancy	HV McKay Pty Ltd	Mr Chamberlain 20 Ultimo Rd
22 Jul 1925		PA No 26938	Weekly tenancy	HV McKay Pty Ltd	Mr Jenty 22 Ultimo Rd
22 Jul 1925		PA No 26938	Weekly tenancy	HV McKay Pty Ltd	Mr Phillips 24 Ultimo Rd
17 Apr 1926	Part of Block 8 of the Ultimo Estate 2 r 31 ¾ p	Vol 3851 Fol 201	CT		H.V. McKay Pty Ltd
22 Aug 1941	Part of Block 8 of the Ultimo Estate 2 r 31 ¾ p	Vol 3851 Fol 201	Lease Expired		NSW Shale & Oil Co Ltd
19 Mar 1943	Part of Block 8 of the Ultimo Estate 2 r 31 ¾ p		Tfr No D195046	H.V. McKay Massey Harris Pt Ltd formerly H.V. McKay Pty Ltd	Dairy Farmers Cooperative Milk Company Ltd
1 Apr 1955	Parts hatched in red [splays on Omnibus Lane]		Tfr No G 823337	Dairy Farmers Cooperative Milk Company Ltd	Council of the City of Sydney
1955-2004			Various mortgages not recorded here	Dairy Farmers Cooperative Milk Company Ltd	

DATE	REAL PROPERTY DESCRIPTION		INSTRUMENT OF TRANSFER	FROM	TO
	Lot & DP	CT/V & F			
13 Jul 2004	Lot 1 DP 76938	1/76938	Tfr No AA795838		University of Technology Sydney