

Our ref: PR143932_A

Level 13, 255 Pitt Street
Sydney NSW 2000
T +61 2 8099 3200

Date: 07 August 2020

Shamma Hasan
Johnstaff
Project Manager
Level 5, 9 Castlereagh Street
Sydney, NSW, 2000

Via email: shamma.hasan@johnstaff.com.au

Dear Shamma,

Liverpool Hospital Redevelopment (SSD-10389): Addendum to Statement of Heritage Impact and Response to Comments – Heritage NSW, Department of Premier and Cabinet

1. Project Background

Johnstaff on behalf of NSW Health Infrastructure commissioned RPS Australia East Pty Ltd (RPS) to provide a Statement of Heritage Impact (SOHI) as part of a State Significant Development (SSD) application for the Liverpool Health and Academic Precinct (LHAP) redevelopment.

Liverpool Hospital is the district hospital for local catchment areas of Liverpool and Fairfield and is a tertiary referral hospital for all South Western Sydney Local Health District (SWSLHD). In June 2018, the NSW Government announced \$740 million of funding for the development of a health, research and academic precinct in Liverpool. The redevelopment would increase the inpatient numbers, in addition to expanding tertiary and quaternary services.

NSW Health Infrastructure submitted an Environmental Impact Statement (EIS) to the Department of Planning, Industry and Environment in accordance with Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) on 7 May 2020. RPS prepared a Statement of Heritage Impact (SOHI) as part of the EIS submission - *Liverpool Health and Academic Precinct – Integrated Services Building and Refurbishment of the Clinical Service Building: Statement of Heritage Impact* (RPS, 2020).

2. Purpose of this Report

On 17 June 2020, Specialist Services, Heritage NSW, Department of Premier and Cabinet (DPC) provided comment on the SOHI on behalf of the Heritage Council of NSW (the Heritage Council). This addendum to the SOHI is provided in response to the comments from Heritage NSW only.

This addendum has been prepared by Joshua Madden (RPS Senior Heritage Consultant) and reviewed by Susan Kennedy (RPS Heritage Manager – Sydney). In accordance with Heritage NSW comments, this addendum updates the archaeological site assessment and an excavation methodology to guide the proposed works. Pursuant to Heritage NSW's response, it is noted Joshua is suitably qualified historical archaeologist and meets the Excavation Director Criteria of the Heritage Council of NSW. His CV is annexed to this report at Appendix 1.

3. Responses to Specialist Services, Heritage NSW, DPC Comments

3.1. Assessments of archaeological potential and archaeological impact.

Comment

The report references archaeological investigations undertaken in 1993 (Higginbotham) and 2009 (AHMS) that both uncovered historical phases of site occupation, with remains such as footings associated with the 1820s Moore Hall, a box drain, a ditch, postholes, deposits and post-1865 artefacts. Heritage NSW observes that both investigations were sampling programs involving test trenches, rather than larger-scale open area excavations, which is of note given the scope of archaeological evidence encountered during the works. Taking this evidence into consideration, the report assesses the archaeological potential of the site as low to moderate in Section 5.1 and low to nil in Sections 7.2.6 and 8.1, with high potential for historical drain/s to survive intact in localised, less disturbed areas of the site without basements. It is noted in the report that the sandstone capped box drain uncovered in the 2009 excavations is not depicted on Liverpool town plans. However, it is not made clear why other un/anticipated archaeological evidence may not survive in situ, as well as the drain/s, within less disturbed site areas.

Heritage NSW does not concur with the assessment of archaeological potential and observations of impact. It is reasoned that a diverse archaeological resource, dating to various historical phases and including unanticipated remains, has previously been discovered on site. Further, as mentioned in the report, it is noted that areas without basements on the site may be (reasonably) undisturbed and, it is argued, may therefore contain a range of archaeological evidence.

Response

Moore Hall

In 1993 Cultural Resources Management prepared an archaeological assessment for works at the corner of Elizabeth and Goulburn Streets (report prepared for Capworks Management Pty Ltd) (see **Figure 1**). The report concluded that there was potential for remains of Moore Hall, which, if present, would be of high cultural significance (Cultural Resource Management, 1993). The assessment and later archaeological excavations (see below) were undertaken as part of the extension and expansion of LHAP which included the construction of the existing vehicle accessways, buildings and basements.

Higginbotham later carried out a series of archaeological test excavations and identified archaeological remains – which included the identification of relics – associated with Moore Hall (Higginbotham, 1993). The identification of the archaeological relics resulted in an open area archaeological excavation of the site (Higginbotham, 1995) (see **Figure 1** for location of excavations). The excavations exposed most of the 1820s footprint of Moore Hall, outbuildings and other historical features including the underground cistern, drains, postholes and rubbish pits (Higginbotham, 1994; AHMS, 2007).

RPS understands that the open area archaeological excavation (stated above) identified complex archaeological remains dating from the early nineteenth century. The archaeological excavation recorded and removed archaeological remains associated with the structures identified on the 1827, 1850 and 1915 plans. The location of the identified archaeological remains is within the footprint of an existing vehicle accessway and carpark, the Education building and the basement carparking for the Clinical Building (see **Figure 1** and **Figure 7**).

It is confirmed that the remains of Moore Hall and associated remains have been accurately and sufficiently recorded and analysed and have been destroyed through archaeological excavation and by the construction of the existing Hospital infrastructure.

AHMS 2007 – 2009 Assessment and Archaeological Excavations

AHMS worked within LHAP and reported on multiple investigations between 2007 and 2009. In 2007 AHMS undertook archaeological test excavations at an area along Elizabeth Street directly east of the current proposal area. RPS were unable to obtain the original assessment that supported the first round of archaeological test excavations.

In August 2007 AHMS prepared an *Archaeological Assessment, Research Design and Excavation Methodology for the Liverpool Hospital Site* (AHMS 2007) that included the current Proposal area. The assessment was prepared to support an Environmental Assessment to accompany a development application to the NSW Department of Planning under Part 3A of the *Environmental Planning & Assessment Act 1979*, Major Project SEPP. This assessment was prepared in August 2007 post-dating the test excavations at the Liverpool Hospital site that AHMS reported on in 2009.

Using the available historical record, the results of the test excavations and an assessment of the existing disturbances, AHMS prepared a disturbance map (see **Figure 2**). AHMS stated:

Areas within the red area are likely to have suffered high levels of physical disturbance related to construction activities associated with large scale structures, basement levels, underground carparking, service conduits and landscaping. As a consequence, this area is assessed as having low to negligible archaeological potential.

The Proposal area for the 2020 LHAP SSD application is located within the 'red area' mapped by AHMS in 2007. The RPS 2020 SOHI therefore concurs with the AHMS assessment, which states that most of the Proposal area is of low to negligible archaeological potential.

The results of the archaeological monitoring and test excavations was reported on in March 2009 (*Liverpool Hospital Test Excavation and Monitoring Final Report*; March 2009). As identified, the results of the archaeological test excavations identified a box drain, a ditch, postholes, deposits and post-1865 artefacts. It is noted that the archaeological investigations were undertaken in an area identified as having moderate to low disturbances with moderate to high archaeological potential (AHMS, 2007 – see above).

The results of the investigations found that the domestic artefacts and structural features originally thought to have been associated with the early Cooper building are likely to have been associated with later refuse disposal activities from the hospital. AHMS found that although fence posts and post holes associated with the early twentieth century Cooper building were uncovered, AHMS considered it likely that after 1858 the area was levelled and used for rubbish disposal prior to the development of this part of the hospital for the piggery (AHMS, 2009).

AHMS found that the archaeological evidence identified was of low archaeological research significance (AHMS, 2009).

Based on the uncovering of an unanticipated box drain AHMS asserted that isolated remains of historical drains could be evident across the Liverpool Hospital Precinct (AHMS, 2009).

Updated Assessment of Archaeological Potential

RPS has prepared a series of figures identifying the nature and extent of ground disturbance across the Proposal area. The figures identify the locations of historical structures in relation to; the existing building and basement footprints, existing sub-surface utilities, previous archaeological excavations and the proposed LHAP redevelopment footprint requiring ground disturbances.

The following provides a summary of the archaeological potential for the Proposal area which has been prepared with reference to the available historical record, previous archaeological investigations and disturbances:

Table 1: Summary of archaeological potential

Structures identified on the following Plans	Location	Potential
Dated 1827 including Moore Hall	Fronting Elizabeth Street	Nil
Dated 1850	Goulburn Street	Low
Moore Hall	Fronting Elizabeth Street	Nil
Dated 1915	Elizabeth Street	Nil
	Goulburn Street	Low
Moore Hall	Fronting Elizabeth Street	Nil

Structures identified on the following Plans	Location	Potential
Dated 1932	Elizabeth Street	Nil
	Corner of Elizabeth Street & Goulburn Street	Low
Dated 1943	Northern end of the precinct – close to Goulburn Street	Low
	Elizabeth Street	Nil
	Goulburn Street	Low to nil
Dated 1961	Goulburn Street	Nil where existing basements are located. Low to nil where existing building structures without basements are located.
Historical Drain mapped in the 1890s	Across the centre of the precinct	Low
Historical drain mapped by AHMS in 2007	Across the centre of the precinct	Moderate to high in locations across the proposal area.

This updated information clarifies RPS' assessment in relation to the archaeological potential of the Proposal area.

The updated information presented in this addendum supports the conclusions of archaeological potential presented in *The Liverpool Health and Academic Precinct – Integrated Services Building and Refurbishment of the Clinical Service Building: Statement of Heritage Impact* (RPS, 2020).

The Proposal area has low and low to nil potential to contain archaeological remains associated with structures shown in the 1827, 1850, 1915 and 1932 plans and the 1943 and 1961 aerials. The exception to this is the potential for drains, which is based on the 2007 archaeological monitoring programme. There is moderate to high potential for similar drains to survive in localised, less disturbed areas of the Proposal area, in areas without basements.

It is noted that the 2007 AHMS assessment broadly corresponds with the conclusions presented by RPS.

The assessment of archaeological potential presented in the SOHI (RPS, 2020) will not be altered.

Response to the Un/anticipated Remains Comment

RPS note the following: an archaeological assessment is, in part, prepared to identify archaeological potential of an area utilising the available historical record, the results of previous archaeological investigations and existing disturbances, and identify the impacts of proposed works on known and potential archaeological remains. The role of an archaeological assessment is not to identify all or any un/anticipated archaeological remains that cannot be substantiated in the available records both primary and secondary. RPS note that un/anticipated archaeological remains are, inherently, un/anticipated.

As such, and as is lawfully required (the Heritage Act 1977 NSW) and best practice, an unexpected finds procedure has been prepared in the event archaeological remains not anticipated (as a result of an investigation of the available primary and secondary resources) are identified.

Legend

- Proposal Area
- Higginbotham (1995) Excavation
- 1827
- 1850
- 1915
- 1932
- 1943
- 1961
- Drain AHMS 2009
- Drain AHMS 2007
- Drain St Luke Parish Map 1890

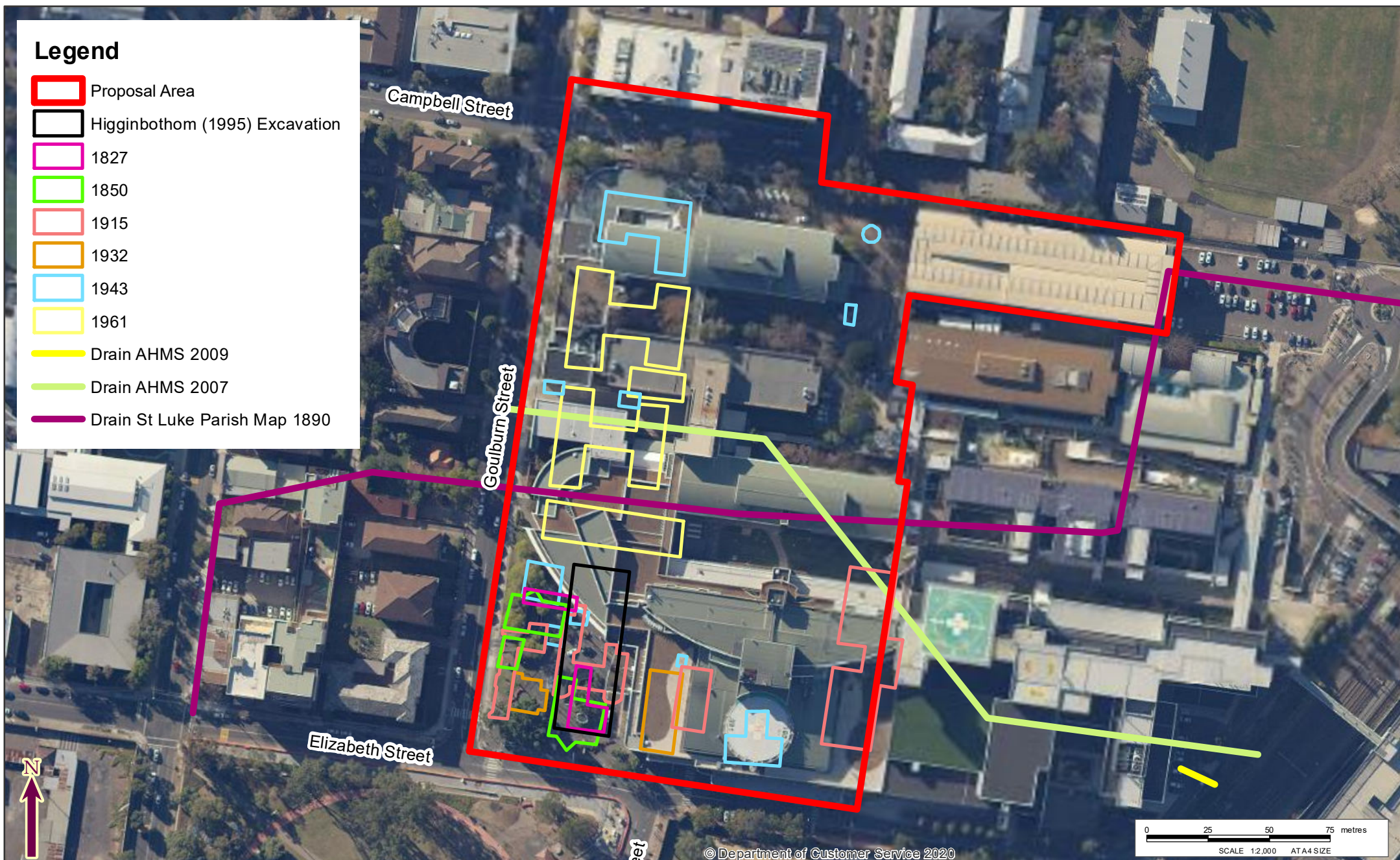


Figure 1: Historical drains and buildings and footprint of Higginbotham (1995) excavation boundary.

Historical buildings are labelled by the earliest map in which they were shown.

LOCATION:

LIVERPOOL, NSW

PURPOSE: HERITAGE

Technician: Luke Gliganic

Date: 20/07/2020

Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool

VERSION (PLAN BY):

DATUM: GDA94
PROJECTION: MGA Zone 56

Data Sources:
RPS
Land and Property 2015

CLIENT: JOHNSTAFF
JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY



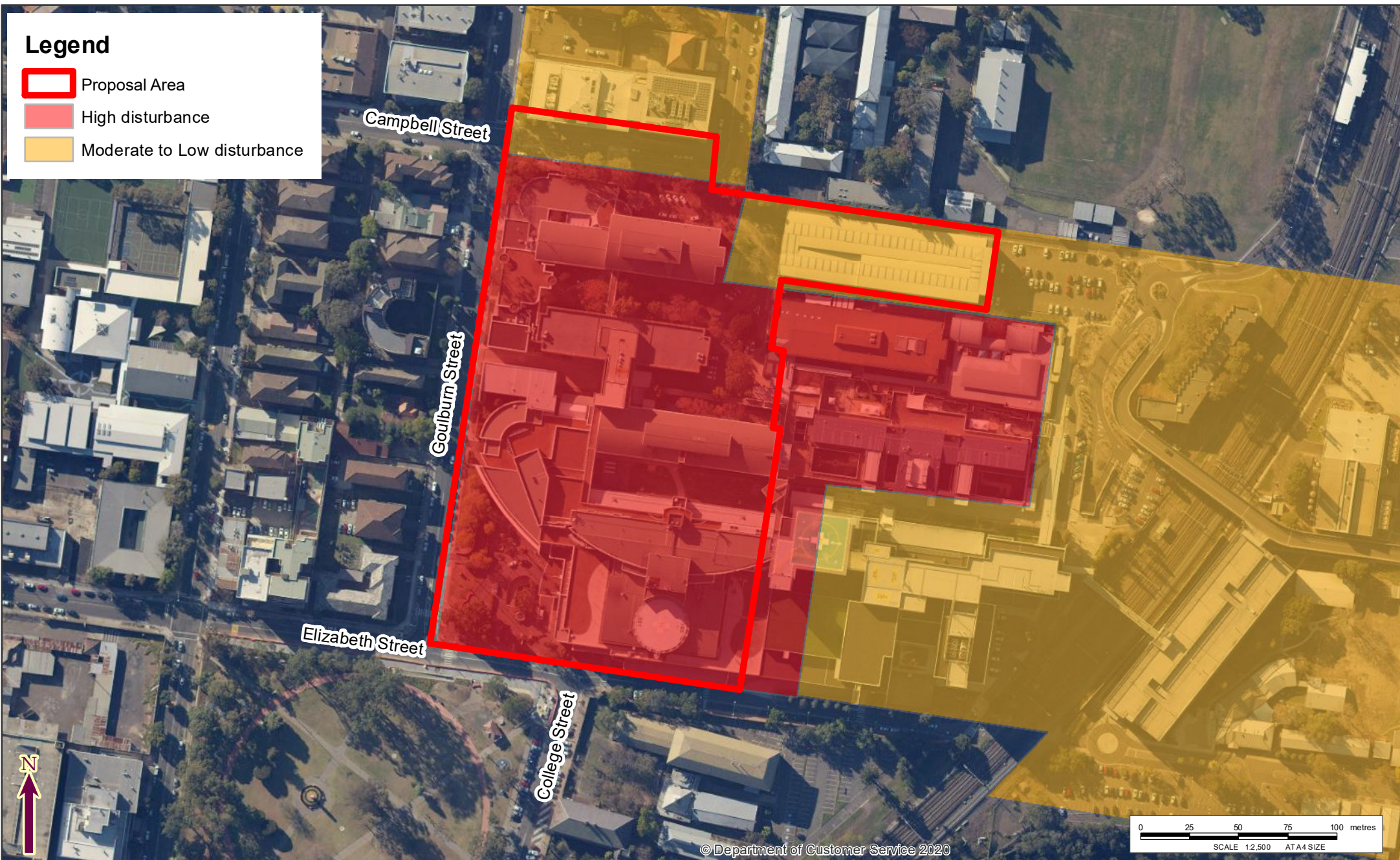


Figure 2: Disturbance mapping from AHMS (2007)

LOCATION:	Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool	DATUM: GDA94 PROJECTION: MGA Zone 56
LIVERPOOL, NSW		
PURPOSE: HERITAGE	VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015
Technician: Luke Gliganic Date: 15/07/2020		

Legend

- Proposal Area
- Footprint of existing basements
- Footprint of existing buildings



© Department of Customer Service 2020

Figure 3: Existing basements and buildings.

LOCATION:	LIVERPOOL, NSW		Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE Technician: Luke Gliganic Date: 20/07/2020	VERSION (PLAN BY):		Data Sources: RPS Land and Property 2015	

CLIENT: JOHNSTAFF
JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY **rps**

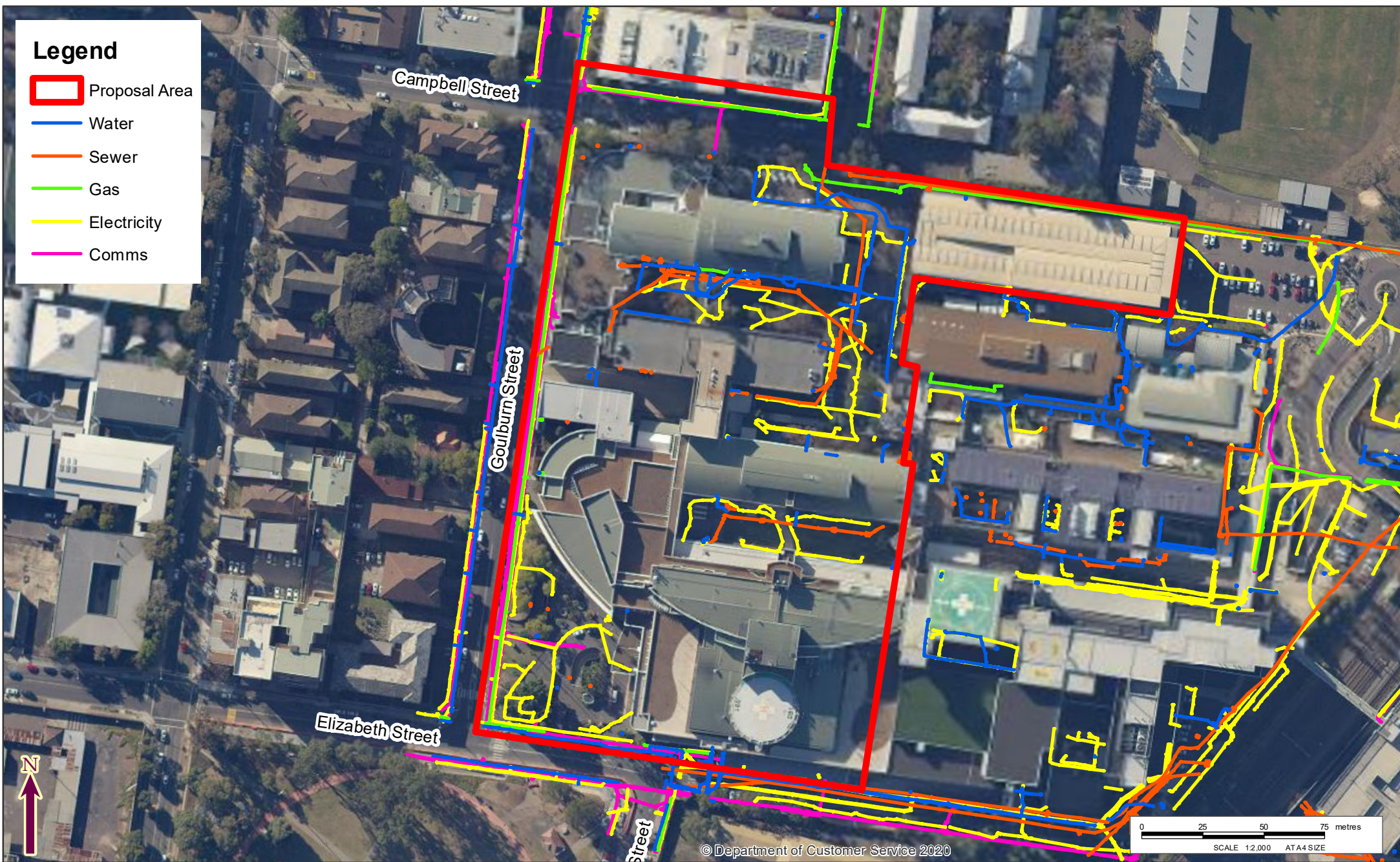


Figure 4: Existing sub-surface utilities

LOCATION:	LIVERPOOL, NSW		Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE	Technician: Luke Gliganic		VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015
Date: 20/07/2020				

CLIENT: JOHNSTAFF
JOB REF: PR 143932

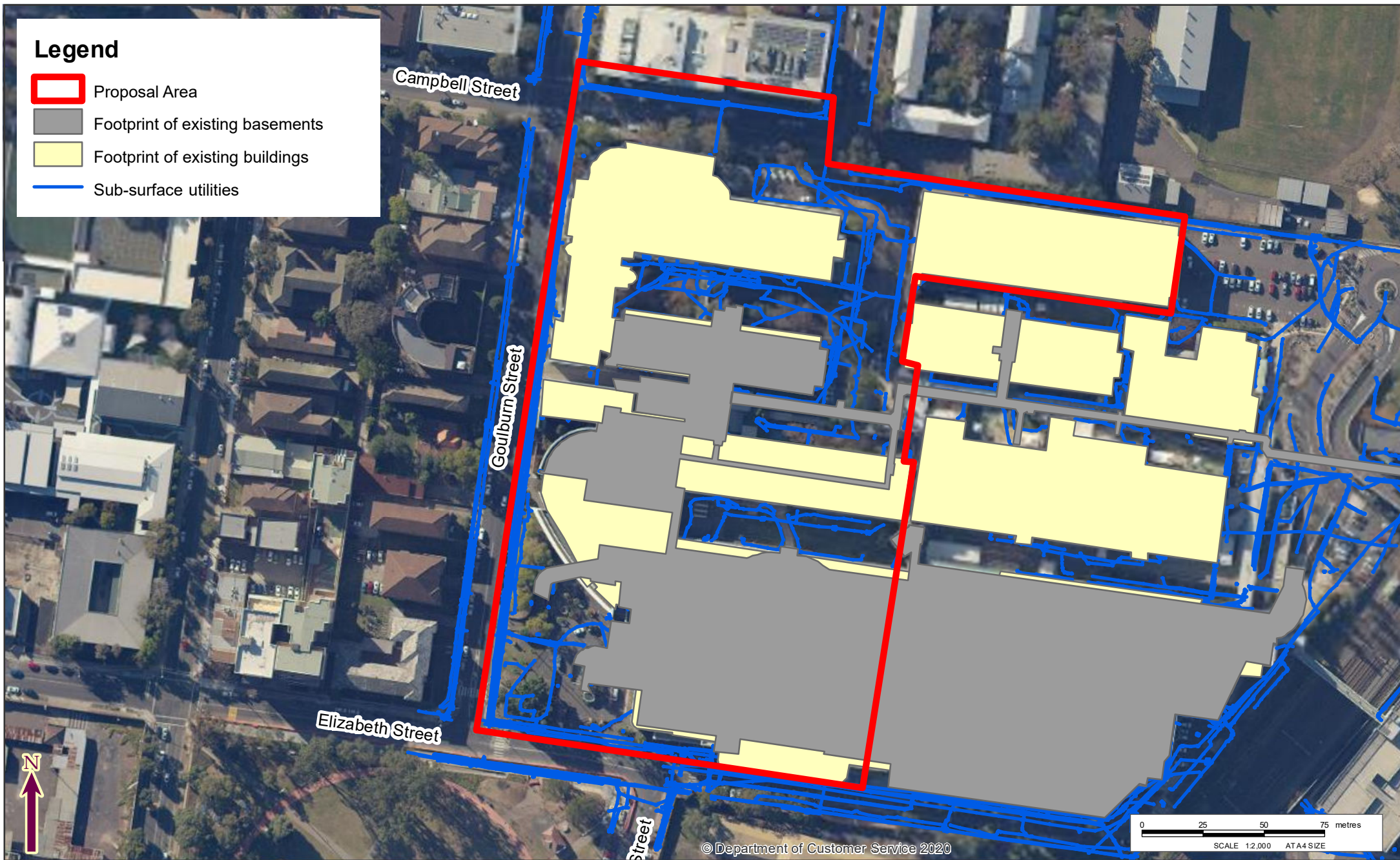
RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY



Legend

- Proposal Area
- Footprint of existing basements
- Footprint of existing buildings
- Sub-surface utilities



© Department of Customer Service 2020

Figure 5: Existing basements, buildings, and sub-surface utilities

LOCATION:

LIVERPOOL, NSW

PURPOSE: HERITAGE

Technician: Luke Gliganic

Date: 20/07/2020

Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool

VERSION (PLAN BY):

DATUM: GDA94
PROJECTION: MGA Zone 56

Data Sources:
RPS
Land and Property 2015

CLIENT: JOHNSTAFF
JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY



Legend

- Proposal Area
- Higginbotham (1995) Excavation
- Footprint of existing basements
- Footprint of existing buildings
- Sub-surface utilities

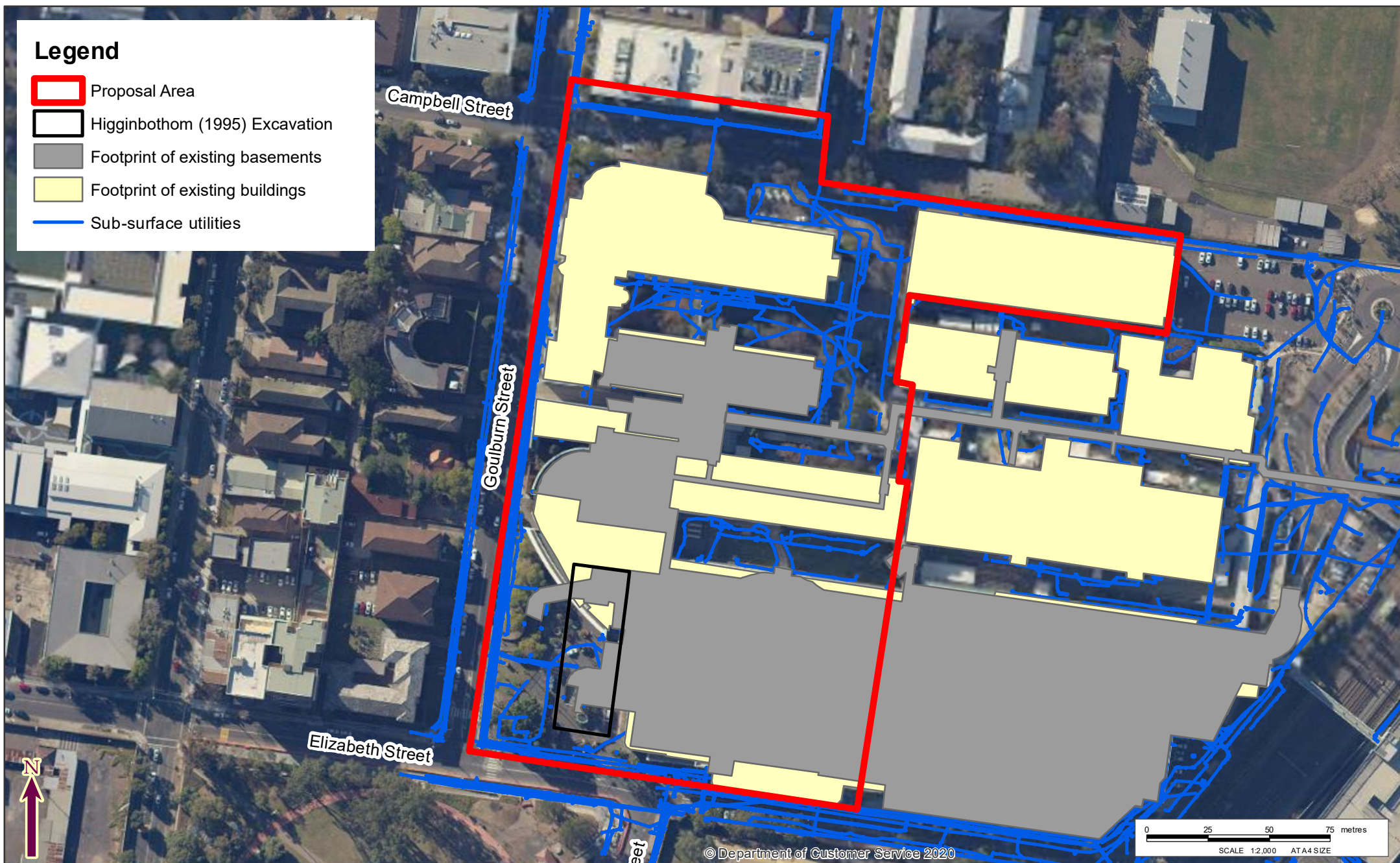


Figure 6: Existing basements, buildings, and sub-surface utilities and footprint of Higginbotham (1995) excavation boundary.

LOCATION: LIVERPOOL, NSW		Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE Technician: Luke Gliganic	Date: 20/07/2020	VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015

CLIENT: JOHNSTAFF
JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY **rps**

Legend

- Proposal Area
- Higginbothom (1995) Excavation
- Footprint of existing basements
- Footprint of existing buildings
- Sub-surface utilities
- 1827
- 1850
- 1915
- 1932
- 1943
- 1961
- Drain AHMS 2009
- Drain AHMS 2007
- Drain St Luke Parish Map 1890

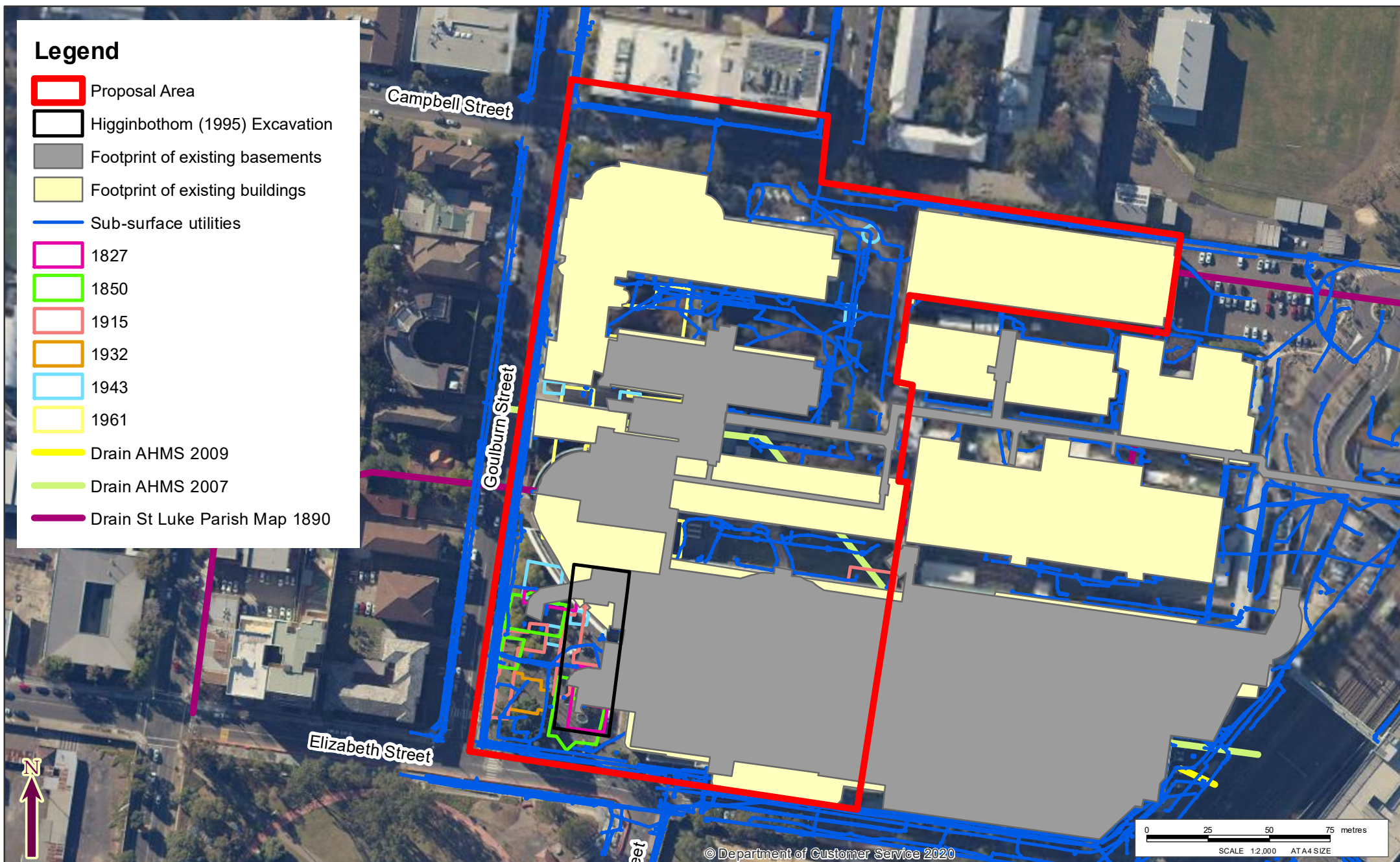


Figure 7: Historical drains and buildings overlain by existing buildings, basements, and subsurface utilities. The footprint of Higginbotham (1995) excavation boundary is also shown. Historical buildings are labelled by the earliest map in which they were shown.

LOCATION: LIVERPOOL, NSW		Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE Technician: Luke Gliganic	Date: 20/07/2020	VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015

CLIENT: JOHNSTAFF
JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY





CLIENT: JOHNSTAFF
JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY

rps

Legend

- Project Area
- Higginbothom (1995) Excavation
- Footprint of existing basements
- Footprint of existing buildings
- Sub-surface utilities
- 1827
- 1850
- 1915
- 1932
- 1943
- 1961
- Drain AHMS 2009
- Drain AHMS 2007
- Drain St Luke Parish Map 1890
- Proposed ISB
- Proposed landscaping
- Proposed road works



Figure 9: Historical drains and buildings overlain by existing buildings, basements, subsurface utilities, and footprint of Higginbotham (1995) excavation boundary. The proposed works are also shown. Historical buildings are labeled by the earliest map in which they were shown.

LOCATION: LIVERPOOL, NSW		Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool	DATUM: GDA94 PROJECTION: MGA Zone 56
PURPOSE: HERITAGE Technician: Luke Gliganic	Date: 20/07/2020	VERSION (PLAN BY):	Data Sources: RPS Land and Property 2015

CLIENT: JOHNSTAFF
JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
Level 13, 255 Pitt Street Sydney, 2001
T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY



3.2 Assessment of archaeological significance.

Comment

The significance assessment presented in the report (Section 6.6) only addresses potential 19th century drains on site, which are assessed as of Local significance for their association with the early town of Liverpool. In Sections 7.2.6 and 8.1, drains are considered to have the potential to be of Local or State significance, dependent upon the evidence and intactness. The significance assessment therefore appears unresolved. A significance assessment for the historical archaeological resource of the entire site (as a whole) has not been included.

Heritage NSW considers that the site significance assessment should have been expanded and refined. It is noted, for example, that the Archaeological Assessment, "Moore Hall" site (Wendy Thorp, 1993) concludes Moore Hall, which is located on the site, is of high cultural significance.

Response

Potential Nineteenth Century Drain Networks

Section 6.6.1.1 Statement of significance of the SOHI notes that:

Intact remains of the nineteenth century drain network including a pre-1850 box drain would be significant at the local level due to their connection with the early town of Liverpool.

Sections 7.2.6 and 8.1 of the SOHI also noted that, drains, if present across the Proposal area, may be significant at a local or state level dependant on the type of drain identified and the level of integrity. RPS note that; the assessment of significance outlined in Section 6.6.1.1 is accurate and the discussions of significance in Sections 7.2.6 and 8.1 do not correspond with the Statement of Significance provided.

This addendum confirms that the significance of drain networks identified is likely to be significant at a local level only (as stated in Section 6.6.1.1 of the SOHI).

Previous archaeological assessment of the LHAP (AHMS, 2007) also found that archaeological remains – including any potential drain network – would be significant at a local level only.

Moore Hall

RPS agrees with Heritage NSW's comments and confirm that; in 1993 Cultural Resource Management prepared an archaeological assessment for works at the corner of Elizabeth and Goulburn Streets (report prepared for Capworks Management Pty Ltd). The report concluded that there was potential for remains of Moore Hall which, if present, would be of high cultural significance (Cultural Resource Management, 1993). As abovementioned, the location of Moore Hall and associated structures were excavated by Higginbotham and have been sufficiently archaeologically recorded and analysed with the significance of all remains realised.

It is likely that all remains associated with Moore Hall have been destroyed by the archaeological excavations themselves and by the excavations for the existing structures, basements and vehicle accessways (see **Figure 1, Figure 6, Figure 7, Figure 9**). As such, it has been determined that a reassessment of the archaeological significance related to Moore Hall is not relevant to this assessment. No additional significance assessment will be prepared for Moore Hall and associated infrastructure.

Updated Statement of Significance

As requested by Heritage NSW, RPS have provided an additional assessment of significance for the potential historical archaeological remains for the Proposal area.

NSW Heritage Criteria for Assessing Significance related to Archaeological Sites and Relics

The *Assessing Significance for Historical Archaeological Sites and 'Relics'* (OEH 2009) OEH legislative guideline outlines the four assessment criteria in assessing the significance of archaeological and potential archaeological sites. The four criteria have been used to assess the potential sub-surface archaeological relics and remains identified in the SOHI and this addendum.

It is noted that this archaeological significance assessment assesses the potential historical archaeological potential for the Proposal area.

Archaeological research potential (Criterion E)

As identified, the Proposal area has, in general, low to nil potential for archaeological remains associated with nineteenth century development and early twentieth century development of the Liverpool Hospital Precinct. Although the development of the Proposal area is well documented in primary and secondary sources, potential archaeological remains, however limited, have the potential to contribute to current understanding of:

- mid-Nineteenth century and early twentieth century building design, materials, technologies and standards in Liverpool;
- the development of hospitals and asylums from the late Nineteenth century to the early-Twentieth century and how construction and design contrast with contemporary theories;
- the development of Liverpool from the mid-Nineteenth century.

Although the historical development of the Proposal area is well documented, the archaeological research potential of any such archaeological remains is considered to be low to moderate at a local level (also noted in AHMS, 2007).

All potential archaeologically remains associated with the construction of hospital services from the mid-twentieth century onward, would not provide information not readily available from other sources. Any such remains would not meet this criterion.

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

The Proposal area is associated with several historical figures important in the development of Liverpool and New South Wales in the early Nineteenth century (see Section 3.3 of the SOHI; RPS, 2020):

- Thomas Moore: was made master boatbuilder at Port Jackson in 1796 and held the title until 1809, Moore moved to his land grant in Liverpool in 1809 becoming the first European settler in the Liverpool area, he was Liverpool magistrate with responsibility of allocation of allotments within the early Town until 1820 and became the magistrate of NSW in 1821.
- James Meehan: in 1812 Meehan was appointed deputy-surveyor of lands, and in 1814 he became collector of quitrents and superintendent of roads, bridges and streets and was granted a block in the north of Section 43.
- Daniel Cooper, merchant, miller and distiller, whose establishment on Levey and Lucas' land (on the adjacent Section 44) was one of the larger structures in the early town.

Although the Proposal area is associated with several prominent NSW figures from the early Nineteenth century there is limited evidence relating to the activities conducted on each of the allotments (AHMS, 2007). The exception to this is Thomas Moore with archaeological excavations undertaken by Higginbotham identifying Moore Hall and associated structures and infrastructure.

Archaeological remains associated with the abovementioned historical figures is likely to be minimal in nature however, if identified, would likely be significant at a local level.

Aesthetic or technical significance (Criterion C)

At this time, with potential archaeological evidence limited primarily too low to nil, assessing the aesthetic and/or technical significance of any potential archaeological remains is difficult to determine with any certainty. However, the potential archaeological remains are unlikely to meet this criterion.

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

As identified in previous archaeological investigations (Cultural Resource Management, 1993 and AHMS, 2007) archaeological remains associated with the development of the Proposal area from the early nineteenth century onward are likely to be fragmentary and significant at a local level only.

Excluding the remains of Moore Hall (already excavated and destroyed), potential archaeological remains are likely to be associated with the development of hospital and asylum infrastructure and historic drains.

Archaeological remains associated with the development of the hospital and the asylum have the potential to contribute to current understanding of the development of hospitals and asylums from the late Nineteenth century to the early-Twentieth century at a local level. Further, any such remains have the potential to identify local responses to contemporary theories on hospital and asylum design, construction and placement.

Integrity of potential archaeological remains

As noted in the SOHI and this addendum, the Proposal area has been subject to significant disturbances since the mid-twentieth century associated with various phases of development within LHAP. Based on the level of disturbances across the Proposal area it is likely that archaeological remains would be truncated with remains, if present, identified in disturbed contexts.

3.3 Archaeological recommendations.

Comment

In Section 8.2, Recommendation 3 proposes that if any drains are encountered during the development, all works should cease in the area and an archaeologist be contacted to record the archaeology. Heritage NSW notes that this recommendation does not mention relics or any other archaeological evidence. Recommendation 4 proposes an Unexpected Finds Protocol, under Section 146 of the Heritage Act 1977. It is a statutory obligation for any person/s who believe they have discovered or located a relic to notify the Heritage Council. As such, Recommendation 4 is a mandatory lawful requirement in any circumstance. Primarily due to the historical occupation uncovered during previous archaeological investigations on site, Heritage NSW considers that the current recommendations are too limited in scope for necessary management of the potential quantum and character of archaeology on site.

Given the above, Heritage NSW considers that the report in its current form does not assess or support appropriate management of the potential archaeological resource on site. It is recommended that, at a minimum, an archaeological monitoring program (supervised by a suitably qualified historical archaeologist) is a more appropriate management strategy for the site. The archaeological program would need to be supported by an Archaeological Research Design (ARD), that includes an archaeological site assessment and an excavation methodology to guide the proposed works, produced by a suitably qualified historical archaeologist, who meets the Excavation Director Criteria of the Heritage Council of NSW.

Response

Recommendation 3

In accordance with Heritage NSW correspondence, RPS have provided an update to Recommendation 3:

Recommendation 3

The proposal is in an area identified as having low and low to nil potential for archaeological remains including works or 'relics' as defined under the Heritage Act. However, if archaeological remains are uncovered, including a stone capped brick or other drain, all works should cease in the affected area, the area cordoned off and a suitably qualified archaeologist engaged to archaeologically excavate and record the remains.

Recommendation 4

RPS agree with the Heritage NSW's comment that an unexpected finds procedure is a mandatory lawful requirement. RPS note the Heritage NSW's confirmation that Recommendation 4 appropriately satisfies the mandatory lawful requirement.

Based on the updated information and disturbance mapping presented in this addendum, it is considered the existing recommendations and mitigation strategies are sufficient. Nonetheless, RPS acknowledges Heritage NSW's request and has provided an additional recommendation as detailed in the updated Recommendation 5 (below).

Recommendation 5

As a result of the Heritage NSW comments, additional archaeological mitigation measures in the form of an archaeological monitoring program should be undertaken at one location within the Proposal area. An archaeological research design and methodology has been prepared to support the archaeological monitoring program.

The archaeological investigation area is located at the corner of Goulburn and Elizabeth Streets (the archaeological investigation area) (see **Figure 10**).

Archaeological Research Design & Methodology

It is noted that this archaeological research design and methodology (ARD&M) relates to a specific area within the Proposal area only (see **Figure 10**). This ARD&M covers that area at the corner of Goulburn Street and Elizabeth Street. This area has been identified as an area requiring additional archaeological mitigation measures for the following reasons:

- This portion of the Proposal area contained several historical structures identified on multiple historical maps and plans from the mid-Nineteenth century onward that may be evident despite mid to late Twentieth century and Twenty-first century redevelopment; and
- Overlays of existing structures, historical structures and proposed ground disturbance works associated with the Proposal indicate that the area has (low) potential retain archaeological remains.

A research design is an important prerequisite for an archaeological investigation. A research design is a set of research questions developed specifically for a site within a wider research framework to ensure that, when archaeological remains of the site are destroyed and/or uncovered without destruction by excavation, their information content is preserved and can contribute to knowledge about the past. An archaeological research design aims to ensure that the excavation of an archaeological site is managed in a way to recover information available through no other technique.

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

Research Framework & Historical Themes

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

A historical theme is a research tool which can be used at the national, state or local level to aid in the identification, assessment, interpretation and management of heritage places (AHC 2001:1). The redevelopment of the Proposal area can be assessed in the context of the broader historic themes defined by the Heritage Council of NSW and Australian Heritage Council (AHC). In accordance with the Heritage Council of NSW and AHC framework of historic themes, the themes in Table 6 are relevant to the Project Area and locality.

Table 2: Historic Themes

Australian Theme	Sub-theme	New South Wales Theme	Notes
Developing local, regional and national economies	Providing Health Services	Health	Activities associated with preparing and providing medical assistance and/or promoting or maintaining the wellbeing of humans
Education	Establishing schools	Education	Activities associated with teaching and learning by children and adults, formally and informally

Australian Theme	Sub-theme	New South Wales Theme	Notes
Governing	Administering Australia – providing services and welfare	Welfare	Activities and process associated with the provision of social services by the state or philanthropic organisations
Developing Australia's' cultural life	Being homeless		
Marking the phases of life	Growing old – looking after the infirm and the aged Dying	Birth and Death	Activities associated with the initial stages of human life and the bearing of children, and with the final stages of human life and disposal of the dead.

Research Questions

This research design is developed considering the results of the SOHI and this addendum which identifies the historic development of the Proposal area, the heritage values and significance of potential archaeological remains and associated research potential.

The following research questions have been established to guide the archaeological investigations. Relevant research questions identified are:

- Is there evidence of pre-contact Aboriginal land use across the archaeological investigation area?
- Can various phases of occupation and development be identified across the archaeological investigation area and are the remains able to be dated?
- Is the archaeological evidence able to contribute to the understanding of the historical development of:
 - the Proposal area as a hospital and asylum?
 - Liverpool more broadly?
- What is the sub-surface integrity across the archaeological investigation area and what are the impacts of the mid to late twentieth century and twenty-first century redevelopment on the nineteenth and early twentieth century historical phases?
- How do the archaeological remains and sub-surface integrity compare to the results of previous historical archaeological investigations in the Liverpool Hospital Precinct?
- Is there sufficient archaeological evidence to identify and comment on local responses to contemporary theories on hospital and asylum design, construction and placement?

Methodology

The primary aim of the archaeological investigation is to identify the location and fabric of the early to mid-Nineteenth century structures within the archaeological investigation area. Previous archaeological excavation programs within proximity to the archaeological investigation area have identified the remains of comparable structures marked on the same historic plans of Liverpool. As such, a program of archaeological monitoring is recommended (Phase 1). The monitoring program may result in more detailed investigation and recording of certain areas if archaeological remains are uncovered (Phase 2).

Phase 1 Archaeological Monitoring

Phase 1 would involve the monitoring of the removal of the existing surfaces and excavations to various depths. The excavations across the archaeological investigation area would be monitored by a suitably qualified archaeologist.

If archaeological features and or relics are identified during the Phase 1 works, mechanical excavations would cease, and detailed archaeological investigations would be undertaken in accordance with best practice standards as outlined in Phase 2 below.

Phase 2 Detailed Archaeological Investigation

Phase 2 works would include the comprehensive manual identification and excavation which would be undertaken and overseen by an appropriately qualified archaeologist in accordance with best practice standards. The Phase 2 investigations should continue until;

- The appropriately qualified archaeologist is satisfied that the research potential of the subsurface deposits/archaeological remains has been realised; or
- Culturally sterile deposits have been encountered; or
- The maximum depth of excavation required for the ground disturbance works has been reached.

All Phase 1 and Phase 2 investigations would be recorded as follows:

- each stratigraphic unit would be given a context number for the appropriate recording of the archaeological investigation area;
- scale photographs would be taken;
- each context would be recorded on individual recording sheets with associated contexts identified;
- the recordings would also include a mud map and a Harris matrix of each context; and
- all archaeological remains (whether a cut, fills, feature or relics etc) would be defined, manually excavated, recorded and given either an appropriate feature or context number as outlined below:
 - all archaeological remains would be recorded on individual recording sheets;
 - all archaeological remains would be drawn to scale with scaled plan and section drawings also produced across each Phase 2 excavation area and across the archaeological investigation area;
 - a photographic record would be undertaken across the study area with a focus on all archaeological relics and features identified. All photographs associated with each context, cut, feature and/or relic would also be recorded on the corresponding record sheet;
 - a Harris matrix would be developed incorporating all context, cut, fill, feature, relic and surfaces identified and recorded;
 - all surfaces contexts, cuts, fills, features and relics would be recorded by a surveyor providing accurate spatial and temporal data across the study area;
 - all recovered artefacts would be cleaned, bagged and archived according to the contexts from which they were recovered; and
 - as part of the potential public interpretation of the archaeological excavation information can be made available within the proposed building redevelopment and/or the local library.

- Depending on the nature and integrity of the deposits and features revealed, the scope of excavation may range from exposure and recording of extant structural elements such as walls, piers, cisterns and wells to more detailed investigations of ephemeral elements such as yard surfaces, rubbish deposits or post holes.

In the unlikely event potential State significant relics are exposed discussions would be held with Heritage NSW with regards to the appropriate management of such relics.

Artefact Cataloguing and Storage

All recovered artefacts from the Project Area would be catalogued with reference to the Guide to: The EAMC Archaeology Database (Penny Crook and Tim Murray). All artefacts would be catalogued and recorded by specialists appropriate to their speciality.

Where appropriate the artefact specialists would subject significant artefacts to materials conservation.

Once cataloguing and analysis is completed, the Liverpool Hospital would need to provide a repository in perpetuity for the storage of all artefacts from this excavation.

Post Excavation Reporting

The results of all historical archaeological investigations would be collated into one over-arching historical excavation report in accordance with the relevant conditions of consent. It is noted that the post excavation report would be prepared to answer the research question outlined above.

The post excavation report would broadly contain the following:

- a description of the excavations undertaken;
- where required, an updated history based on the results of the excavations;
- a summary of the results of the excavations broken down into Phase 1 monitoring results and Phase 2 detailed archaeological investigations results including relevant photographs;
- a summary and synthesis of the results;
- the digital presentation of all plans prepared on-site;
- incorporation of all survey data;
- an analysis of the recovered artefacts as a catalogue;
- where required, specialist artefact reports would be detailed and appended;
- an analysis and interpretation of the results in relation to the research questions;
- the provision of a clear comparative analysis of the results in relation to the results of adjacent archaeological excavations; and
- The report would be submitted to the Heritage NSW and the Liverpool Council Library.

Legend



Proposal Area



Archaeological Investigation Area



Figure 10: Archaeological Investigation Area

LOCATION:

LIVERPOOL, NSW

PURPOSE: HERITAGE

Technician: Luke Gliganic

Date: 20/07/2020

Path: N:\Projects\Conics_Sydney\PR 143932 - Liverpool

VERSION (PLAN BY):

DATUM: GDA94

PROJECTION: MGA Zone 56

Data Sources:

RPS

Land and Property 2015

CLIENT: JOHNSTAFF

JOB REF: PR 143932

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)

Level 13, 255 Pitt Street Sydney, 2001

T: 02 8270 8300 www.rpsgroup.com.au

MAKING
COMPLEX
EASY



References

AHMS, 2007, *Liverpool Hospital, Liverpool, NSW, Historical archaeological assessment, research design, and excavation methodology*, Report prepared for Capital Insight Pty Ltd.

AHMS, 2009, *Liverpool Hospital test excavation and monitoring final report*, Report prepared for Capital Insight Pty Ltd.

Higginbotham, E, 1993, *Report on the Archaeological Excavation of Test Trenches on the site of 'Moore Hall', Liverpool Hospital, Elizabeth & Goulburn Streets, Liverpool, NSW*, Report prepared for Capworks Management Pty Ltd.

Higginbotham, E, 1995. *Report on the Archaeological Excavation of 'Moore Hall' & College on the Proposed Extension of Liverpool Hospital, Elizabeth Street, Liverpool, NSW*, Report prepared for Capworks Management Pty Ltd.

RPS, 2020. *The Liverpool Health and Academic Precinct – Integrated Services Building and Refurbishment of the Clinical Service Building: Statement of Heritage Impact*. Report prepared for Johnstaff.

Cultural Resource Management Thorp, W, 1993, *Archaeological Assessment, Moore Hall site, Liverpool District Hospital*. Report prepared for Capworks Management Pty Ltd and the South Western Sydney Area Health Service.

Our ref: PR143932_A

Appendix 1: Joshua Madden Curriculum Vitae

Joshua Madden

Role at RPS

Senior Heritage Consultant
-Sydney

Location

Sydney, NSW, Australia

Qualifications

Bachelor of Arts
(Archaeology) (Honours),
The University of Sydney

Memberships

International Council of
Monuments and Sites
(ICOMOS)

Australasian Society for
Historical Archaeology
(ASHA)

Interpretation Australia (IA)

Committees

Liverpool City Council
Heritage Advisory
Committee – Technical
Specialist

Joshua is a heritage specialist with over ten years' experience providing expert heritage management advice to clients. He is experienced in managing large complex linear and urban projects. His project experience includes transport infrastructure and urban development in NSW.

Josh has a highly developed understanding of the legislative frameworks and approval pathways within which projects operate. He is experienced in the delivery of heritage and archaeological assessments, managing fieldwork and excavation programs and the delivery of post fieldwork reporting to a high standard and within project timeframes.

Most recent relevant projects

Excavation Director (s140)

Swan Street, Cooks Hill Reconstruction*, Newcastle City Council, 2017-2019

Josh supported Council in the development of designs which provided best practice archaeological outcomes during the reconstruction of Swan Street. Josh oversaw the delivery of the pre-approval historical archaeological approvals for Council. Josh was responsible for the historical archaeological monitoring and excavations in accordance with the s140 permit conditions. Josh was also responsible for preparing and presenting heritage induction material for contractors on-site.

Newcastle 500 V8 Supercars*, iEDM, 2017-2019

Josh was part of the project team that managed the pre-approvals, the s60 and s140 archaeological excavation applications for works within SHR listed and locally listed items and the post-approval historical archaeological excavation and field works for the construction of the Newcastle V8 500 Supercars track and associated infrastructure. As one of two s140 permit excavation directors approved by Heritage NSW, Josh was responsible for supervising and undertaking archaeological excavations along the approved corridor route. Josh was responsible for providing on the ground heritage advice to the primary contractor and sub-contractors while also undertaking historical heritage assessments for project expansions. The archaeological excavation report was prepared and submitted post excavation works.

30 Swan Street, Morpeth*, Private Developer, 2017-2020

Josh managed and prepared the historical archaeological assessment, research design and methodology for the proposed works. As excavation director archaeological program Josh was responsible for monitoring all works, archaeologically excavating, and recording all archaeological remains. The archaeological excavation report was prepared and submitted post excavation works.

The Former Empire Hotel*, BLOC, 2016-2019

Josh project managed the delivery of both the historical archaeological and Aboriginal cultural heritage pre-approval assessments for the redevelopment of the former hotel site. He was responsible for preparing all documentation to support a s140 excavation permit. As an excavation director Josh was responsible for managing the historical archaeological and Aboriginal cultural heritage excavation programs in accordance with the dual conditions of approval. Josh was also responsible for preparing and presenting heritage induction material for contractors on-site.

Where not excavation director

Wollongong Harbour Precinct*, NSW Department of Industry, 2019-2020

Josh was responsible for managing the archaeological works within the state heritage listed Wollongong Harbour precinct in accordance with Section 57(2) Exemption (endorsed under Standard Exemption 7) to the Heritage Act 1977 and the historical archaeological methodology. The archaeological monitoring works were undertaken to support the service and mains relocations for the utilities and mains upgrade within the precinct. The archaeological monitoring report was prepared and submitted post archaeological works.

Griffith Park Stockton*, City of Newcastle, 2017-2019

Josh project managed the delivery of both the historical archaeological Aboriginal cultural heritage pre-approval assessments for the park and sub-surface utilities upgrades. Josh was responsible for managing the archaeological monitoring works undertaken in accordance with the Section 139(4) Exception 1B to the Heritage Act 1977. The archaeological monitoring report was prepared and submitted post archaeological works.

Newcastle Light Rail Project*, Transport for NSW, 2016 – 2020

Josh was client contact responsible for the management of both the historical archaeological and Aboriginal cultural heritage post approval conditions. Josh was responsible for providing on the ground heritage advice to the primary contractor and sub-contractors while also undertaking both Aboriginal cultural heritage and historical heritage assessments for project expansions. Josh was responsible for supervising and undertaking archaeological excavations along the approved route. The archaeological excavation report was prepared and submitted post excavation works.

Millers Point Telecommunications Program, VisionStream, Current

Josh is managing and responsible for the delivery of the final test excavation report in accordance with the Section 57 Exemptions. The excavation report details the archaeological monitoring works undertaken within the Millers Point and Dawes Point Village Precinct State Heritage Registered conservation areas for the installation telecommunication infrastructure. RPS undertook the archaeological monitoring and heritage management of all construction works in accordance with the appropriate conditions of approval.

National Broadband Network*, Telstra NBN Network Delivery, 2016 – 2020

Josh has overseen numerous historical archaeological and heritage assessments for the Telstra nbn delivery team throughout NSW. Josh has provided historical archaeological advice for delivery programs located within the boundary of local, State and National heritage listed items. Working with the delivery team, Josh has been able to provide advice that has supported the delivery of the program while managing and mitigating impacts to the heritage values.