FINAL ARCHAEOLOGICAL REPORT

Former Newcastle Court House
9 Church Street, Newcastle NSW



AMAC Archaeological

Kevin Hickson, Martin Carney & Kelly Strickland

Archaeo*logical* Management & Consulting Group

for
Built on behalf of

Azusa Sekkei & Nihon University

August 2021

Disclaimer

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Cover Image

East area, north part of brick drain [001] with natural brown clay [011] on both sides. Facing north.
AMAC Group, 27/03/2020, digital image 6923.

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EXECUTIVE SUMMARY

Summary of Historic Development

- The study site forms part of a larger portion of land reserved by the Crown for the settlement of Newcastle.
- A plan dating from 1836–1841 shows that while still under government ownership, the wider grounds had been 'reserved for military purposes' and several new buildings had been constructed to front the Newcomen Street.
- The study site remained undeveloped during this time.
- A new barrack wall has been built along the Church Street boundary to enclose the military grounds.
- The construction of Newcastle's second court house occurred in the early 1890s, replacing the c.1841 court house further north of the study site (on the corner of Hunter and Bolton Streets).
- The 1890s court house continued to be used throughout the 20th century.
- During World War II, four 'pill box' air raid shelters were constructed on the east side of the site.
- In the mid-20th century, the justice precinct was expanded to include three-storey buildings on both the east and west sides of the court house and a morgue in the southeast corner of the site.
- A new court house was constructed in Civic Place and in 2015 the 1890s court house was retired.

Summary of Fieldwork Program

East Side

- Evidence of the c.1840s sandstone military barracks wall running along Church Street was exposed in the northeast corner of the study site in a former driveway location.
- The remnant structures consisted of two sandstone walls [242] and [243] and a possible cross wall or rubble patch [244].
- This structure formed the barracks retaining wall fronting the study site.
- The function of the east-west southern wall [243], possibly formed an undocumented gated entry way, small sentry box or lower underground courses of wall south of the buttress for increased stability and support.
- Two portions of a below ground, ovoid shaped brick culvert [001] were exposed on the east side of the 1890s former court house building.
- The brick culvert [001] had been truncated by 20th century construction.

Central Rear

- A series of structural remains were exposed behind the court house and consisted of enclosed courtyards (1–5), square unroofed walled yards with a water closet in the corner of each.
- Courtyard 1 still partly stood at the time of archaeological monitoring.
- A large portion of Courtyard 2 remained intact and unexposed during excavation works.
- Deeper excavation for new water tanks involving removal of Courtyards 3 to 5 following archaeological recording.

- A rectangular shaped amenities block was exposed just south of the enclosed courtyards, with maximum external dimensions measuring approximately 6.33m (east-west) x 1.15m (north-south).
- External areas of the amenities block and enclosed courtyards appear to have been repeatedly surfaced with tar, asphalt and concrete.

West Side

- Archaeological inspection shows that large scale building activities in the 1960s for the construction of the administration building has truncated this area down to B horizon subsoils.
- The c.1840s barracks wall extended across the whole northern frontage of the study site, further north of the 1960s building footprint.
- Thus, low to moderate archaeological potential exists for more truncated structural remains of the sandstone wall to survive in situ along the west side frontage.

Revised Significance

- Prior to the construction of Newcastle's second court house in the c.1890s, the study site initially formed undeveloped paddocks of the wider military barracks.
- The former court house site is a locally significant resource for its symbolism as part of Newcastle's judicial system and a valuable historic asset to the local Newcastle community.
- The truncated structural remains of the c.1840s military barracks retaining wall, do not provide further understanding of the use of space in the pre court house occupation phase.
- The wall foundations do confirm the validity of historic plans which can assist with historic overlays at other nearby sites in the future.
- The post-1861 culvert is not a considered a rare type of structural remains, nor the earliest in its construction type in the wider context.
- It does signify government adoption and extended rollout of a particular type of successful underground stormwater management system being used in Windsor, Parramatta and Sydney from as early as the 1820s.
- As anticipated, there was a lack of deposition, however, the former court house building provides a physical representation of the site's long-time function.

Recommendations

- In compliance with Condition E25 of SSD9787, this final archaeological report must to be lodged with the Planning Secretary for sign off on that condition.
- Copies of the report must also be provided to the Heritage Council of NSW or its delegate, Heritage NSW.

Recommendations Regarding Future Work

- Should any redevelopment works be planned in areas still known to hold archaeological potential (see Section 6.0), a revised assessment of the proposed archaeological heritage impacts will be required in advance of any planned excavation works, to provide management advice and prevent disturbance to known relics on site.

GLOSSARY

Term	Definition
AMAC	Archaeological Management and Consulting Group
Archaeological feature	Archaeological material which is not considered a relic in terms of the NSW Heritage Act 1977. For example- postholes, artefact scatters, cesspits or rubbish pits
CMP	Conservation Management Plan
DCP	Development Control Plan
DP	Deposited Plan
Former relic	A deposit, artefact, object or material evidence whereby the integrity of the relic is viewed to have been destroyed or disturbed to the point where it is no longer considered to hold any significance as a relic in terms of the NSW Heritage Act 1977.
Heritage NSW	Formerly known as the Heritage Division, Heritage Branch. Now also governing body managing Aboriginal cultural heritage, previously known as Office of Environment and Heritage (OEH)
LEP	Local Environment Plan
LGA	Local Government Area
LTO	Land Titles Office
NPW Act	National Parks and Wildlife Act 1974
OEH	Now Heritage NSW (see above)
Relic	Defined by the NSW Heritage Act (see Section 1.5.3) 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"
S57	Refers to definition of Section 57 in the NSW Heritage Act 1977
S60	Refers to definition of Section 60 in the NSW Heritage Act 1977
S139	Refers to definition of Section 139 in the NSW Heritage Act 1977
S140	Refers to definition of Section 140 in the NSW Heritage Act 1977
SHI	State Heritage Inventory
SHR	State Heritage Register
SoHI	Statement of Heritage Impact
SSD	State Significant Development



Figure 1.1 **Aerial photograph showing the study site outlined in red.**
Note aerial has not been updated since redevelopment work occurred on site. SIX Maps, accessed 19th July 2021,https://maps.six.nsw.gov.au/

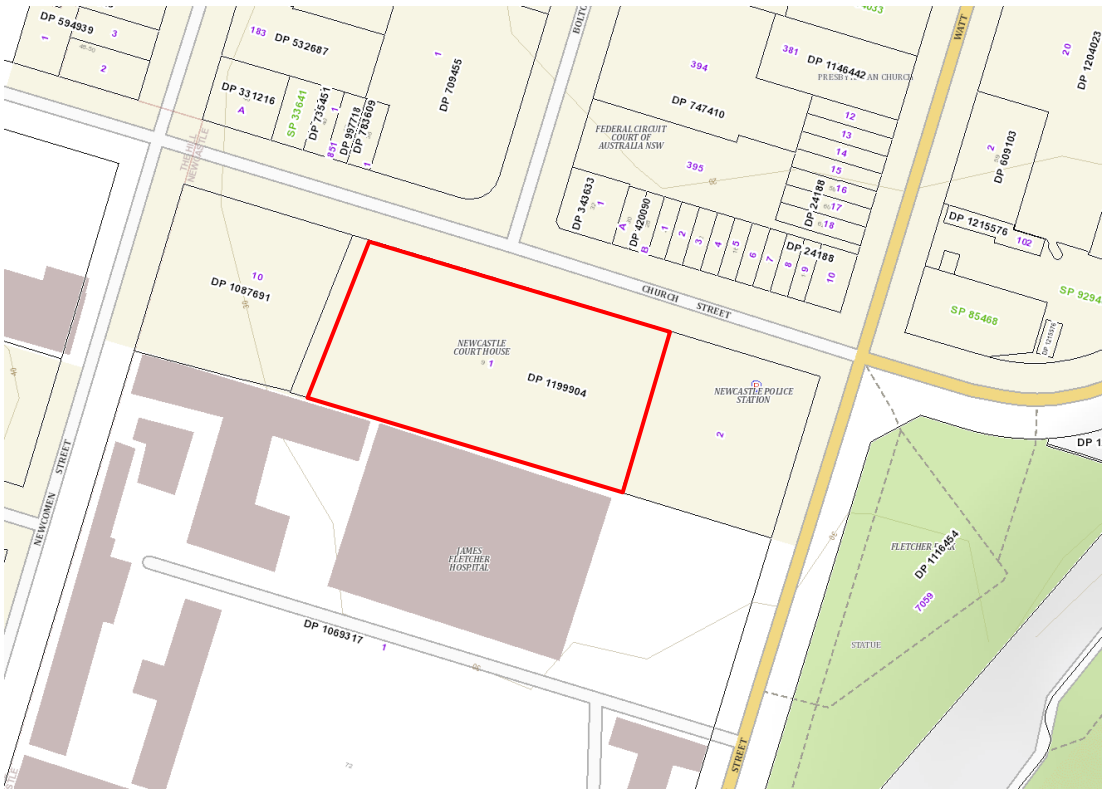


Figure 1.2 **Site location, study site outlined in red.**
Six Maps, accessed 19th July 2021, https://maps.six.nsw.gov.au/

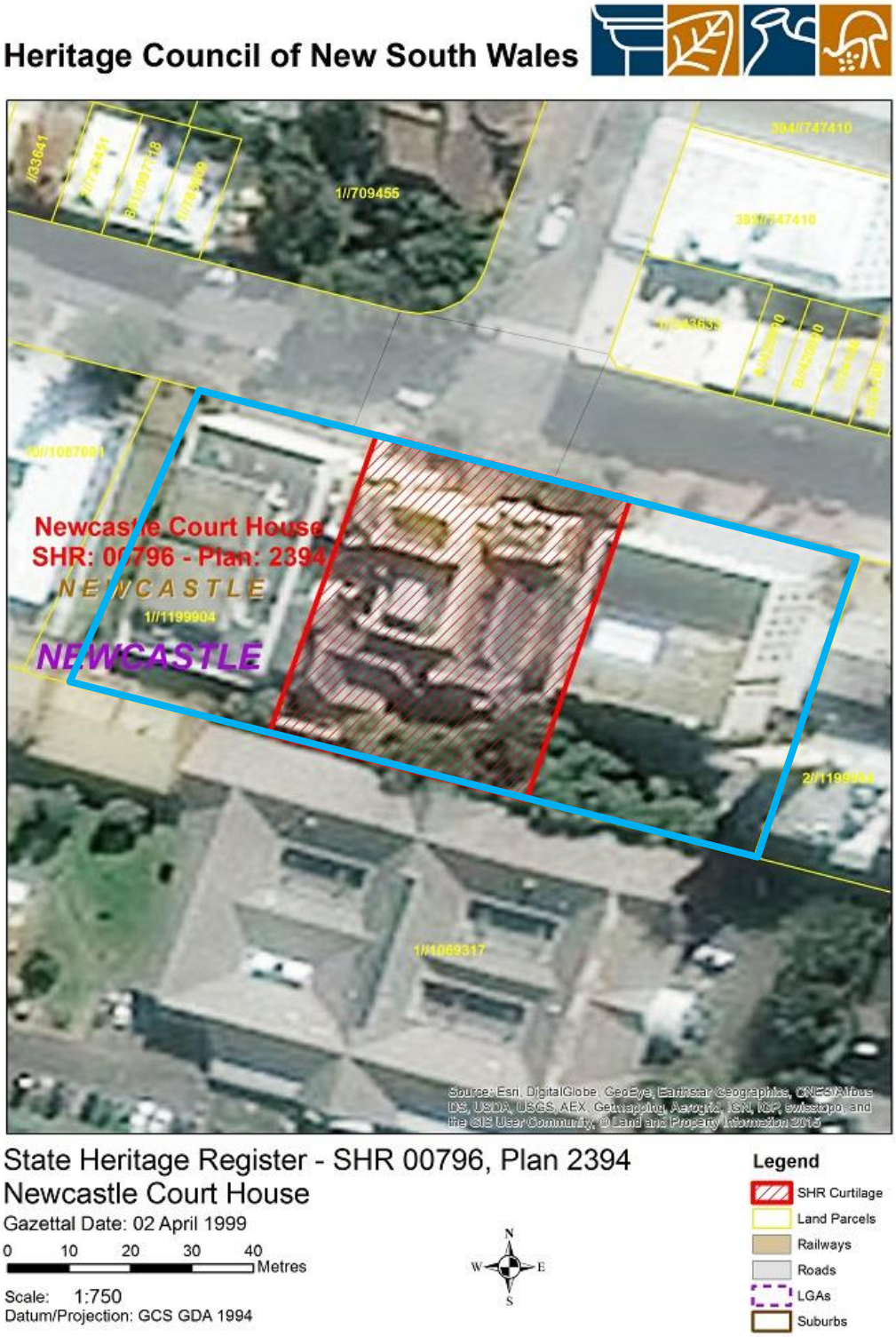


Figure 1.3 **State Heritage Register plan of SHR00796 – Newcastle court house (study site outlined in blue).**
NSW State Heritage Register Database, accessed 19th July 2021, https://www.environment.nsw.gov.au/heritageapp/HeritageItemImage.aspx?ID=5045560#ad-image-4



Figure 1.4 **State Heritage Register plan of SHR01841 – Newcastle Government House and Domain (study site outlined in blue).**
NSW State Heritage Register Database, accessed 19th July 2021, https://www.environment.nsw.gov.au/heritageapp/HeritageItemImage.aspx?ID=5060998#ad-image-2

1.0 INTRODUCTION

1.1 BACKGROUND

Built on behalf of Azusa Sekkei & Nihon University has commissioned the Archaeological Management and Consulting Group (AMAC Group) to prepare a Final Archaeological Report detailing the results of archaeological monitoring and excavation which occurred at the study site on different occasions between March 2020 and June 2021.

This final report has been prepared in accordance with Condition E25 of approved SSD9787:

E25. *The Applicant must prepare an archaeological report of the salvage excavation undertaken in accordance with condition C17. An interim report of the salvage excavation must be provided for the information of the Heritage Council of NSW and Council within one month of completion of the salvage work and a final report provided within 12 months of completion of the salvage work or within another timeframe agreed with the Planning Secretary. Copies of the report must also be provided to the NSW Heritage Division and Council.*

This Final Archaeological Report has also been prepared in accordance with Section 146 of *NSW Heritage Act 1977*.

1.2 STUDY AREA

The study site is the piece of land described as Lot 1 in Deposited Plan 1199904. The Street address is known as 9 Church Street, Newcastle, in the Parish of Newcastle, County of Northumberland (Figure 1.1–Figure 1.4).

1.3 SCOPE

The Final Archaeological Report has been prepared by AMAC Group to fulfil the second part of Condition E25 (see Section 1.1 above). A final archaeological report includes a trench, area or overall stratigraphic report detailing precisely what was found by area, phase and stratigraphic relationships and an analysis of the results of the work; a response to the research design, so far as the results allow, and a comparison with the results of similar sites in the local area where possible. The final report will also include a completed Harris Matrix, digitised records (context sheets, unit list, photographic register, and artefact catalogue), digitised plans, artefact analysis and artefact photography. Additional historical research may also be conducted in response to the finds of excavation.

This report considers Historical Archaeology only. This report conforms to Heritage Office Guidelines for Archaeological Assessment.[1] This report does not consider the potential Aboriginal archaeology of the study site, which was managed separately by AMAC Group in 2020. The heritage value of the structures currently standing on the study site is not assessed as part of this report.

The discovery of unknown and unassessed remains will require additional assessment and may require written notification to Heritage NSW under Section 146 of the Heritage Act 1977.

[1] Heritage Office and Department of Urban Affairs and Planning (1996).

1.4 AUTHOR IDENTIFICATION

This report was written by Kevin Hickson and Kelly Strickland with internal review by Martin Carney. The history as presented in Section 2.1 forms a summary of development from the original history presented in the Baseline Archaeological Assessment by AMAC Group (November 2018) and authored by Emma Williams, with additional contributions from post excavation research presented in Section 2.2. Table 1.1 shows a breakdown of authorship per report section.

Table 1.1 Authorship of report.

Section	Author
1.0 – Introduction	Kelly Strickland
2.0 – Site History	Emma Williams; Kelly Strickland
3.0 – Physical Evidence	Kevin Hickson
4.0 – Response to Research Design	Kelly Strickland
5.0 – Revised Assessment of Significance	Kelly Strickland
6.0 – Revised Archaeological Potential	Kelly Strickland
7.0 – Permit Compliance	Kelly Strickland
8.0 – Results and Recommendations	Kelly Strickland
9.0, 10.0 – Bibliography and Appendices	Kevin Hickson

1.5 STATUTORY CONTROLS AND HERITAGE STUDIES

1.5.1 NSW Heritage Act 1977 (as amended)

The NSW Heritage Act 1977 affords automatic statutory protection to relics that form archaeological deposits or part thereof. The Act defines relics as:

> Relic means 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

Sections 139 to 145 of the Act prevent the excavation or disturbance of land for the purpose of discovering, exposing or moving a relic, except by a qualified archaeologist to whom an excavation permit has been issued by the Heritage Council of NSW.

1.5.2 National Parks and Wildlife Act (1974)

The *National Parks and Wildlife Act 1974* (as amended) affords protection to all Aboriginal objects and is governed by the NSW Office of Environment and Heritage. These objects are defined as:

> any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.[2]

[2] Part 1 Section 5, National Parks and Wildlife Act 1974.

It is an offence to destroy Aboriginal objects or places without the consent of the Director-General.[3] Section 86 discusses 'Harming or desecration of Aboriginal objects and Aboriginal places':

(1) A person must not harm or desecrate an object that the person knows is an Aboriginal object. Maximum penalty:
  (a) in the case of an individual-2,500 penalty units or imprisonment for 1 year, or both, or (in circumstances of aggravation) 5,000 penalty units or imprisonment for 2 years, or both, or
  (b) in the case of a corporation-10,000 penalty units.
(2) A person must not harm an Aboriginal object. Maximum penalty:
  (a) in the case of an individual-500 penalty units or (in circumstances of aggravation) 1,000 penalty units, or
  (b) in the case of a corporation-2,000 penalty units.
(3) For the purposes of this section, "circumstances of aggravation" are:
  (a) that the offence was committed in the course of carrying out a commercial activity, or
  (b) that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.
  This subsection does not apply unless the circumstances of aggravation were identified in the court attendance notice or summons for the offence.
(4) A person must not harm or desecrate an Aboriginal place.
Maximum penalty:
  (a) in the case of an individual-5,000 penalty units or imprisonment for 2 years, or both, or
  (b) in the case of a corporation-10,000 penalty units.
(5) The offences under subsections (2) and (4) are offences of strict liability and the defence of honest and reasonable mistake of fact applies.
(6) Subsections (1) and (2) do not apply with respect to an Aboriginal object that is dealt with in accordance with section 85A.
(7) A single prosecution for an offence under subsection (1) or (2) may relate to a single Aboriginal object or a group of Aboriginal objects.
(8) If, in proceedings for an offence under subsection (1), the court is satisfied that, at the time the accused harmed the Aboriginal object concerned, the accused did not know that the object was an Aboriginal object, the court may find an offence proved under subsection (2).[4]

1.5.2.1 Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW

In October 2010 DECCW (now the Office of Environment and Heritage) introduced the "Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW".[5] This code of conduct was released in response to changes in the NPW Act which now states "A person must not harm or desecrate an object that the person knows is an Aboriginal object" or that "A person must not harm or desecrate an Aboriginal place" (NPW Act, Amendment 2010). Individuals or organisations who are contemplating undertaking activities which could harm Aboriginal objects should consult this code or engage the services of an appropriately qualified archaeological consultant to carry out a Due Diligence study on any proposed development.

[3] Part 6 Section 90 (1) National Parks and Wildlife Act 1974.
[4] Part 6 Section 86, National Parks and Wildlife Act 1974.
[5] Office of Environment and Heritage, http://www.environment.nsw.gov.au/resources/cultureheritage/ddcop/10798ddcop.pdf

This code provides a process whereby a reasonable determination can be made as to whether or not Aboriginal objects will be harmed by an activity, whether further investigation is warranted, and whether the activity requires an Aboriginal Heritage Impact Permit (AHIP) application.

If through this or any other process which meets the standards of this code, such as the commission of an Environmental Impact Assessment, one has already taken reasonable steps to identify Aboriginal objects in an area subject to a proposed activity. Subsequently if it is already known that Aboriginal objects will be harmed, or are likely to be harmed by an activity, then an application should be made for an AHIP.

1.5.3 State Heritage Register and Inventory

The NSW State Heritage Register or Inventory is a list which contains places, items and areas of heritage value to New South Wales. These places are protected under the New South Wales Heritage Act 1977.

The site is listed on the NSW State Heritage Register as item number 00796 'Newcastle Court House' (full listing in Appendix 8.1 in AMAC, November 2018). This heritage curtilage is restricted to centre third of the study site, surrounding the c.1892 court house itself. It is described as a grand example of late 19th century civic architecture in the town.

The other two thirds of the site fall within State Heritage Register Item 01841 – 'Newcastle Government House and Domain' (full listing in Appendix 8.2 in AMAC, November 2018). This listing is associated with the site's initial reservation as Crown land, forming part of a wider area of government land holdings for military barracks and commissioner's residence.

1.5.4 National Heritage List

The National Heritage List is a list which contains places, items and areas of outstanding heritage value to Australia. This can include places and areas overseas as well as items of Aboriginal significance and origin. These places are protected under the Australian Government's EPBC Act.

The study site is not listed on the National Heritage List.

1.5.5 Commonwealth Heritage List

The Commonwealth Heritage List can include natural, Indigenous and historic places of value to the nation. Items on this list are under Commonwealth ownership or control and as such are identified, protected and managed by the federal government.

The study site is not listed on the Commonwealth Heritage List.

1.5.6 Newcastle Archaeological Management Plan (1997)

Suters Architects and Planners, in association with Lavelle, C and M. J. Doring Pty Ltd and Turner created an Archaeological Management Plan (hereafter AMP) for Newcastle City Council in 1997 regarding potential archaeological sites in Newcastle. The study site, 9 Church Street, is included in Item 0059 as the 'court house'. Its character of occupation is described as government and administration. It has been located within the original convict settlement and the history of occupation of the site from early plans notes the site as a government enclosure and

gardens in wider association with the commissioner's residence during the 1820s and 1830s. A perimeter wall on the Church Street boundary is noted as being associated with the development of the military barracks in the 1840s. The AMP inventory sheet notes the below ground resource as a 'disturbed/potential site'.

Item 1127, 'vertical shaft and tunnel', relates to a rounded brick-lined tunnel rediscovered in 1938 and surviving beneath the southern side of Church Street. This portion of the drain/ culvert tunnel appears to have been used for stormwater management and parts of the tunnel are known to have been repaired with concrete by the council in the late 20th century. The AMP inventory sheet states that 'the tunnel would survive deep underground' and all excavation works in this location are recommended to be archaeologically monitored.

1.5.7 Newcastle Local Environment Plan 2012

The Newcastle Local Environment Plan was prepared in 2012. Heritage Conservation is discussed in Part 5; Section 5.10 of this document. The following section highlights the archaeological considerations of a site in relation to developments:

> 7) Archaeological sites
> The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the *Heritage Act 1977* applies):
> (a) notify the Heritage Council of its intention to grant consent, and
> (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

Schedule 5 of this plan lists Items of Environmental Heritage with Heritage Items listed in Part 1, Heritage Conservation areas listed in Part 2 and Archaeological Sites listed in Part 3.

The site is listed as heritage item I375, 'Court house', and item 1473, 'Newcastle Government House and Domains' in Part 1 of Schedule 5 of the Newcastle Local Environmental Plan 2012. The item is described as being of local significance. The site is also included in C6 "The Hill Heritage Conservation Area", which is listed in Part 2 of Schedule 5 (Figure 1.3).[6]

1.6 PREVIOUS HERITAGE STUDIES AND REPORTS

1.6.1 TKD Architects – Newcastle Courthouse, 9 Church Street, Newcastle. Conservation Management Plan (August 2015)

Tanner Kibble Denton Architects (TKD Architects) prepared a Conservation Management Plan (hereafter CMP) on behalf of Government Property NSW for the study site. Concerning the archaeological significance of the site the CMP notes:

> The Courthouse site is amongst the most significant sites in the Newcastle city area, having been in continual occupation by key civic functions from the earliest days of the settlement. [7]

The CMP highlights the possibility for remains of a mid-19th century brick culvert to survive below ground in between the c.1892 court house and east administration

[6] Newcastle City Council 2012.
[7] TKD Architects (August 2015), p. 69.

building, forming a southern branch leading towards James Fletcher Hospital. Part of this brick lined culvert has been exposed on other portions of Church Street and appears to form a double ring brick-lined drainage tunnel (see Section 3.4 of this report for discussion). The CMP advised that though the culvert is yet to be listed on the Newcastle Local Environment Plan,

> "The sections below the Administration building have been replaced in concrete pipe, but intact sections may be present between the southern end of the current building and the hospital boundary. The culvert is not listed separately as a heritage item, but excavation of or near the culvert would be treated as an archaeological relic under the Heritage Act. The City of Newcastle intends to list the culvert and pipe as items of local heritage significance."[8]

> "Future uses at the Courthouse site are likely to require excavation for construction of new buildings and site infrastructure and landscaping. Such works have potential to impact remnant historical archaeological resources, including the convict brick culvert and drain, and should therefore be managed to avoid, minimise or mitigate impacts as much as possible. Where excavation or ground disturbance is unavoidable then it should be undertaken in such a way as to improve the understanding of the history and heritage of the site."[9]

There is potential for the proposed development to encroach on the mid-19th century culvert. Refer to Section 5.0 of this report for a discussion.

1.6.2 AMAC Group – Baseline Archaeological Assessment. Former Newcastle Court House, 9 Church Street, Newcastle NSW (November 2018)

AMAC Group prepared a Baseline Archaeological Assessment of the study site in November 2018 for Azusa Sekkei and Nihon University. This report provided an assessment of the site's history, archaeological potential, significance and potential impacts to the historical archaeological record of the site based on the proposed development at the time. Recommendations of the report included:

- It is recommended that an Archaeological Research Design and Excavation Methodology be prepared during the detailed design phase (post DA) in order to develop mitigation measures to manage the archaeological resource at the site.
- The Research Design and Methodology will form part of an overall s60 permit application submitted to the Heritage Division, or documentation submitted to another relevant delegate as part of a State Significant Development.

The Baseline Archaeological Assessment (November 2018) was submitted as part of the State Significant development application. This document was been prepared both in response to the recommendations of the initial Baseline Archaeological Assessment and Condition C17 of SSD9787 development consent.

1.6.3 AMAC Group – Archaeological Research Design and Excavation Methodology. Former Newcastle Court House, 9 Church Street, Newcastle NSW (February 2020)

In compliance with Condition C17 of issued SSD9787, AMAC Group were commissioned to author an Archaeological Research Design and Excavation Methodology to mitigate impacts to archaeological remains from the approved

[8] TKD Architects (August 2015), p. 117.
[9] TKD Architects (August 2015), p. 140.

development.[10] This document was submitted and endorsed by Heritage NSW, on behalf of the Delegate, in March 2020. All archaeological field activities occurring on site were to be undertaken and guided by the details of the Research Design and Excavation Methodology (see Section 3.0).

1.7 ACKNOWLEDGMENTS

Benjamin Moss and Sita Vasanthakumar of Built, for their assistance during the final reporting process. Also, Benjamin Bates, Benjamin Moss and Robbie Clydesdale of Built for their assistance during the field work phase.

[10] AMAC Group (February 2020).

2.0 SITE HISTORY

2.1 SUMMARY OF SITE DEVELOPMENT

The following forms a summary of historic development of the study site as well as a selection of historic maps, illustrations and photographs. For a complete history of the site, please consult the Baseline Archaeological Assessment by AMAC Group.[11]

Colonisation of Newcastle c.1804 – 1890s

- The study site forms part of a larger portion of land reserved by the Crown for government use during the initial European colonial settlement of Newcastle.
- Early 19th century plans show that the study site was a vacant piece of land, located east of a c.1819 convict-built parsonage and further northwest of the commissioner's residence which was located on the higher portions of the crest towards the sea cliffs (Figure 2.1).
- Initially reserved for the 'Glebe', a plan dating between 1836-1841 shows that while still being under government ownership, the wider grounds had been 'reserved for military purposes and several new buildings had been constructed to front the extension of Newcomen Street (Figure 2.3).
- The study site remained undeveloped at this point in time, though a 'new barrack wall' had been constructed along the Church Street boundary in order to enclose the military grounds (Figure 2.3).[12]
- An underground brick culvert was constructed along Church Street during the mid-19th century in an effort to control some of the stormwater runoff from higher parts of the city.
- The exact construction date of the western brick-lined tunnel extension running off the Church Street tunnel and underneath the study site is unclear, though it can be assumed to postdate 1861 as 1862 seems to form the earliest date that the portion of brick lined culvert running along Church Street in between Watt and Newcomen Streets could have been constructed.
- The inventory sheet for the drainage tunnel notes that the original c.1861 Watt and Church Streets shaft (not part of the study site) was rediscovered in 1938 and that "the tunnel ran westwards under Church Street or possibly under the Court, and ran eastwards to emerge as an adit in the cliff face".[13]
- It is not known if the western branch of the tunnel that runs across the study site was constructed at the same time as the Church Street tunnel or later.
- The buildings within the military barracks were later refurbished and used as an industrial school for girls (later the Reformatory for Girls) from 1867 until 1871 where it was converted into a hospital for the mentally ill.
- During these conversions, the study site appears to have continued to remain undeveloped as paddocks among the wider grounds of these occupation phases (Figure 2.4–Figure 2.5).

[11] AMAC Group (November 2018).
[12] 'Newcastle Government House and Domain', NSW State Heritage Register, accessed 1st November 2018.
[13] 'Vertical Shaft and Tunnel', Newcastle Archaeological Management Plan (February 1997), Inventory sheet 1127.

Newcastle Court House c.1890s – 2016

- By 1889 the original court house on the corner of Hunter and Bolton Streets, further north of the study site, was considered beyond repair and "a disgrace to the Government of the colony".[14]
- Plans for a new court house to be constructed on the study site were approved that same year.[15]
- The court house was designed by architect James Barnet and was given a budget of £15,000.[16] The majority of building works had been completed by November 1891, though the court house was officially opened in March 1892.[17]
- The building is in the Victorian Italianate style and faces the T-intersection of Bolton Street. The design is symmetrical, with a large arched tower entrance to the central court room. This main entrance is flanked by two side single storey side wings. The building was constructed of rendered brick with a basement level containing cells to house people awaiting trial (Figure 2.13).[18]
- The court house building remained unchanged until the late 1940s when an extension was built to the east (Figure 2.10) as the original building was now too small.[19]
- A plan dated to the late 1940s shows the administration building (later magistrates building) with WWII air raid shelters in the rear yard (Figure 2.10).
- The 1940s plan also shows the location of the underground brick culvert branching off from the post-1861 Church Street culvert, running north-south through the site and into the grounds of James Fletcher Hospital (Figure 2.9).
- This building was altered in 1959 and a car park was added at the rear along with a separate morgue building (Figure 2.14).[20]
- Another court building was added to the west of the c.1890s court house building sometime after 1964.
- Repairs and seismic strengthening works occurred in 1991 following 'extensive damage' from the 1989 earthquake.[21]
- The c.1890s court house was in use until 2016 when a new court house was built in Newcastle's Civic Place, on Hunter Street.

[14] Newcastle Morning Herald and Miners' Advocate (05.06.1889), p. 4.
[15] Evening News (02.07.1889), p. 5.
[16] The Daily Telegraph (31.01.1890), p. 4.
[17] Newcastle Morning Herald and Miners' Advocate (02.11.1891), p. 5; Sydney Morning Herald (01.03.1892), p. 8.
[18] Sydney Morning Herald (01.03.1892), p. 8.
[19] TKD Architects (August 2015), p. 19.
[20] TKD Architects (August 2015), p. 22.
[21] "Main Works Begin to Repair Court Buildings", Newcastle Herald (29.12.1990).

2.2 POST EXCAVATION RESEARCH

The following additional historic research has been undertaken in response to the specific archaeological remains exposed and recorded during archaeological monitoring (Section 3.0). This section builds upon the site history originally presented in the archaeological assessment written by AMAC Group in 2018 and contains additional historic maps, photographs and sketches to complement the overall development of the site.[22]

2.2.1 C.1840s Military Barracks Wall

The study site formed a portion of larger land which was initially reserved for the Glebe but quickly reassigned to the military barracks by 1835 (Figure 2.2). At this point in time Church Street was yet to be formalised and plans showing its sketched alignment also showed an 'old wall' running through what is now the middle of the street (Figure 2.2). A plan dating between 1836 and 1841 shows the development of the wider military grounds and several new buildings had been constructed to front the extension of Newcomen Street (Figure 2.3). The study site remained undeveloped though a 'new barrack wall' had been constructed along the Church Street boundary in order to enclose the military grounds.

The portion of wall running along Church Street was constructed with mortared sandstone blocks and appeared to have sat eight or nine courses high (Figure 2.8). Two historic photographs dated to the 1880s (Figure 2.5–Figure 2.6) show the rear profile of the wall which runs along the north boundary of the study site. The rear of the wall has been constructed with a sequence of square shaped buttresses to stabilise and support the wall. In particular, the rear of the wall at the northeast corner of the site (Figure 2.5) appears to have had additional rubble or fill built up against it in between the buttress to increase stability over time.

Historic photographs of Newcastle demonstrate that the study site continued to remain undeveloped throughout the mid to late 19th century, with the barrack wall still prominently visible along the Church Street frontage (Figure 2.4 and Figure 2.5). These photographs also demonstrate the sharp, sloping topography of Newcastle East and The Hill regions to which the town developed around (Figure 2.4). The lowest point of the wider military grounds, later converted into the Industrial School for Girls in the late 1860s, was its Church Street frontage. Newspaper articles dating to the 1860s and 1870s highlight multiple instances of drainage problems after episodes of heavy rainfall across this area was affecting the structural integrity of structures such as the 'old barrack wall' (see Section 2.2.2 below) which had already been subject to partial collapse.[23] This could be why additional rubble or fill was being packed behind the wall in the latter parts of the 19th century as the study site would have been pooling extensive surface water runoff from higher grounds to the south (Figure 2.5).

The 'old barrack wall' along the northern boundary was demolished in 1890 for the construction of the court house. Photographs taken in 1948 during the construction of the magistrate building (Figure 2.7) show that the c.1840s barrack wall was still standing at the adjacent police station site with a visibly extensive eroded wall face.

[22] AMAC Group (November 2018).
[23] The Sydney Morning Herald (10.05.1869), p. 4.

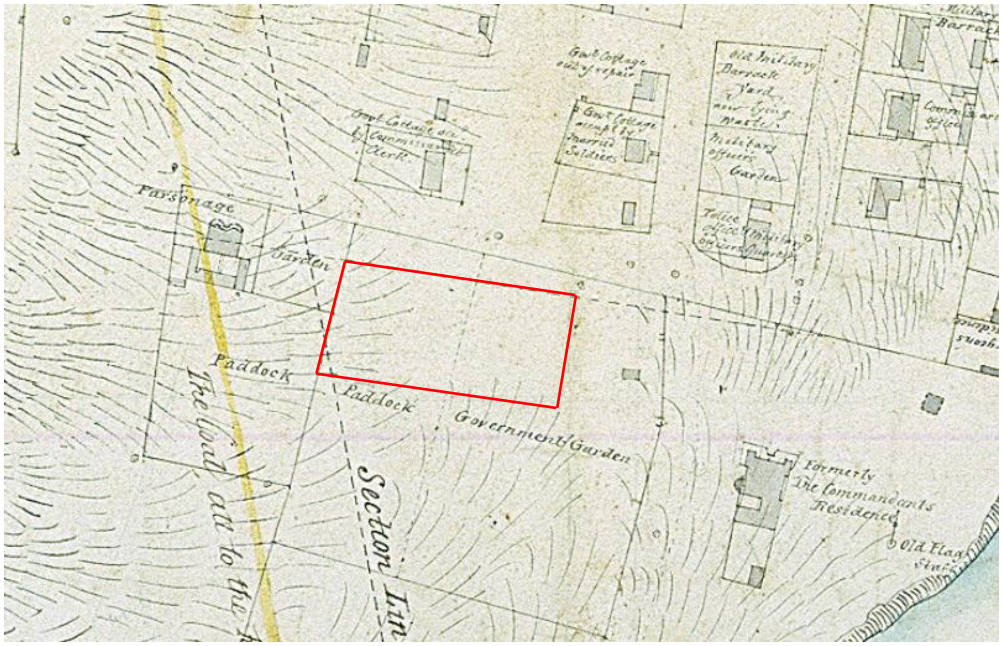


Figure 2.1 **1830 Armstrong plan, study site outlined in red.**
Note that the later south alignment of Church Street had been marked out on this plan. Alexander Turnbull Library, National Library of New Zealand.

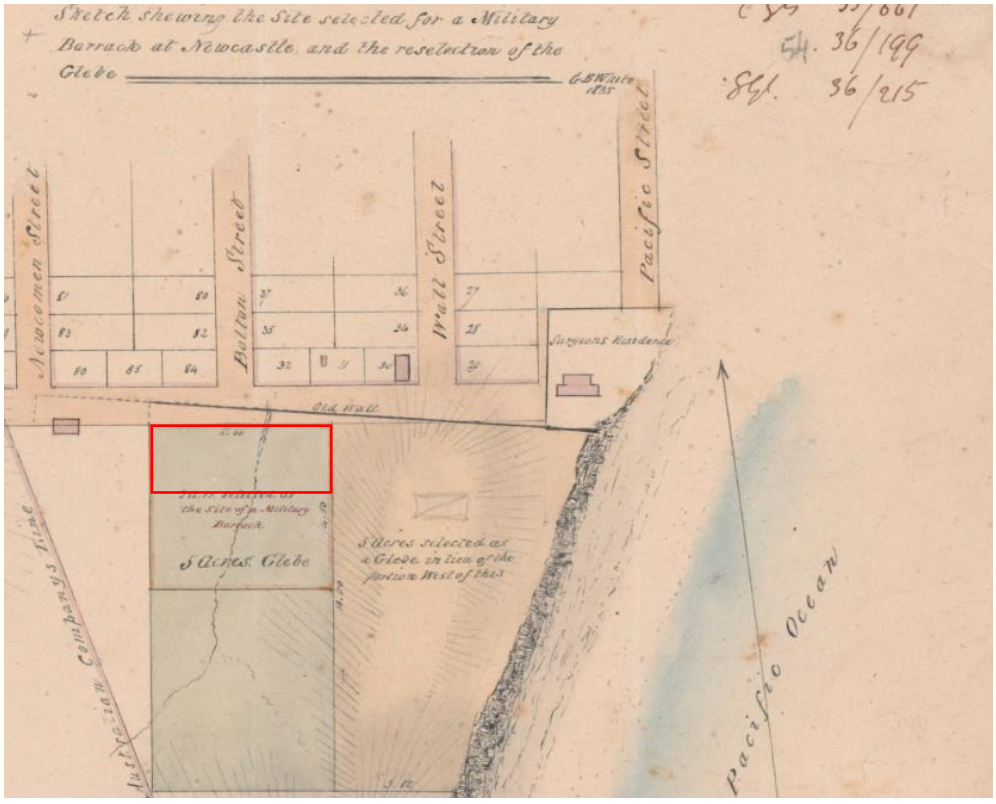


Figure 2.2 **Part of an 1835 Surveyor General's field book entry, showing the proposed change of land originally allocates to the Glebe be changed to military barracks.**
Note 'old wall' shows the previous street alignment prior to the formalisation of Church Street. NSW State Records, Surveyor General's Sketch Book 3 Folio 31.



Figure 2.3 **1836-1841 plan, showing study site shaded in red.**
Note 'new barrack wall' written on plan. Newcastle Region Library LHMB 333.3/16.

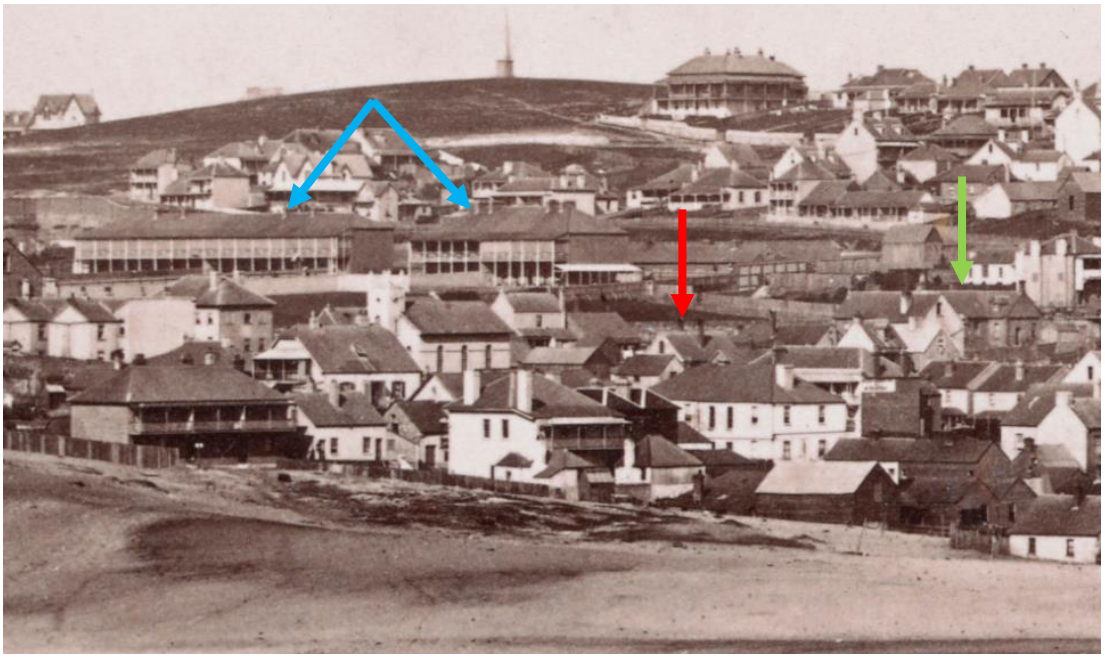


Figure 2.4 **Part of an 1875 photograph facing southwest, partly showing the study site with the former military barracks at rear.**
Key:
Red arrow: c.1840s sandstone barracks wall along north boundary.
Blue arrow: former military barracks buildings fronting Newcomen St.
Green arrow: Parsonage on corner of Church and Newcomen Sts.
State Library of Victoria, digital reference h141644.

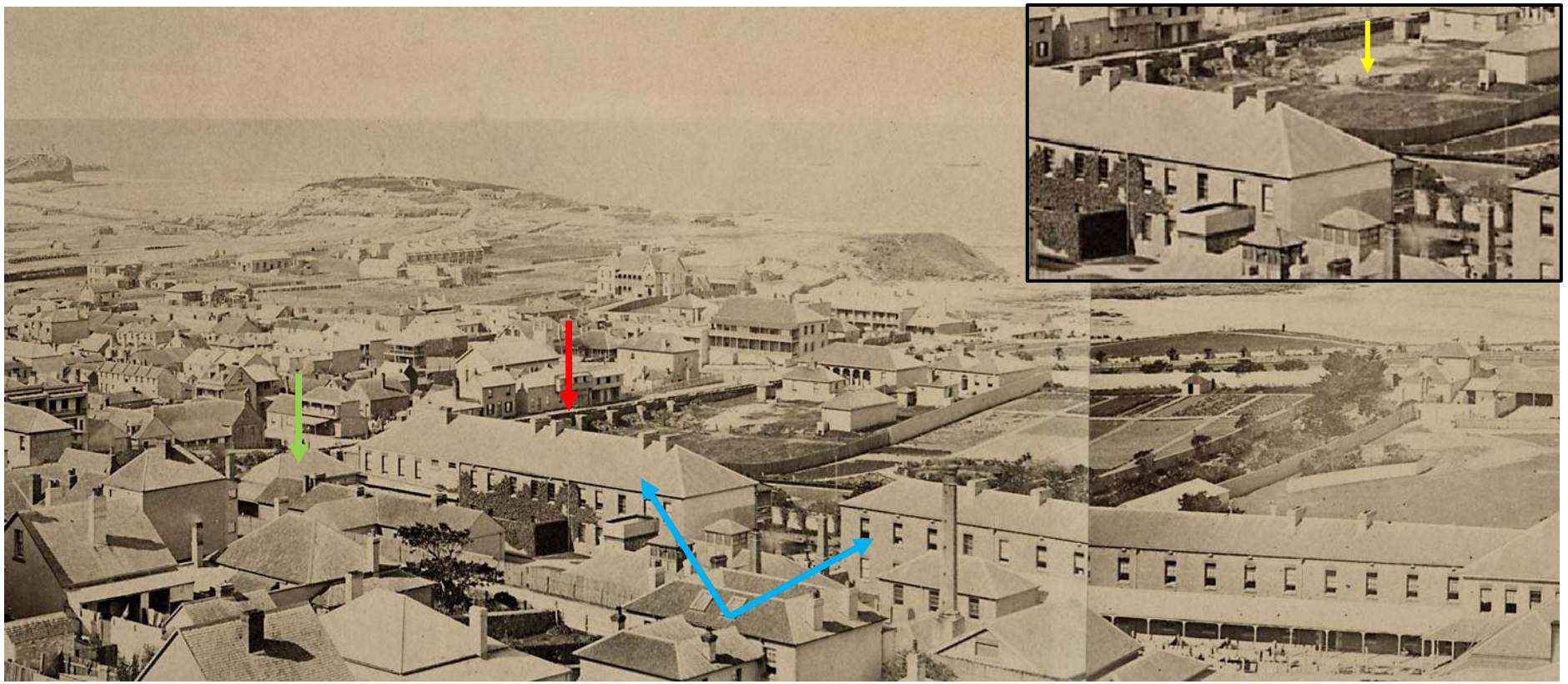


Figure 2.5 **Part of John Rae's c.1880s photograph of Newcastle, facing northeast and showing the study site and c.1840s barracks wall.** Also note the southern rear boundary of the study site is fenced off from the former military grounds with a timber fence. University of Newcastle Cultural Collections, accessed from Hunter Living Histories, 'John Rae and Newcastle', posted 13th September 2011.

Key:
Red arrow: c.1840s sandstone barracks wall along north boundary of study site.
Blue arrow: former military barracks buildings fronting Newcomen St.
Green arrow: Parsonage on corner of Church and Newcomen Sts.
Yellow arrow: timber fence at east boundary of study site separating it from police barracks.



Figure 2.6 **An undated photograph showing the vacant study site at right (red arrow), fenced off from the hospital and parsonage grounds.** Note that the c.1840s retaining wall along Church Street is still standing. Based on the presence of Kirkwood House extension and the absence of Newcastle court house, this photograph is believed to have been taken between 1886-1891. Private Collection.

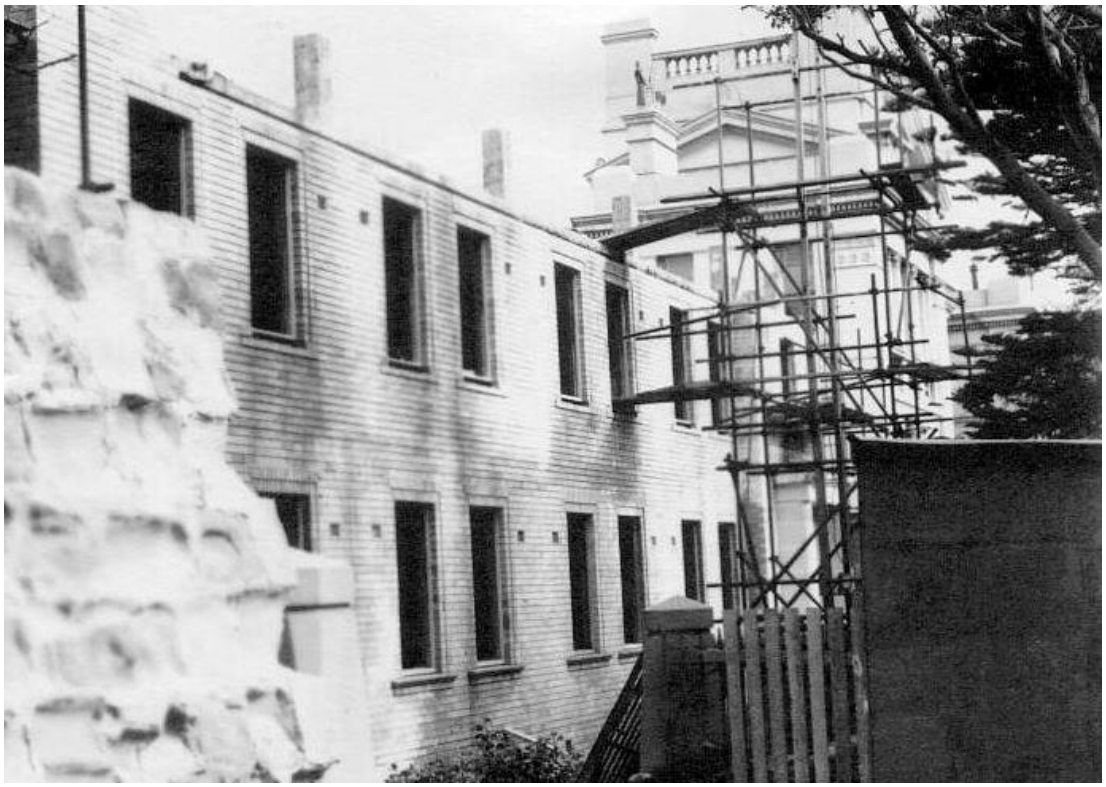


Figure 2.7 **A photograph dated to 1948 during the construction of the administration building, showing remnant standing portion of the c.1840s barracks wall at adjacent police station site.** Newcastle Library, digital collection reference 104/000254.



Figure 2.8 **A 1966 photograph of the c.1840s sandstone wall from another part of Church Street (not on study site) showing profile, condition and construction detail.**
Newcastle Library, digital collection reference 104/006656.

2.2.2 Post 1861 underground brick culvert

The history presented in the November 2018 assessment by AMAC Group detailed that an underground brick culvert was constructed east-west along Church Street during the mid-19th century in an effort to control some of the stormwater runoff from higher parts of the city.[24] It is known that sometime postdating the Church Street culvert's construction in the early 1860s that a north-south underground culvert was constructed off the east-west Church tunnel and ran through the study site (Figure 2.9 and Figure 2.10).

Though no specific reference has been found in newspaper articles to link public tenders to the site's specific underground culvert works, later 20th century public works plans (Figure 2.9) show that the culvert extended further than the southern boundary of the study site and into the former military barracks. As the study site formed undeveloped land in the former wider military barracks, operating as the Industrial School for Girls by the late 1860s, it can be assumed that the branch of the brick culvert running underneath the study site was constructed for the purposes of draining water away from the barracks grounds. Historic photographs demonstrate it sat at a considerably higher level compared to the study site (Figure 2.4).

Newspaper articles dating to the 1860s and 1870s further detail the ongoing drainage issues surrounding Newcastle East and The Hill. It seemed that episodes of heavy rainfall resulting in significant water runoff into the lower topographic slopes of Watt, Bolton and Wolfe Streets and the headmaster of the Industrial School for

[24] The Newcastle Chronicle and Hunter River District News (6th April 1861), p. 2.

Girls was continuously appealing to Council for drainage improvements in Newcomen Street and surrounding areas, claiming that heavy rainfall was destabilising infrastructure such as the 'old barracks wall'. In May 1869, heavy rainfall

> "The water rushed down from the hill with overwhelming impetuosity, and, in some of the low-lying localities of the town, the streets were flooded…About a hundred feet of the old barrack wall in the rear of the Industrial School fell down – the noise made by the crash being heard by many of the residents if Church, Upper Newcomen and Tyrell streets."[25]

Historic photographs postdating this article show that the portion of collapsed wall was not the part running along the study site (Figure 2.4–Figure 2.5, see Section 2.2.1 above). However, it does provide a greater understanding as to why Newcastle placed considerable emphasis into designing and executing large scale, underground drainage schemes during the mid to late 19th century, in an effort to alleviate the problems of the natural topography that the town had designed itself around. The underground brick culverts were retained and still being utilised well into the 20th century, portions being repaired or partly replaced with concrete stormwater pipes as required (see Section 3.4.5).

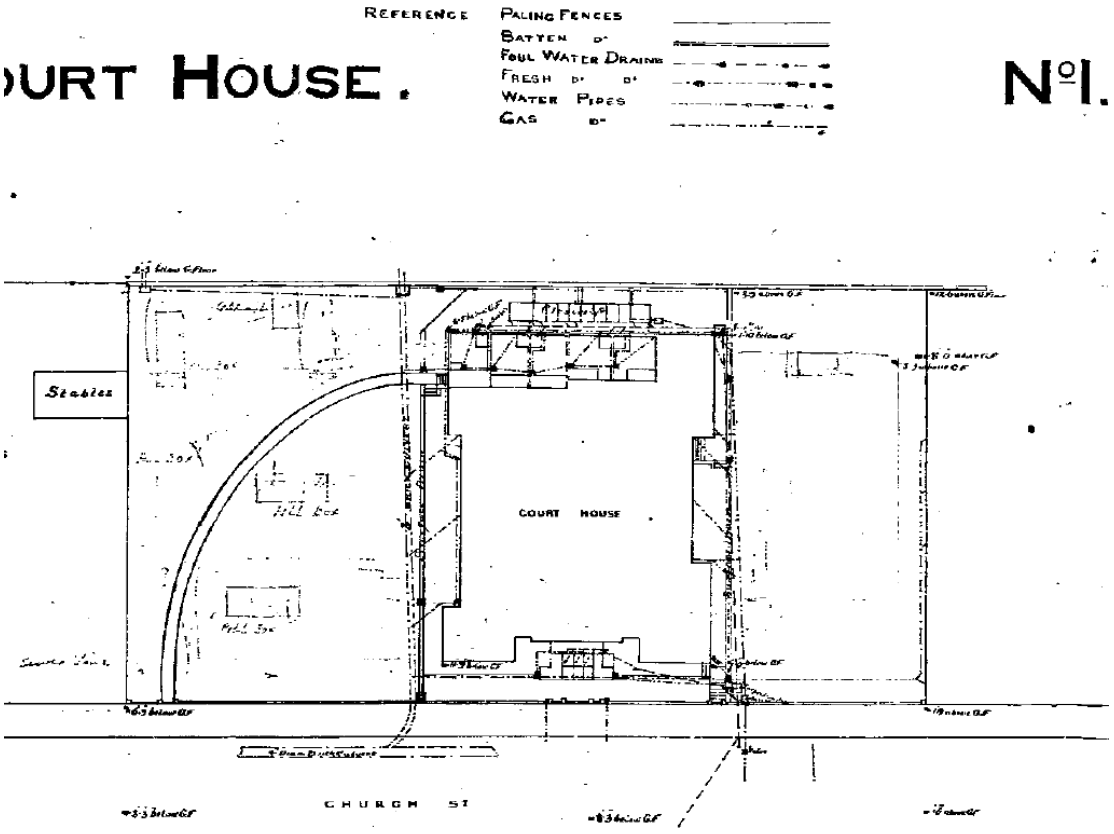


Figure 2.9 **Part of a pre-1945 NSW Public works plan showing below ground culvert location running north-south through the site and continuing past the southern boundary.**
This plan also details underground services to the amenities blocks and court house. Date of plan obtained on basis of marked 'pill box' WWII shelters. NSW Public Works plan reference PC386/17.

[25] The Sydney Morning Herald (10.05.1869), p. 4.

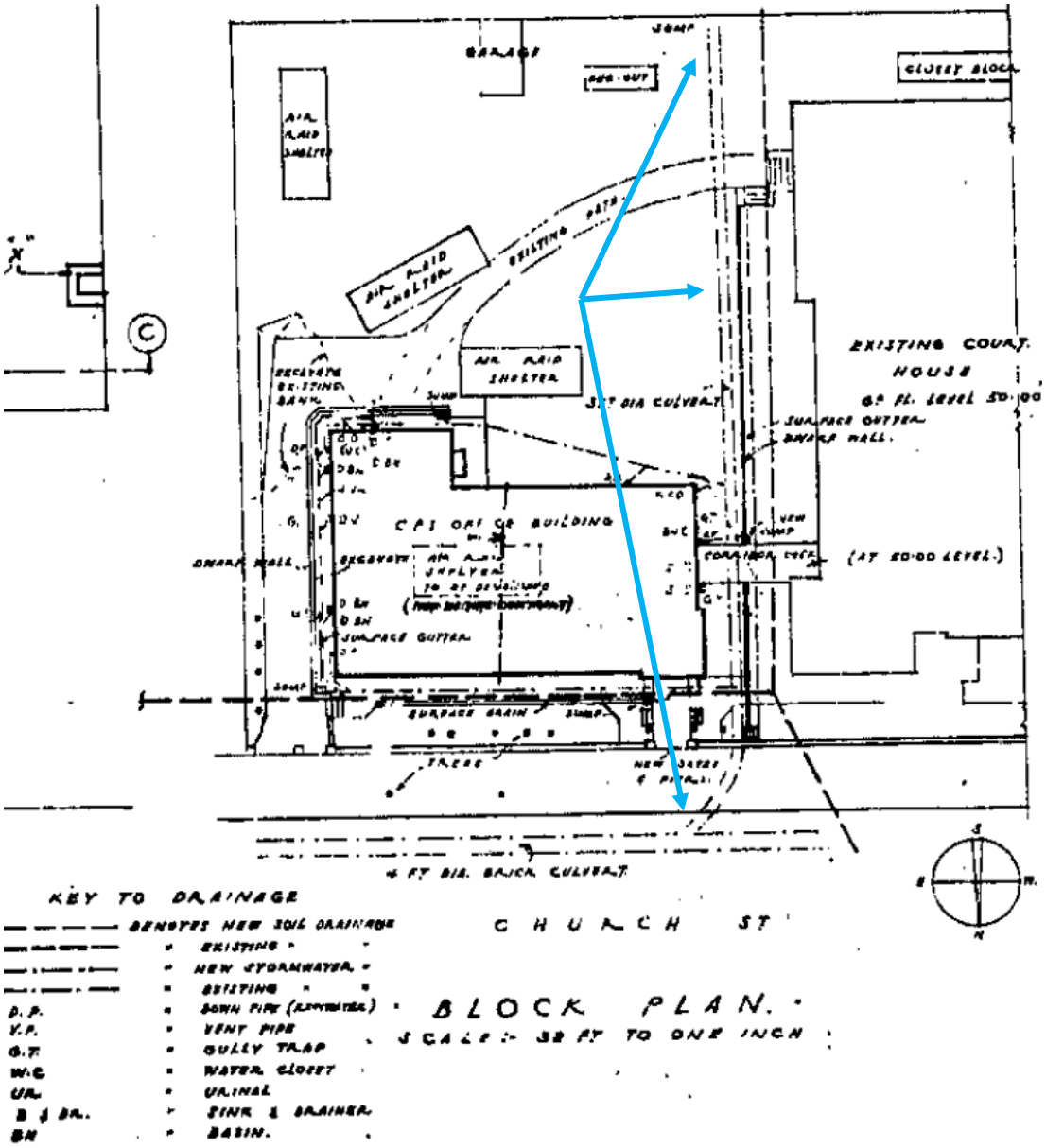


Figure 2.10 **Part of a 1945 block plan showing the proposed magistrate building in the northeast corner of the site and location of the post-1861 below ground brick-lined culvert (blue arrow).**
NSW Public Works plan reference PC386/29.

2.2.3 Court House – Private courtyards and amenities block

Public works plans and surveys showing the new court house building fronting Church Street include detailed plans of the rear of the building where private and public amenities were to be located. The ground floor construction plan (Figure 2.11) showed that five 'yards' were attached to the rear of the court house. The plan further indicates that these courtyards were private enclosed, square walled yards with a water closet in the corner of each. An 1893 photograph of the court house following its completion and showing a small portion of the easternmost courtyard indicates that these spaces were unroofed (Figure 2.13).

Access to each courtyard appears to have been from a staircase from individual offices in the internal part of the court house which were later closed off when these yards were removed (Figure 2.11–Figure 2.12). The historic plans further show that each courtyard was the same width as the office room in front of it (Figure 2.12). The plan also details who had access and use of each courtyard at the time the plan was produced (Figure 2.12). Using the same room number system allocated during archaeological monitoring phase (Section 3.5.3) running west to east, the following room descriptions were obtained from the original construction plan (Figure 2.11):

Courtyard 1 was linked to a Jury room.
Courtyard 2 was linked to another Jury room (Law library post 1960s plan).[26]
Courtyard 3 was linked to the Sheriff's office (Typists room post 1960s plan).[27]
Courtyard 4 was linked to the 'associate' (No. 2 Judge post 1960s plan).[28]
Courtyard 5 was linked to the No. 1 Judge.

It is known that from the outset, all amenities at the court house were underground plumbed services (Figure 2.9).[29] Directly south of the private courtyards was rectangular amenities block for other court staff and officials (Figure 2.12). This block was accessed externally from the side of the court house and contained a urinal at each end and eight cubicles. External areas of the amenities block appear to have been repeatedly surfaced with tar, asphalt and concrete at several different points in time and as specified on the public works plan. The internal spaces of each private courtyard also contained a tar surface.

The external amenities block and courtyards were demolished during the 1960s redevelopment and 1964 construction of the administration building on the west side of the study site.[30] The westernmost courtyard (1) was retained, roofed and converted into an internal bathroom.[31]

[26] NSW Public Works plans reference PC386/774.
[27] NSW Public Works plans reference PC386/774.
[28] NSW Public Works plans reference PC386/774.
[29] Hunter District Water Board 1896 plan series, C919.442/34/009; NSW Public Works plans reference PC386/17.
[30] NSW Public Works plans reference PC386/706.
[31] NSW Public Works plans reference PC386/774.

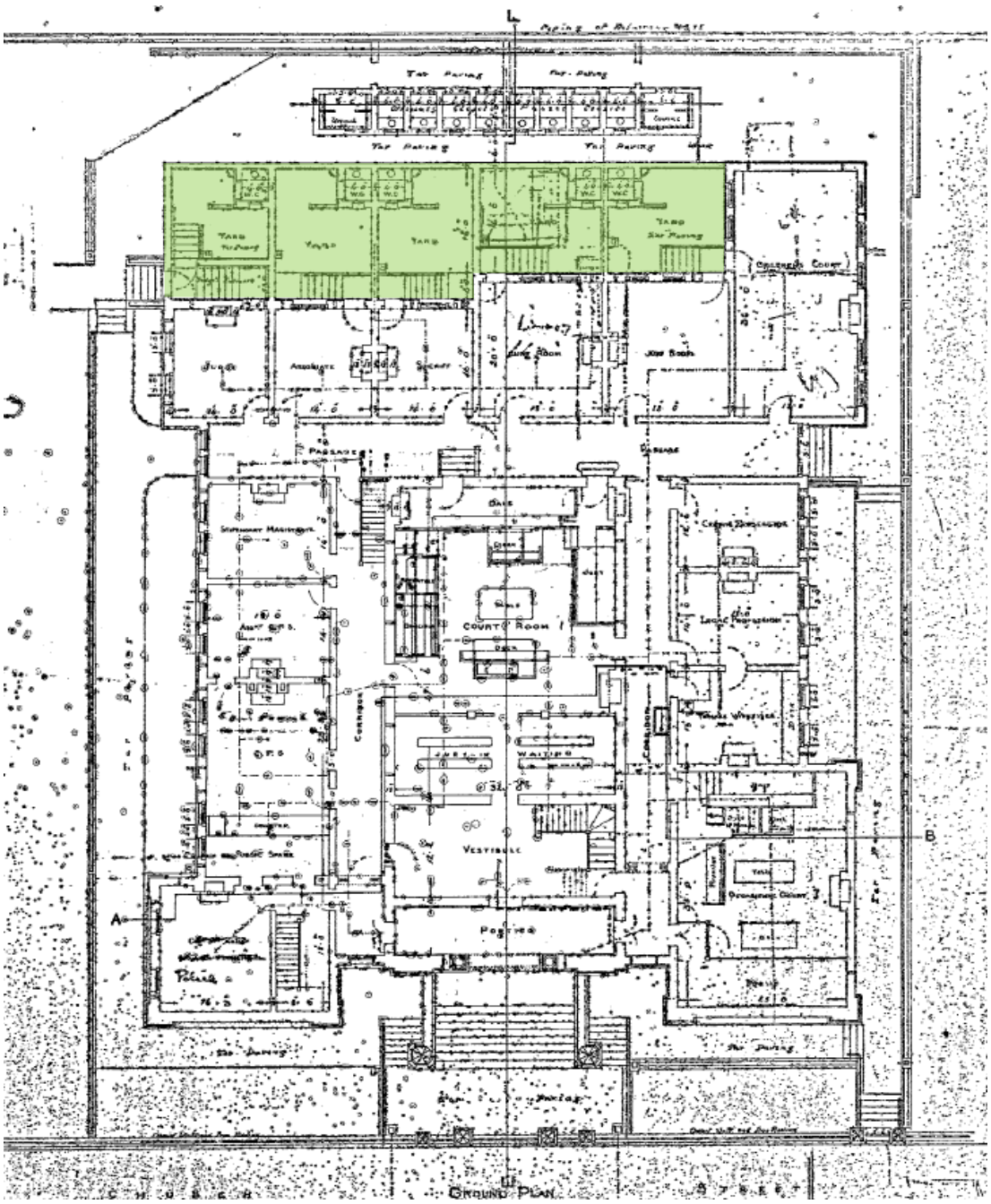


Figure 2.11 **Ground floor construction plan for Newcastle Court House, with private courtyards shaded in green.**
NSW Public Works plan reference PC386/18.

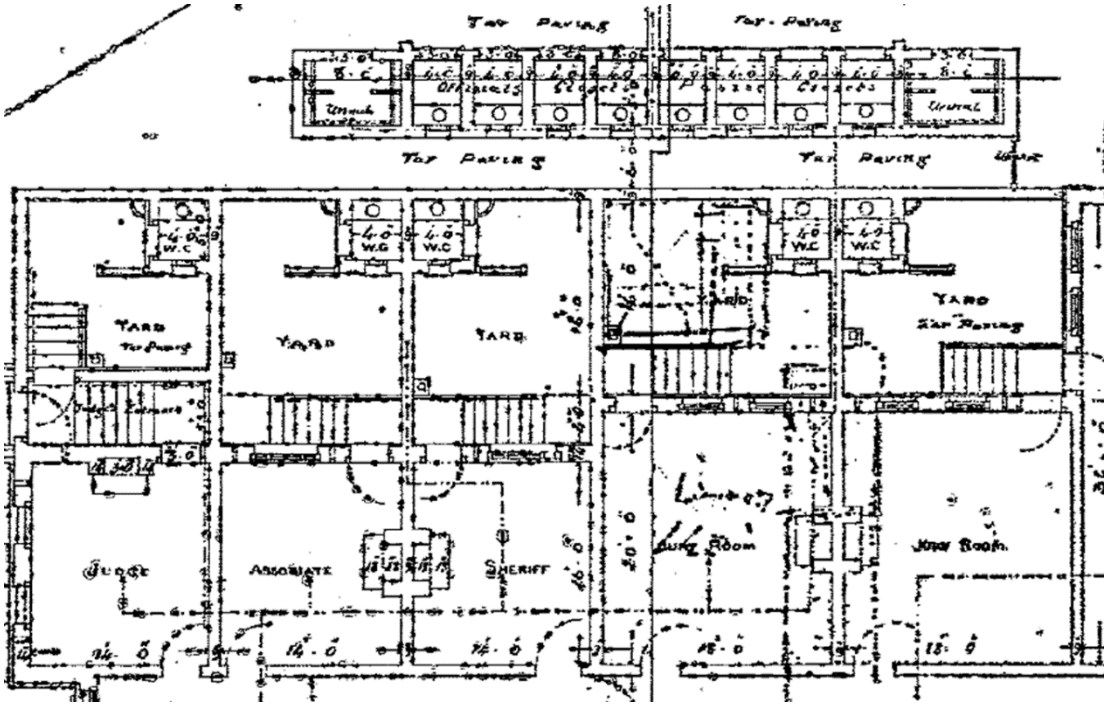


Figure 2.12 **Extract of NSW public works plan, showing detail of private courtyards and their internal room connection, as well as public amenities block.**
NSW Public Works plan reference PC386/18.



Figure 2.13 **1893 photograph of the Newcastle Court House, showing wall of easternmost courtyard at rear (green arrow).**
Newcastle Library, Hunter Photo Bank, ASGN0102-B4.

2.2.4 Mid-20th Century Morgue Building

A rectangular shaped, two storey brick building was constructed in the southeast corner of the study site during the mid-20th century and postdating the 1948 magistrate building (Figure 2.15). Figure 2.14 is an aerial photograph dated to 1970 showing the morgue building in its wider context.

The morgue building formed another building in the larger law and judicial precinct, which had been developing on and adjacent to the study site since the late 19th century. By the 1970s the study site comprised the original court house, magistrate building, administration building and morgue, all of which was located besides the police station and sat opposite 58 Bolton Street which was also purchased by the government in the 1980s and repurposed for the courts.[32] The morgue building was demolished during the 1980s and converted into a carpark.[33]

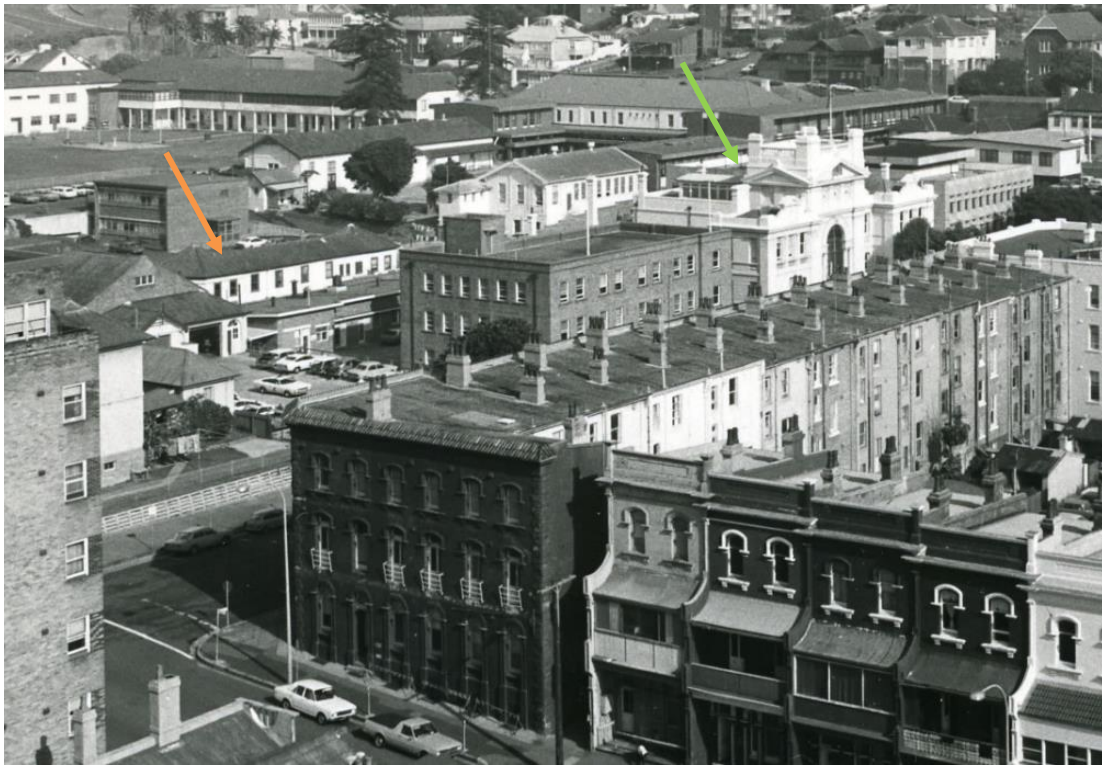


Figure 2.14 **Part of a 1970 aerial photograph, showing morgue building (orange arrow) in southeast corner of study site. Facing southwest.**
Newcastle University, Hunter Living Histories, accessed 26th July 2021, http://livinghistories.newcastle.edu.au-nodes-view-17046

Key:
Green arrow: court house building
Orange arrow: morgue building

[32] AMAC Group (July 2015), p. 101.
[33] John Carr Heritage Design (May 2019), p. 25.

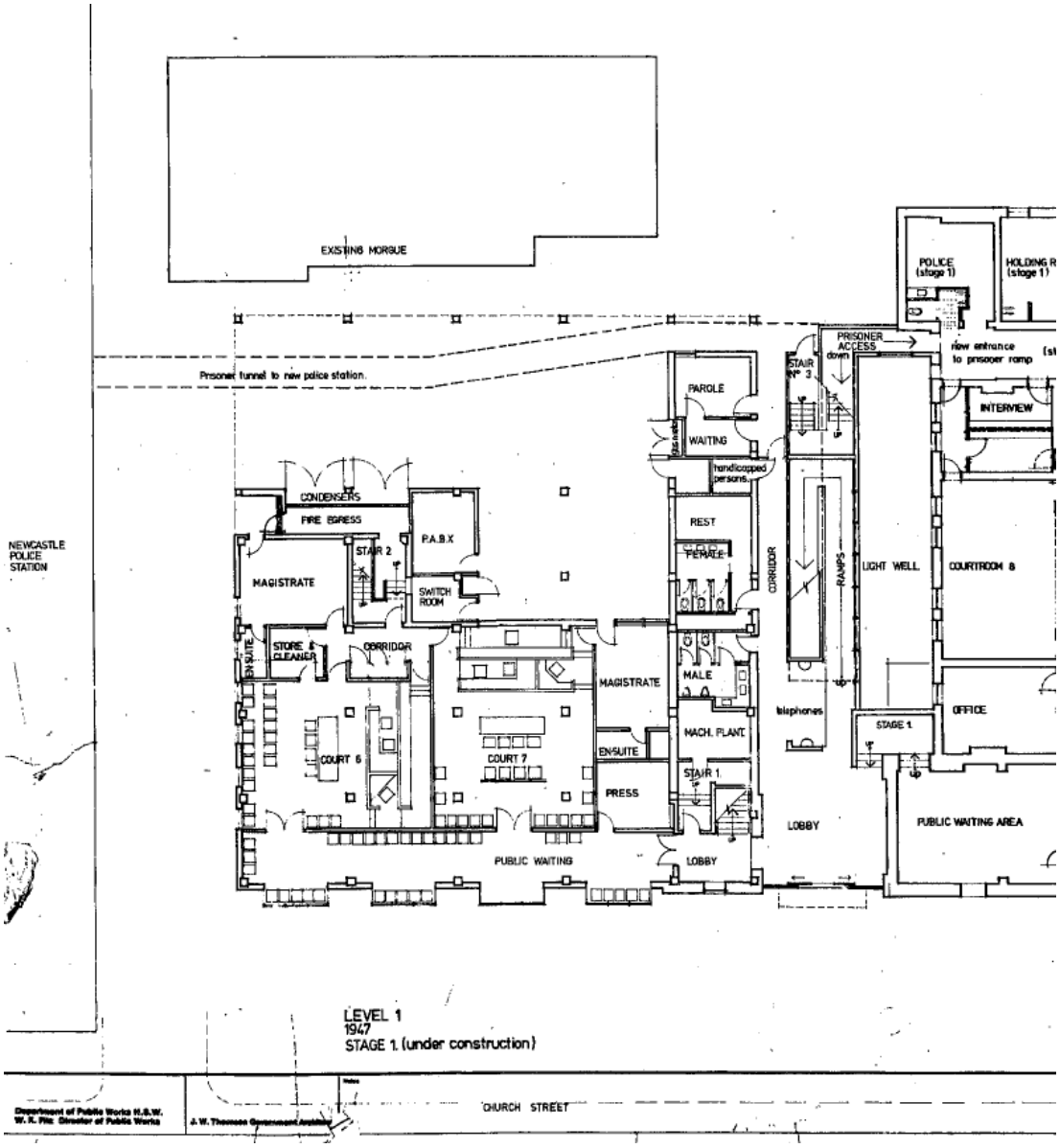


Figure 2.15 **Part of a 1980s public works plan, showing morgue building in southeast corner of site.**
NSW Public Works plan reference PC386/705.

3.0 PHYSICAL EVIDENCE

3.1 BACKGROUND OF EXCAVATION

Archaeological monitoring and excavation were undertaken at the study site between March 2020 and June 2021, in accordance with the approved Research Design and Excavation Methodology endorsed under Condition C17 of SSD9787.

The archaeological component of the approved university redevelopment consisted of monitoring and salvage excavation of remains discovered during earthworks in areas determined to form monitoring zones and holding archaeological potential for relics.[34] All monitoring zones were external to the court house and can be divided spatially into west, east and rear areas (Figure 3.1). All three areas were monitored and salvage excavation took place in the east and rear areas, the former in relation to a brick culvert and the latter investigating demolished parts of the court house. Records included field diary, context sheets, and photography and scaled plans with reduced levels. Schematic plans and sections were made from measured field drawings as well as photogrammetry and planning. Digitised copies of unit lists and photographic registers are presented in the appendices (Appendix 10.0).

3.2 GEOLOGY AND SOILS

Newcastle proper is constructed on soil profiles determined as Killingworth and Hamilton.[35] It appears that the study site is located within the Killingworth soil profile. However, it must be understood that localised anomalies occur, and that no full account of the effect of development on individual sites can be made in a generalised survey such as that conducted for *Soil Landscapes of the Newcastle 1:1000 000 Sheet*.

The properties of the Killingworth profile consist of the following:

- A1 Brownish black pedal loam (silty, sandy, or clayey depending on parent material).
- A2 Bleached, greyish yellow brown loam, (silt to clay loam).
- B Yellowish brown clay (silty to sandy, sometimes heavy). Siltstone or ironstone fragments may be inclusive.

These natural soils typically overlie interleaved layers of siltstone/tuff and sandstone. The parent material (stone) directly beneath the soil in any locality will specifically affect the composition of the overlying soils.[36]

3.3 RECORDING AND EXCAVATION

3.3.1 Excavation Team, Liaison and Site Safety

The excavation team was made up of qualified archaeologists from AMAC Group and a mechanical excavator operator. A copy of the assessment, the approved

[34] AMAC Group (February 2020), Section 6.0 and Section 7.0.
[35] Matthei (1995) 38, 132.
[36] Matthei (1995) 133.

research design and methodology[37], and any conditions set out by the approved SSD9787 was available on site for any of the workers to consult.

The approved Secondary Excavation Director, Kevin Hickson, was present on the site for the entirety of the archaeological programme. The Primary Excavation Director, Martin Carney, was on site during the exposure of archaeological relics.

Table 3.1 Summary of AMAC Group excavation team.

Excavation team	Role
Martin Carney	Primary Excavation Director
Kevin Hickson	Secondary Excavation Director
Kelly Strickland	Supervisor & Senior Archaeologist
Prue Newton	Archaeologist
Emma Williams	Archaeologist & photogrammetry specialist
Yolanda Pavincich	Archaeologist
Jessica Gallagher	Archaeologist

3.3.2 General Methodology

Standard archaeological excavation techniques, utilised by this company and in accordance with the Heritage Council of NSW were employed throughout the excavation. The excavation and recording methodology was based on the 'Regentville Method' devised for the Centre for Historical Archaeology at the University of Sydney.

The excavation methods for the site were tailored toward the retrieval of data and to collect the maximum data from each necessary excavation. The methods and work detailed here are not related to the proposed construction programme, but works guiding it. These works will provide data, analysis and recommendations with which to guide the mitigation of destruction of archaeological resources in this and future development proposals.

Relics of State significance may be exposed, and potentially sampled, however no intention exists in this programme to remove on a comprehensive basis relics of State significance. No relics of State significance were identified during archaeological monitoring works at the study site.

[37] AMAC Group (February 2020).

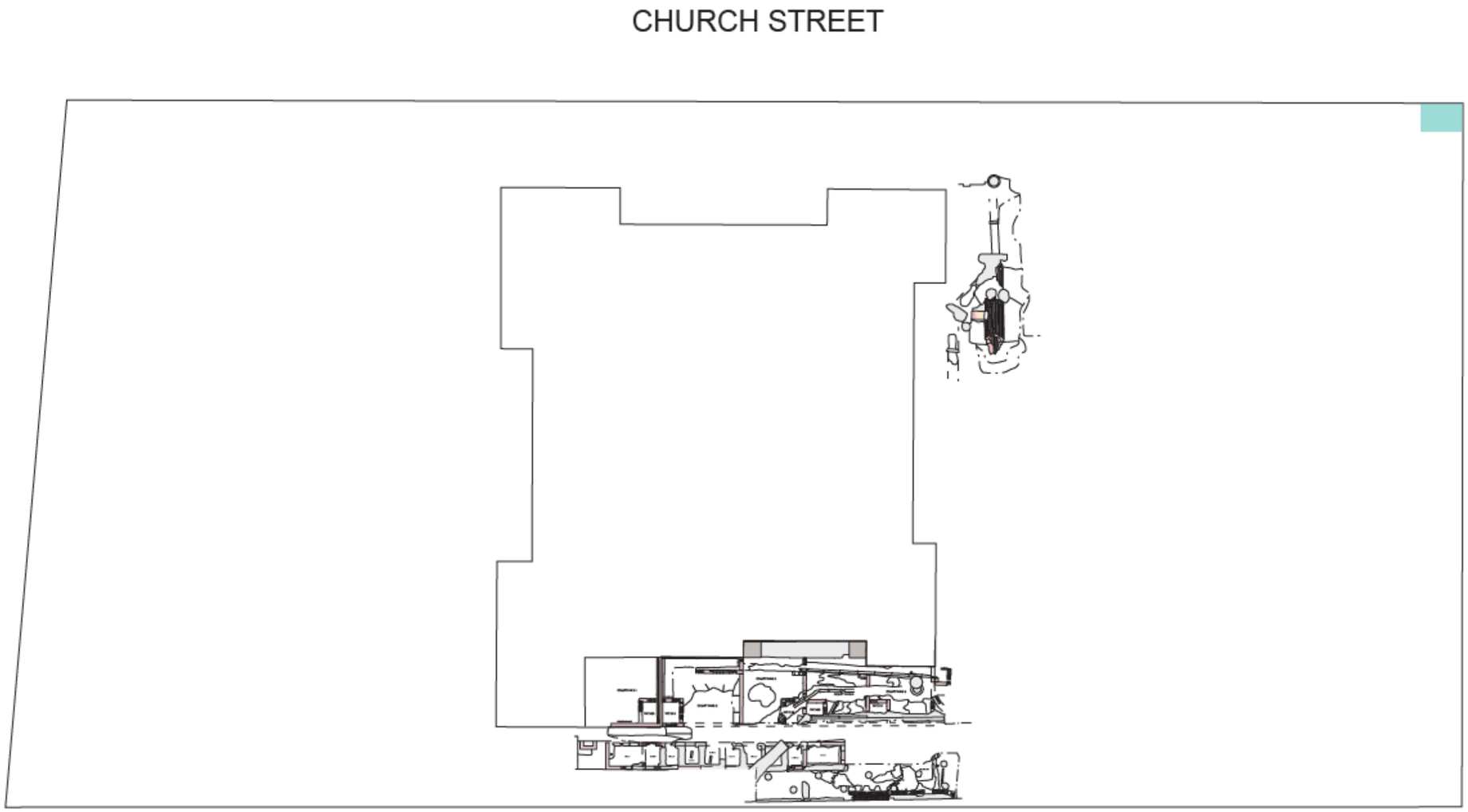


Figure 3.1 Overall site plan showing location of recorded historical archaeological features.

Note light blue shaded box in northeast corner of site indicates location of truncated sandstone wall remains (see Section 3.4.6) E. Williams, July 2021.

3.4 ARCHAEOLOGICAL MONITORING – EAST AREA

Initial earthworks and monitoring in the east area involved the south part behind the building then in the final stages of demolition. The rear area was previously used as a carpark with vegetation along the southern boundary wall. The work zone's north perimeter was a concrete slab overlying an underground tunnel connecting the court house with the adjacent police station. It was defined at the east and south by construction grid lines 5m from the police station and 3m from the south wall (reduced to 2.4m during machining), and at the west by a line extending from the southeast corner of the court house. Commencing with asphalt surfacing nominally at 22.6m Australian Height Datum (AHD), the area was reduced to a nominal end level of 21.70m and spatially measured approximately 14m x 32m. Figure 3.2 shows the rear area prior to commencement of machining.



Figure 3.2 **East area, rear part prior to commencement of earthworks. Facing east.** Police station along east site boundary in background. AMAC Group, 09/03/2020, digital image 6748.

3.4.1 Surfacing and Brick Structure

Work in the rear east area commenced with removal of 4-6cm of asphalt [200] on brown road base [201] and up to 20cm thick across the entire rear area except for a strip along the south perimeter that had been vegetated. The road base sealed a fill horizon [202] overlying remains of a structure consisting of remnant double brick walls [203] bonded with cement on concrete footings [204] set in trenches [205] (Figure 3.3–Figure 3.6). Measuring 83 x 115 x 235mm (3¼ x 4½ x 9¼ inches), the bricks were dry press with a rounded rectangular frog, no maker's name and a coarse orange fabric (Figure 3.8). The walls where preserved had clean yellow-brown sand between the double brick. With blue metal aggregate and steel rod reinforcement, the concrete footings ranged 38–68cm wide, mostly 46–65cm, and about 40cm thick. Surfaces were flat, but rough sides showed the concrete had been poured into the trenches without formwork.

Figure 3.9 is a schematic plan of the footings revealed during initial and later monitoring. Shown at right on the plan, the later work revealed the east wall of the structure to be located 3.15m from the east boundary and its return westward about 15.25m from the south boundary wall. The latter distance suggests that there may have been further footings along the north not exposed during monitoring.

At the east end the footings were found cutting natural red clay [210] and sealed by fill [202] with demolition debris below road base [201] (see Figure 3.7). The sequence in section on the south side of the footing trench for the rear wall showed demolition of the structure also involved external machining that removed existing deposits over natural clay. Pre-construction excavation for levelling the building's location also appeared indicated by absence of topsoil and subsoil overlying natural brown clay [211] revealed by removal of fill in the southeast spaces (see Figure 3.4). That fill may have been all demolition fill [202] or included underfloor cavity fills should the structure at least in part have had concrete floors. Along the north and at the west the natural brown clay [211] disappeared below mixed fills into which the structure's footings in those areas were laid (see Figure 3.5–Figure 3.6).

All the concrete footings required removal due to their upper parts being above the end level.



Figure 3.3 **East area, initial reveal of structure remains and fill [202] below road base [201]. Facing northwest.**
AMAC Group, 09/03/2020, digital image 6765.



Figure 3.4 East area, concrete footings in rear part, natural brown clay [211] in centre foreground. Facing west.
AMAC Group, 09/03/2020, digital image 6800.



Figure 3.5 East area, structure footings in north part, also showing natural brown clay [211] disappearing northward below fills. Facing southwest.
AMAC Group, 12/03/2020, digital image 6867.



Figure 3.6 **East area, southwest footings set into fills. Facing east.**
AMAC Group, 09/03/2020, digital image 6788.



Figure 3.7 **East area, section at southeast showing foundation trench for rear wall cutting natural red clay [210]. Facing east.**
AMAC Group, 10/03/2020, digital image 6804.



Figure 3.8 **East area, fabric of structure bricks (red scale 20cm).**
AMAC Group, 09/03/2020, digital image 6770.

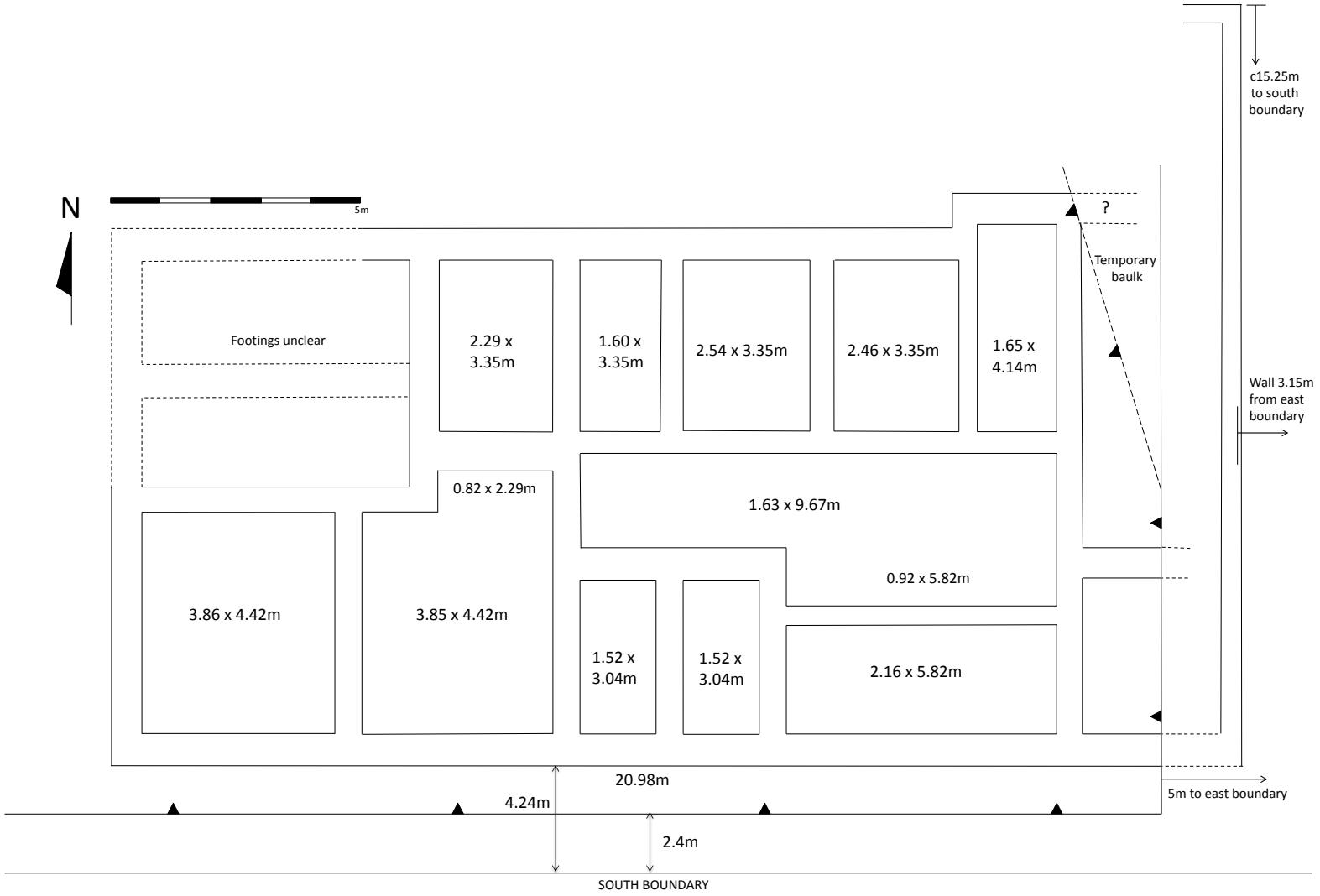


Figure 3.9 Schematic plan of mid-20th century morgue footings.
K. Hickson, July 2021.

3.4.2 South Sections

The location of the south baulk appeared to have not been included in excavation of the site of the brick structure. Two sections were recorded, one on the bench (previously the vegetated area) and one on the baulk.

Section 1, measuring approximately 1m in width, was located on the bench at 7–8m west of the police station and 66cm north of the south boundary wall (Figure 3.10–Figure 3.11). Concrete dish drain [206] was remnant in two parts, one in the central south area along the bottom of the brick boundary wall and within a strip of vegetation. Drainage holes in the wall pointed to the drain having extended its full length, and the part in south Section 1 probably was a replacement since it was set off the wall and abutted a concrete support for a steel water main. The underlying soil [207] and sand [208] may have related to this change since they were not observed elsewhere. Mixed fill [209] sitting over the natural red clay [210] rather than the brown clay [211] suggested it was the same as, or equivalent to demolition fill [202] in the east baulk nearby.

The natural clays [211] on [210] sloping westward also was evident in the south baulk (Figure 3.12) and on the end level surface at the southwest where [211] disappeared (Figure 3.13). Its disappearance northward below fills similarly showed a slope in that direction (see Figure 3.5).



Figure 3.10 **East area, south Section 1. Facing south.**
AMAC Group, 10/03/2020, digital image 6805.

206	Concrete dish drain	13cm
207	Grey clayey loamy soil	9cm maximum
208	Clean sand	3-11cm
209	Mixed fill	6-7cm
210	Natural clay	

Figure 3.11 **East area, schematic south Section 1.**
K. Hickson, July 2021.



Figure 3.12 **East area, south baulk showing natural clays [211] on [210] sloping westward (excerpt of photograph). Facing southwest.**
AMAC Group, 12/03/2020, digital image 6867.



Figure 3.13 **East area, southwest rear at end level, natural brown clay [211] disappearing westward. Facing northwest.**
AMAC Group, 12/03/2020, digital image 6867.

South Section 2 was on the baulk at approximately 22.3–26.3m west of the police station, about two-thirds of the baulk length (c. 32m). It showed 50–60cm of mixed fill [212] over dark grey sandy clayey loam [213], on top of lighter grey/brown sandy clayey soil [214] and over the natural brown clay [211] (Figure 3.14–Figure 3.15). Containing numerous roots, the overlying fill [212] appeared in place before the strip of vegetation was established along the south perimeter. Along the length of the section the combined depth of soils ([213] and [214]) increased from approximately 20cm at the east to 35–40cm at the west. Although undulating, the surface of soil [213] was broadly level as a result of the thickening then at the west end appeared to begin sloping in that direction.

Albeit subject to bioturbation, particularly root activity, soils [213] and [214] were clean and their interface diffuse suggested they formed natural A1 topsoil on A2 subsoil. The interface between [214] and [211] was diffuse and both soils overlying clay would explain their strong, plastic composition. No historical or Aboriginal artefacts were observed in either soil. At the extent of excavation in the southwest corner, soil [213] extended approximately 3.5m northward from the baulk then disappeared below mixed fill [215] (see Figure 3.22).

In identifying [213] and [214] as A1 and A2 soils, the natural topography in this area seems to have been gentle slopes to the north and west. The former was evidenced in the east area by brown clay [211] disappearing below fill, and the latter in the south baulk where it sloped slowly westward to run below soil [214]. Allowing an average depth of 30cm, soils [213] and [214] disappearing about 3.5m north of the south baulk would produce a gradient in that direction of approximately 1:12.



Figure 3.14 **East area, south Section 2. Facing southeast.**
AMAC Group, 11/03/2020, digital image 6832.



Figure 3.15 Annotated photo of East area, south Section 2, detail at west end. Facing south.
AMAC Group, 11/03/2020, digital image 6837.

3.4.3 Court House Steps

Two remnant brick footings [216] bonded with cement were found adjacent to the southeast corner of the court house where a projecting keystone in the wall indicated earlier closure of a doorway (Figure 3.16). This identified them as footings for steps and being keyed into the court house wall showed they were original features.

Set 1.32m apart (4ft 4ins), the south footing measured 0.48 x 1.80m (1ft 7ins x 5ft 11ins) and the north footing 0.51 x 1.75m (1ft 8ins x 5ft 9ins). Seemingly machine-made given their weight and density, the bricks were a fine clay fabric in creamy brown, creamy pink and orange (Figure 3.17). The south footing was later overlaid by part of brick sump [091] with a concrete cover.



Figure 3.16 East area, steps footings [216]. Facing west.
AMAC Group, 11/03/2020, digital image 6827.



Figure 3.17 East area, brick types in steps footings [216]. Facing west.
AMAC Group, 23/03/2020, digital image 6912 – 6914.

3.4.4 West Area

The west end of the rear area contained a number of structural and service features shown in Figure 3.21, a schematic plan produced approximately to scale.

The earliest feature appeared to be two roughly squared sandstone blocks [223] aligned southwest - northeast (Figure 3.18–Figure 3.19). While dimensions varied both averaged 24cm (9½ ins) wide and 40cm (15¾ ins) high, with the east block 130cm (4 ft 3 ins) long and the west block continuing into the baulk more than 142cm in length. The blocks were not bonded and their surfaces showed no residual mortar.

The adjacent section (Figure 3.20) evidenced the blocks were set in a trench [222] with dark grey sandy fill [224] which underlain part of the west block. The trench cut mixed clayey fill [221] overlying dark grey sandy/clayey loam, which was later more widely exposed at end level in this area and interpreted to form A1 topsoil [213]. Fill [221] likely was the same as fill [215] below which [213] disappeared northward. Layering in the section was not uniform but the upper part consisted of two main

deposits, brown silty loam [225] over road base [201] that sealed the top of the west block and mixed fill [221]. Both were later found across the adjacent area behind the court house, the loam as [021] and the road base as [022]. Also assigned context [032], the sandstone wall also was found again during salvage excavation of the southeast corner of that area (see Section 3.5.1).

The other main structural feature was concrete footing [218] about 49cm wide and 40cm thick, and orientated east-west. While similarity in size and the same method of construction pointed to an association with the brick structure's footings eastward, the concrete having more varied and smaller aggregate suggested otherwise. More likely it was the continuation eastward of concrete footing [073] later revealed in the area behind the court house (see plan, Figure 3.81). So, too, remnant brick sump [217] set against its south side and by that position apparently associated. With an interior space 61cm (2ft) square and walls 11cm thick, the sump was made with dense orange clay bricks – of which at least one was stamped 'BOWTELL' – and bonded with cement.[38] These bricks were different to those used for the structure eastward, though re-use of older bricks for the sump is possible. Whatever the case, it appeared likely that construction of the footing and sump had involved removal of at least one additional sandstone block belonging to wall [223].

Three services also were present in this area, copper alloy water pipe [219] and two remnant ceramic pipes. The pipe was below road base [201] and its trench probably cut mixed fill [221]. Service [220] with the ceramic pipe set in cement ran northward below footing [218] and may have preceded it. Adjacent service [220a] with sand fill appeared to be later but whether its pipe also ran below footing [218] could not be determined.



Figure 3.18 **East area, southwest corner with sandstone wall [223] brick sump [217] adjacent to concrete footing [218], ceramic service features [220] and water pipe [219]. Facing northeast.**
AMAC Group, 11/03/2020, digital image 6838.

[38] Joseph Bowtell was a local brickmaker based in Merewether from the 1860s to later than 1914 (Gemmell,1986, p. 76). His death in 1917 was followed by that of his son Joseph in 1919 (Northern Times 18 July 1917, Newcastle Morning Herald and Miners Advocate 27 September 1919) and it is unclear whether the business continued to operate.



Figure 3.19 **East area, sandstone wall [223]. Facing south.**
AMAC Group, 11/03/2020, digital image 6835.

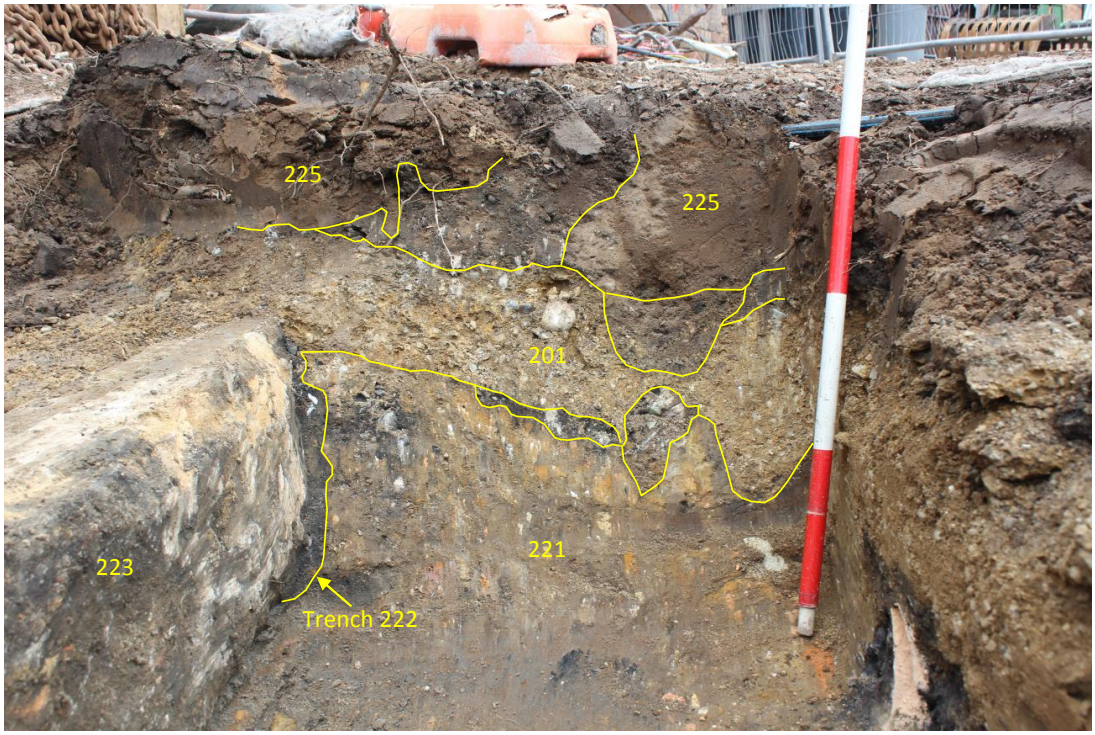


Figure 3.20 **East area, west section in location of sandstone wall [223]. Facing west.**
AMAC Group, 11/03/2020, digital image 6851.

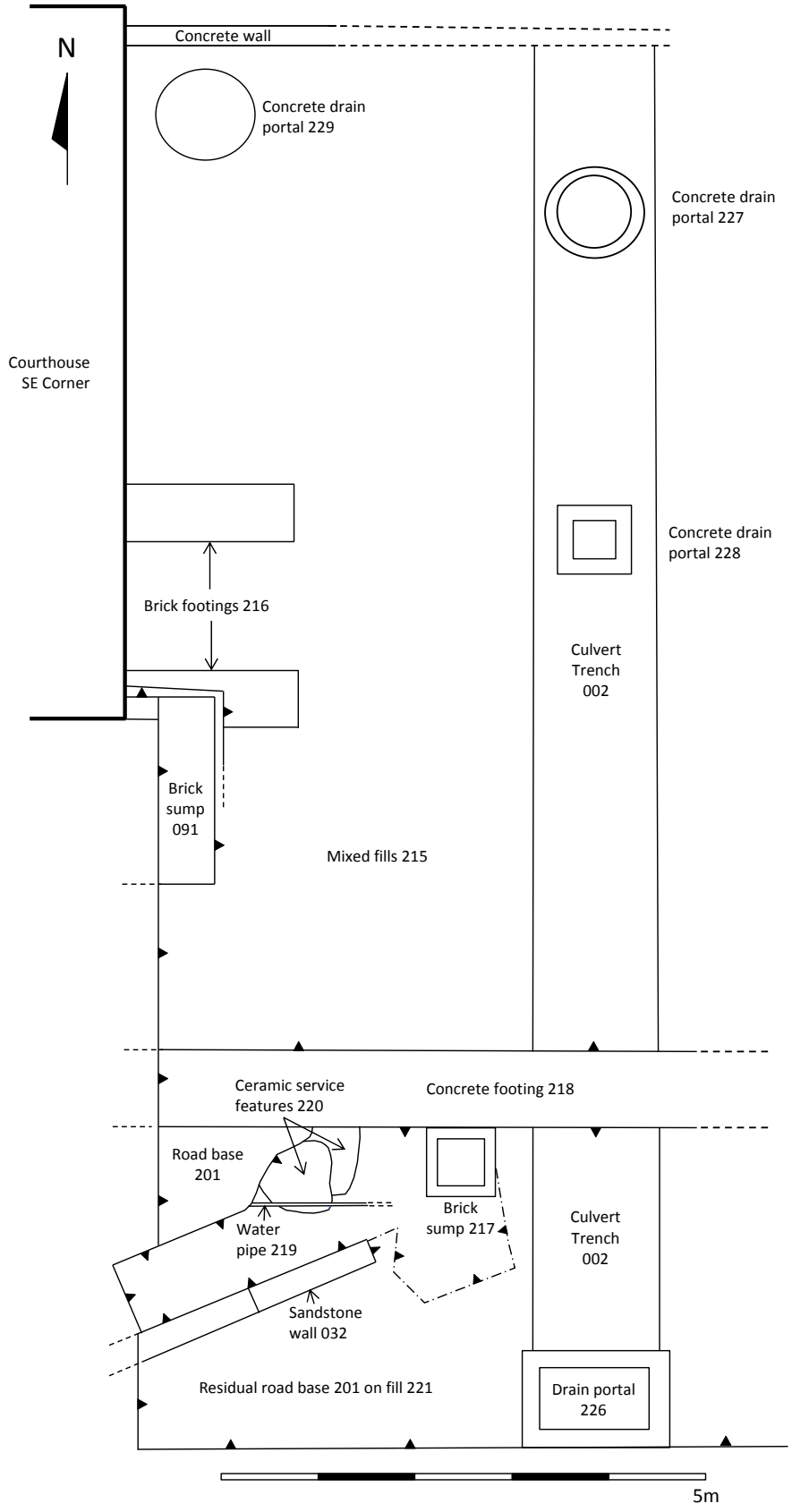


Figure 3.21 Schematic plan of features at the west end of the east rear area (approximately to scale).
K. Hickson, July 2021.

3.4.5 Brick Culvert

The location and north-south orientation of a major drain attested by portals [226] - [228] in the west part of the rear area was confirmed by a trench exposed at end level (see plan Figure 3.21 and Figure 3.22). Situated approximately 4.2m (13ft 9ins) east of the nearest court house wall, the trench was found cutting the dark grey loam taken to be A1 topsoil [213] though the cut level may have been higher. Work in the northwest area exposing the top showed the drain to be a brick culvert and removal of the underground concrete tunnel once connecting the court house and police station revealed the extent of its destruction (Figure 3.23–Figure 3.24). When first revealed the north part was mostly buried, but the oviform shape of the south part was fully exposed (Figure 3.25). The latter was recorded and salvage excavation on the north part took place. For the latter, refer to plan presented as Figure 3.33.

Table 3.2 shows the main dimensions of the south and north parts of the culvert.

Table 3.2 Brick culvert – dimensions.

Dimensions	South part of culvert	North part of culvert
External height	5ft 2ins / 157.5cm	c.4ft 8½ins / 143.5cm
Internal height	3ft 9ins / 114cm	3ft 5½ins / 105.4cm
External width	4ft 3ins / 129.5cm	4ft 2ins / 127cm
Internal width	2ft 9ins / 84cm	2ft 7½ ins / 80cm

Wall width of the south part varied, but generally was 23cm (9ins) and contained two brick heights plus cement mortar, with the top of the arch 25cm (10ins) thick. Variation in wall width was in part due to cement on the external surface, though not being uniform suggested this was the bricklayers disposing of excess mortar rather than rendering. Brick shapes also varied to create the ovoid shape, and the visible key arch brick (4½ ins high; 11.4cm) measured 10.2cm (4ins) at the top and 6.4cm (2½ins) at the bottom. Its length was 19cm (7½ins) whereas most other bricks were longer at 24cm (9½ins). Figure 3.26–Figure 3.27 show the arch and the brick fabrics, which were very similar to the bricks used in footings [216] described in Section 3.4.3. Set between the bottom bricks of the outer course and overlaid by the inner course, the base was a bedding of cement and cinder. The top of the arch was located 4.95m (16ft 3ins) east of the nearest court house wall. The trench for the culvert was not discernible in the section except at the bottom where the base material and bricks were laid directly on and against natural mid grey clay with russet mottling.

The north part (Figure 3.30) was a more regular oviform shape and slightly smaller, though the average wall width of 23.5cm (9¼ins) was a fraction larger. As in the south part, the base was set between the bottom bricks of the outer course and overlaid by the inner course, but here was cemented brick rubble [014]. Figure 3.28 shows the brick shapes and fabrics on the west side. Levels indicate a very gentle slope northward, the top of the arch dropping only 2cm over approximately 3.9m (RL20.64m to RL20.62m AHD) being a gradient of about 1:195. While the top of the arch on the south part being 23cm higher (RL21.87m AHD) also attested the northward slope, the gradient could not be confirmed due to flooding preventing measurement of the distance between the two.

The north part was constructed in trench [002] with a backfill [003] mostly of brown sandy clay (Figure 3.29). The trench was excavated as a deeply concave form with

a flat base and the lower part of the culvert built against the sides, which also appeared to be the case in the south part. The trench then gradually widened to be 25–30cm from the culvert. In the initial reveal of the east side, it was found cutting a remnant of dark grey sandy clayey loam [005] on a semi-diffuse interface with brown clay [011] (Figure 3.29). This repeating soil sequence southward suggests [005] was a variant of [213]/ [214] identified as A1/A2 topsoil, with [011] being the same as brown clay [211]. The underlying light grey clay [016] with red/orange/brown mottling was similar to the clay into which the south part of the culvert trench reached but both were different to the red clay [210] in the east rear area.

Two later cuts were made into the north part of the culvert apparently for insertion of drainpipes, [012] on the east side and [013] on the east side. On the west side the culvert was abutted by concrete footing [007] supporting remnant wall [006] of dry press bricks (8 x 10 x 23cm) bonded with cement. Both were truncated by trenching for a new culvert of concrete pipes [008] in part sealed by concrete [010] and [017]. This later culvert was located along the west side of the concrete tunnel linking the court house and police station (Figure 3.32). Although destroying much of the north part of the brick culvert, it connected with the south part of the brick culvert that remained in operation. This connection was just south of the exposed profile and likely also involved concrete portal [229] to the west (see plan, Figure 3.21).

The two partially exposed patches of concrete [007] and [010] overlying the north part of [008] were of uncertain function, possibly serving to seal pipe connections or related to a structure over this area after the concrete culvert was installed. Concrete piles [009], two of which also destroyed part of the brick culvert, suggested a building existed in this location.



Figure 3.22 **East area, southwest corner, reveal of culvert trench [002]. Facing southwest.**
AMAC Group, 12/03/2020, digital image 6861.



Figure 3.23 **East area, initial reveal of north part of brick culvert [001] cut by concrete tunnel. Facing south.**
AMAC Group, 20/03/2020, digital image 6874.



Figure 3.24 **East area, view from south part of brick culvert [001] to north part after removal of concrete tunnel. Facing north.**
AMAC Group, 23/03/2020, digital image 6892.



Figure 3.25 **East area, south part of brick culvert [001] exposed by removal of concrete tunnel. Facing south.**
AMAC Group, 23/03/2020, digital image 6895.



Figure 3.26 **East area, south part of brick culvert [001], detail of arch bricks. Facing south.**
AMAC Group, 23/03/2020, digital image 6911.



Figure 3.27 **East area, south part of brick culvert [001], detail of brick fabrics. Facing south.**
AMAC Group, 23/03/2020, digital image 6910.



Figure 3.28 **East area, north part of brick culvert [001], detail of brickwork and fabrics. Facing north.**
AMAC Group, 23/03/2020, digital image 6907.



Figure 3.29 **East area, north part of brick culvert [001], east side trench cutting dark grey soil [005]. Facing north.**
AMAC Group, 23/03/2020, digital image 6903.



Figure 3.30 **East area, north part of brick drain [001] with natural brown clay [011] on both sides. Facing north.**
AMAC Group, 27/03/2020, digital image 6927.



Figure 3.31 **East area, north part of brick drain [001], detail of arch (excerpt of photograph). Facing north.**
AMAC Group, 27/03/2020, digital image 6923.



Figure 3.32 **East area, diversion of drainage in concrete pipes [008] between the court house and concrete tunnel. Facing south.**
AMAC Group, 27/03/2020, digital image 6941.

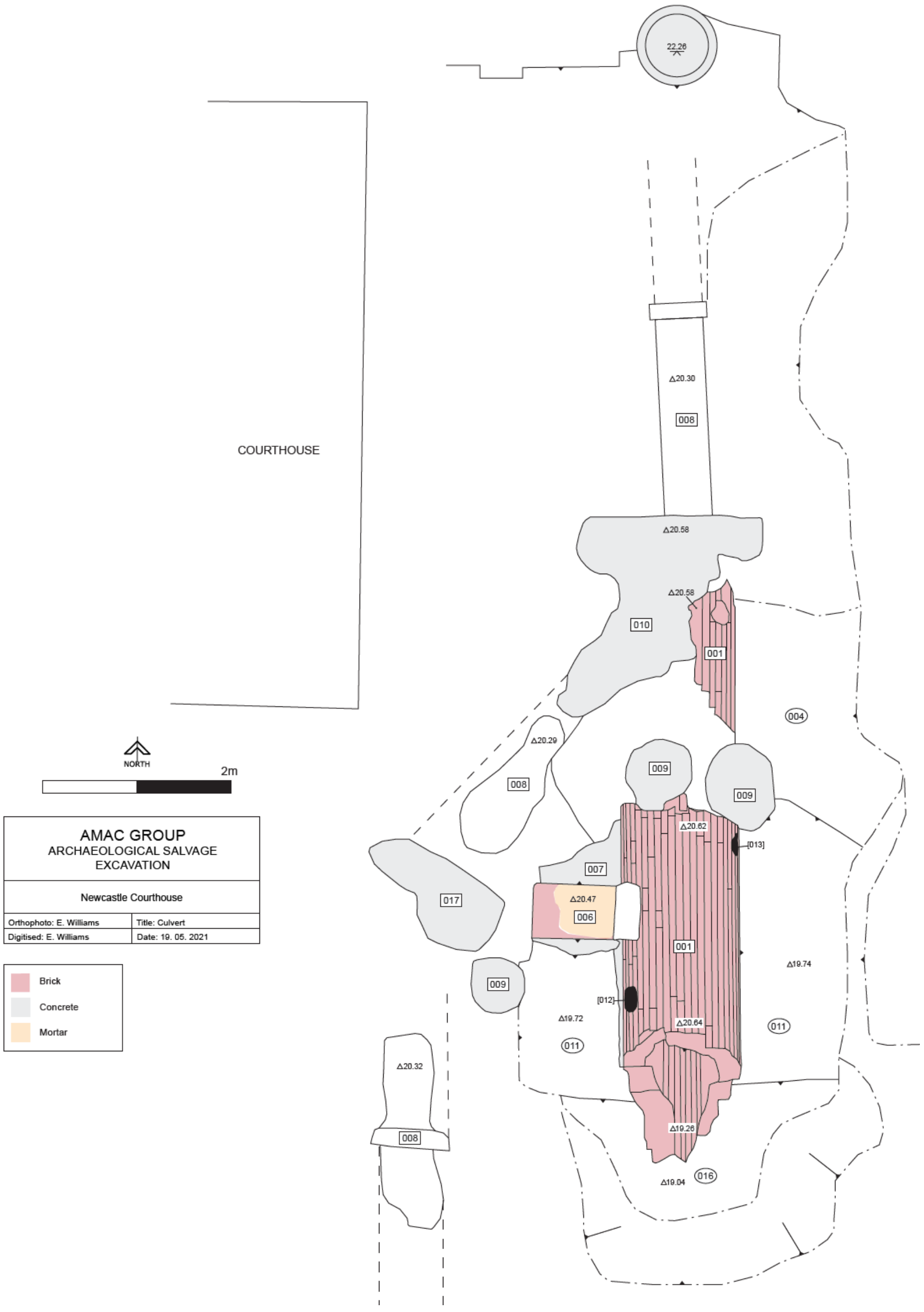


Figure 3.33 **Plan of area of north part of brick culvert [001].**
E. Williams, June 2021.

3.4.6 Sandstone Wall Remains

Based on levels required for site redevelopment, archaeological recording occurred in the northeast corner of the site and in the former driveway location. Although notification of intended work at the northeast corner occurred, a miscommunication meant, that the excavation to end level proceeded prior to the appointed day and without archaeological supervision. Following notification of this situation, an inspection was made the next day. Upon identification of the structural remains of sandstone walls and deposits of shell lime mortar, the area was cleaned and recorded. No manual excavation was undertaken since the exposed remains sat at, or below, the required construction level and would not be further impacted. Figure 3.34 shows the location of the area relative to the adjacent police station and to Church Street. Based on spoil identified by the foreman as being from the works area, the inclusion of sandstone blocks indicated removal of a course of one or both walls (Figure 3.35).



Figure 3.34 Location of area of wall remains. Facing northeast.
AMAC Group, 16/06/2021, digital image 0198.

The remnant structures consisted of two sandstone walls orientated east-west and a possible cross wall. Figure 3.35 shows a general view of the recorded area. The former continued eastward into a narrow section along the boundary and both were truncated at the west by cut [260] with mixed fill, possibly a service trench (see Figure 3.44).

The visible portion of north wall [242] measured 3.75m long and it was a little longer since the easternmost block continued into section. Seven roughly shaped and undressed blocks survived, with hard shell lime in the gaps between (Figure 3.36). Table 3.3 records the visible and maximum dimensions of the north wall blocks numbered in westward order.

Table 3.3 East area, dimensions of blocks in north wall [242].

Block	Length (E-W)		Width (N-S)	
	Centimetres	Inches	Centimetres	Inches
1	57	>22½	24	9 ½
2	22	8 2/3	29.2	11 ½
3	48.9	19 ¼	28	11
4	63.5	25	30.5	12
5	53.3	21	39.4	15 ½
6	49.5	19 ½	49.5	19 ½
7	87.6	34 ½	25.4	10

Although the easternmost block (1) overlying block (2) evidenced a second course, no mortar was apparent on the surface of blocks (3–7). It occurred only on the west end of block (2) and between blocks (1) and (2). Block (6) also differed in being roughly square and projecting southward (Figure 3.37). The westernmost block (7) easily was the longest and had not been truncated since its west end was within cut [260].

The north wall was abutted on the north side by a narrow strip of yellow-brown sandy clayey soil identified as the fill of foundation trench [246] (Figure 3.38). Suggesting the blocks still in situ were the basal course, the trench cut brown sandy loamy soil [247] minimally exposed a potential A1 topsoil horizon.

The visible portion of south wall [243] measured 3.22m long and it was a little longer since the easternmost block belonging to a second course was in section (Figure 3.39). This block had a maximum width of 40.6cm (16ins) and an average height of 33cm (13ins), with the underlying shell lime mortar up to 5cm thick. Mortar on the central part of its surface suggested at least one further course of blocks or perhaps bricks.

The exposed part of the south wall differed from the north wall in lacking block regularity, for even while much was covered by thick shell lime mortar the use of both large blocks and rubble was clear. The widespread mortar on the surface also was a difference, and a notable feature was the mortar having a distinct and fairly straight edge along the south side (Figure 3.40). Should that line have marked the edge of the wall, another block measured 36.8cm (14ins) wide.

Measured in three places, the distance between the exterior edge of the north wall and the mortar line along the south wall was consistent at 1.63m and 1.65m (5ft 4ins and 5ft 5ins). The distance between the two varied due to irregular block shapes but averaged 94–96.5cm (37–38ins), slightly more than three feet. The area between was divided by a linear arrangement of rubble sandstone [244] extending to both walls (Figure 3.41). Although without clear definition this feature is identified as a possible cross wall, in part because the areas to its east and west differed.

On the longer west side several patches of thick shell lime mortar abutted the rubble blocks, and except for a small patch of overlying sand [252] the remainder of the area was covered by a yellow-brown coarse and gritty sandy soil [249] with plentiful shell lime mortar mixed through. Based on a cavity that opened adjacent to the south wall (partly visible in Figure 3.41), this material appeared to overlay a bed of sandstone rubble [248]. The patches of mortar did not occur on the east side of [244] where sand [252] overlay a yellow-brown coarse and gritty sandy soil [253],

virtually identical to [249] on the west side but with no mortar mixed through. Sandstone rubble also underlying [253] is not known and fragments at the northeast corner appeared to be in a foundation trench with sandy fill along the south side of the north wall.

In relation to the mortar, the shell inclusions were oyster of varying size but included many large fragments. The latter particularly were present in the mortar on the south wall and in the area between the walls, which was softer than the very hard mortar in the north wall with few if any larger fragments.

The east section of the area between the walls showed a thin layer of later fill over concrete footing [250] above mixed fill [251] up to 15cm deep over sand [252] (Figure 3.42). This section lacked a layer of mixed clay and sandstone rubble [259] abutting the south wall, extending southward and evident in the east section south of wall [243] (Figure 3.43). This section showed a downward sequence of a layer of churned asphalt [258] over fill [257] with some asphalt mixed through over a lens of sand over the mixed clay and sandstone rubble [259]. Seemingly in a cut into asphalt layer [258], the latest soil in section appeared to be dark brown sandy clayey soil [255] abutting the south wall block in section. The apparent cut may have been the trench for a nearby white PVC pipe [254] set against the south wall.

The extent of mixed clay and sandstone rubble [259] southward and what it may have overlaid is not known. The possible service trench [260] that truncated the north and south walls also cut fill [259] though the cutting level may have been higher.

No trace of the sandstone and railing boundary wall along Church Street, which was set on a concrete footing, occurring in this area suggested it may have always been an entrance to the court house precinct. Albeit by eye only over a long distance, the alignment of that wall appeared to run between the north and south walls and closer to the north wall.

Any eastward extension of the north and south walls would have been destroyed by construction of the adjacent police station (see Figure 2.7). More of both walls may have survived west of cut [260] but in the case of the north wall, it was aligned for such continuation to have been along the north side of a large trench opened several metres westward for installation of water mains. However, this does not preclude survival further westwards, and the same may apply to the south wall.

To protect the remains the area was to be covered with damp-proof membrane (DPM) prior to laying of gravel base for surfacing. It was also established that the base of bollards to be installed in this area would sit higher and not impact upon the remains. The surfaces of the lower parts of the walls sit at approximately RL21.8 - RL21.9m (AHD), with the higher east end of the north wall at RL22.26m (AHD) and the east end of the south wall at RL22.36m (AHD). The north wall was located 4.30m from the kerb and gutter along the south side of Church Street.



Figure 3.35 General view of walls area. Facing east.
AMAC Group, 16/06/2021, digital image 0203.



Figure 3.36 North wall [242]. Facing east.
AMAC Group, 16/06/2021, digital image 0214.



Figure 3.37 **North wall, block (6). Facing north.**
AMAC Group, 17/06/2021, digital image 0254.



Figure 3.38 **Detail showing foundation trench [246] along north side of north wall, cut into loamy soil [247]. Facing east.**
AMAC Group, 17/06/2021, digital image 0237.



Figure 3.39 South wall [243]. Facing east.
AMAC Group, 16/06/2021, digital image 0217.



Figure 3.40 South wall [243], detail of shell lime mortar (1m tape scale). Facing north.
AMAC Group, 16/06/2021, digital image 0242.



Figure 3.41 **Possible cross wall [244]. Facing north.**
AMAC Group, 16/06/2021, digital image 0226.



Figure 3.42 **East section between walls. Facing east.**
AMAC Group, 16/06/2021, digital image 0224.



Figure 3.43 East section south of wall [243]. Facing east.
AMAC Group, 17/06/2021, digital image 0247.



Figure 3.44 Linear cut and fill [260] along west side of walls area (1m tape scale). Facing north.
AMAC Group, 17/06/2021, digital image 0249.

3.5 ARCHAEOLOGICAL MONITORING – REAR AREA

Three stages of salvage excavation took place in the area behind the court house, the first at the southeast corner, the second along the north and the third along the central area. The first and third involved remains of the original amenities block and other features, the second involved courtyards connected to the court house building. Data obtained in the latter area was supplemented by monitoring of deeper excavation for installing water tanks (see Section 3.5.3.9).

3.5.1 Southeast Rear

After notification that machining to end level in the southeast corner had exposed structural remains spanning an area approximately 2.5m x 14.3m, excavation and recording was undertaken (Figure 3.45). Manual excavation was limited to establishing the relationship between internal fills and footings above the end level, which on the ground ranged from RL22.55 to RL22.6m AHD. That the end level and the exposure level of structural remains roughly coincided was fortuitous, though in the west part deposits and a sizable portion of a brick drain running along the south boundary wall presumably had been removed. For the plan of the area refer to Figure 3.54.

The west section (Figure 3.46) evidenced the deposits removed by machining, including a thick layer of gravel [020] laid on geofabric by the builders. It sealed brown silty loam [021] about 10cm thick over yellow-brown road base [022] with uneven surface and base and an average depth of 10cm. The same as [201] across the rear east area, road base [022] overlay a disturbed layer of tar paving [023].[39] This surfacing abutted brick dish drain [029], subsequently abutting the south boundary wall [028a]. The tar paving overlay mixed fill [024] with a high content of brownish orange sandy clay. Machining had reduced most of the west area to within fill [024] but eastward a sizable portion of the area at end level was residual road base [022].

The west section also showed concrete footing [025] orientated southwest - northeast to be sealed by a loam fill [021] and set into road base [022]. Exposed again later in the central and north areas (numbered [073]), footing [025] was the latest structural feature revealed since the road base overlay all earlier remains.

The remains included concrete footing [026a] representing the south wall of a building with returns northward delineating three internal spaces (Figure 3.47).[40] Having stone as aggregate, the footings ranged 30–40cm wide (12–16ins) and those forming the west space were about 16cm (6 3/10ins) higher than those eastward. On the lower part two courses of the south and east walls [026] of the central space mostly survived (Figure 3.48). Set on a slate damp course and

[39] The term is borrowed from the original Plan No.11 of the court house showing exterior areas were to be surfaced with tar paving. While perhaps not the exact material the architect intended, the surfacing found in several locations in the rear area consisted of tar laid over and to a limited extent, penetrating a bed of coal fragments. The limited penetration by tar was clearly evident by the bedding being loose coal where the surface was missing.

[40] Reference to the historical plans indicated the remains were part of the amenities block with water closets and urinals. The building was later exposed by work along the central rear area and that full reveal including the three spaces is described in the following Section 3.5.2.

bonded with cement, the bricks had a fine and dense orange clay fabric and measured 7 x 11 x 23cm (2¾ x 4 3/8 x 9ins).

With no cut for the south wall footing discernible in fill [024], the central space was chosen for investigation of any internal stratigraphy. Underlying road base [022], mixed clayey fill [033] was found to seal footing trench [036] and cut into mixed clayey fill [034] (Figure 3.49). This showed [033] to be post-construction fill and [034] pre-construction fill like [024]. The lack of a visible cut in the surface of [024] was due to the concrete being poured into the footing trench without formwork. The same method was used for concrete footing [027] set in [024] adjacent to concrete footing [028a] for the south boundary wall (Figure 3.50). However, while appearing to be aligned with the east wall of the central space, it was of irregular shape with maximum dimensions of 52 x 122cm (20½ x 56ins) and differed from footing [026a] in having fragments of orange brick as aggregate.

The concrete footing [028] for the south boundary wall [028a] was also set into fill [024] and where exposed in the west area stepped down eastward 14cm, from RL22.73m to RL22.59m (AHD). As shown in Figure 3.51, brick dish drain [029] was set against wall [028a] and the surviving part extended over 8.85m. However, the drain being present in the west section pointed to it having extended the full length of this area and removal by the machining. The drain was made with a central line of bricks laid flat lengthwise flanked by bricks laid perpendicular with an inward slope. The orange clay bricks measured 7 x 11 x 23cm (2¾ x 4 3/8 x 9ins), the same size as those in brick wall [026]. Parts were deflated and others disturbed by tree roots but where intact the drain was 61cm (24ins) wide. About two-thirds of the length was cement rendered along the south side and although patchy or absent on the remainder, the whole having been rendered appeared likely.

Drain [029] sat above the footing for the south boundary wall with fill added where required to create a slope eastward. The top of the central bricks dropped from RL22.90m (AHD) in the west section to RL22.49m (AHD) at the east end, a drop of 41cm that over a length of 14m gives a gradient of approximately 1:34. Originally continuing eastward along the full length of the south boundary wall is feasible though no brick drain was observed along that part of the wall. It may have been buried, removed for the plantings or replaced by the concrete dish drain [206] remnant against the boundary wall in this area.

The sequence of road base [023] over tar paving [023] over fill [024] in the west section was repeated across most of the area, though in places the paving was absent and road base overlay fill [024]. Where remnant the tar paving abutted the top of the east end of concrete footing [026a] and also abutted the north side of brick drain [029]. Only one small patch of intact paving was exposed at the east, and its surface at 22.57m being 33cm below a surface level in the west section (about 22.90m) indicated an eastward gradient of approximately 1:30.

At the east end of this area tar paving [023] abutted angled sandstone wall [032], the same as [223] previously exposed nearby to the east but with no trench cut visible. The block at the wall's south end appeared to have been shaped to fit against brick drain [029] (see Figure 3.53). Paving [023] and wall [032] both underlay a thin deposit of brown sandy soil [039] sealed by remnant concrete surfacing [030] with an average depth of 5cm. The thinness of deposit [039] suggested an accumulation rather than bedding for [030], which appeared most likely to be exterior surfacing. As such [030] may have superseded the tar paving, for while absent in the west section the paving layer was disturbed and the concrete could have been removed prior to the road base being laid. The possibility of being a floor inside a building was raised

by the exposed part of [030] extending over the west side of concrete footing [041], suggesting the two were associated (see Figure 3.52). However, there was no trace of other footings for walls, nor any indication that [041] had carried a wall. Both also were later features, concrete [030] above paving [023] abutting wall [032], and footing [041] abutting one of the wall blocks. Its relationship with brick drain [029] was unclear but the latter seemed not have been impacted and also may have been abutted by footing [041].

Later still was ceramic service [035a] since installation of a downpipe [035] involved a cut into the east side of footing [041]. Whether the downpipe might have drained a sump against footing [041], similar to the previously exposed sump [217] against concrete footing [218] is unknown.



Figure 3.45 **Southeast rear area after cleaning. Facing east.**
AMAC Group, 01/06/2020, digital image 2121.



Figure 3.46 **Southeast rear area, west section.**
AMAC Group, 01/06/2020, digital image 2176.



Figure 3.47 **Southeast rear area, partial reveal of remains of amenities block.**
AMAC Group, 01/06/2020, digital image 2149.



Figure 3.48 **Southeast rear area, brick wall [026] abutted by internal fill [033]. Facing north.**
AMAC Group, 01/06/2020, digital image 2184.



Figure 3.49 **Southeast rear area, footing trench [036] cut into fill [034]. Facing north.**
AMAC Group, 01/06/2020, digital image 2201.



Figure 3.50 Southeast rear area, concrete footing [027].
AMAC Group, 01/06/2020, digital image 2161.



Figure 3.51 **Southeast rear area, brick dish drain [036] along south perimeter. Facing east.**
AMAC Group, 01/06/2020, digital image 2165.



Figure 3.52 **Southeast rear area, east end with concrete surfacing [030], concrete footing [041], part of sandstone footing [032] and downpipe [035]. Facing southwest.**
AMAC Group, 01/06/2020, digital image 2210.



Figure 3.53 Southeast rear area, partial reveal of angled sandstone footing [032] below concrete surfacing [030]. Facing northeast.
AMAC Group, 01/06/2020, digital image 2213.

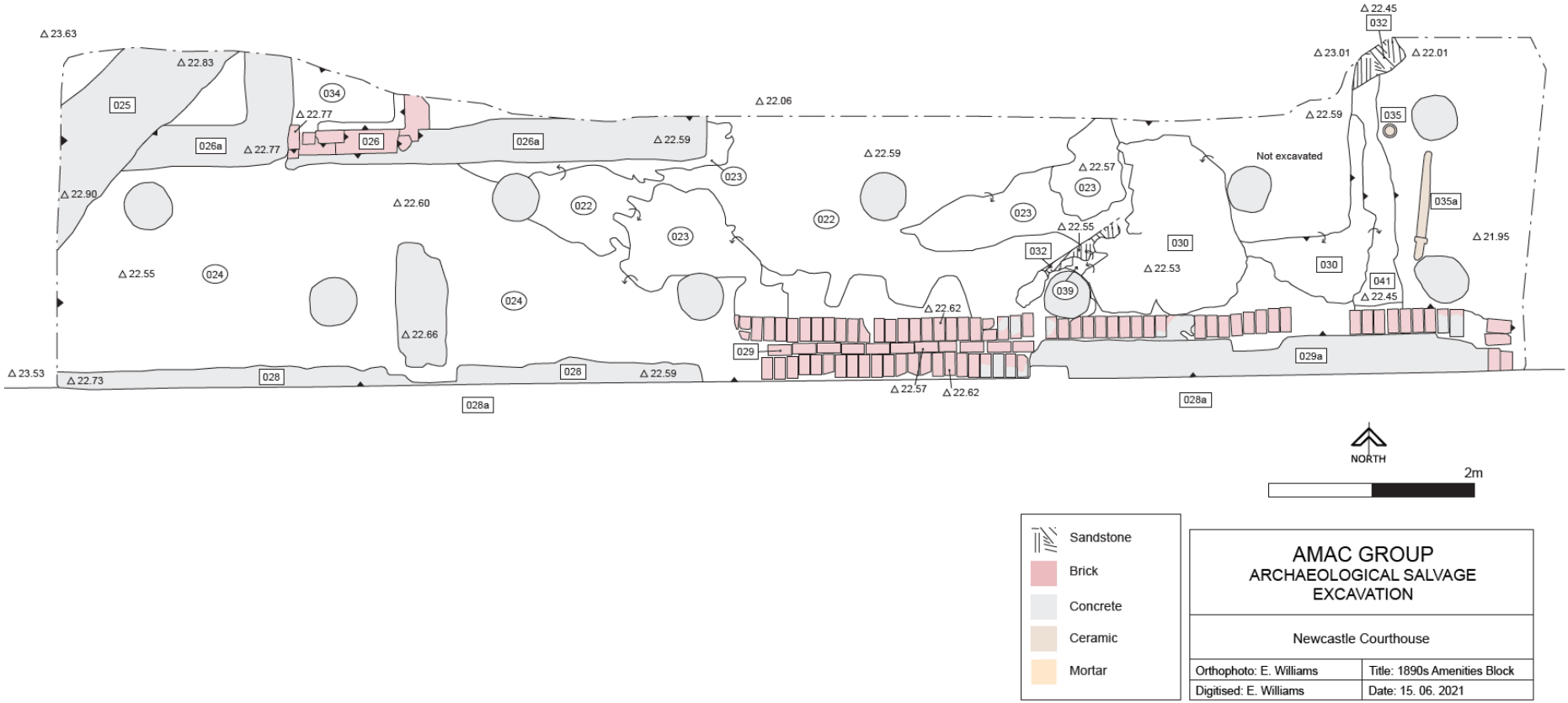


Figure 3.54 **Digitised plan of southeast corner of rear area.**
E. Williams, June 2021.

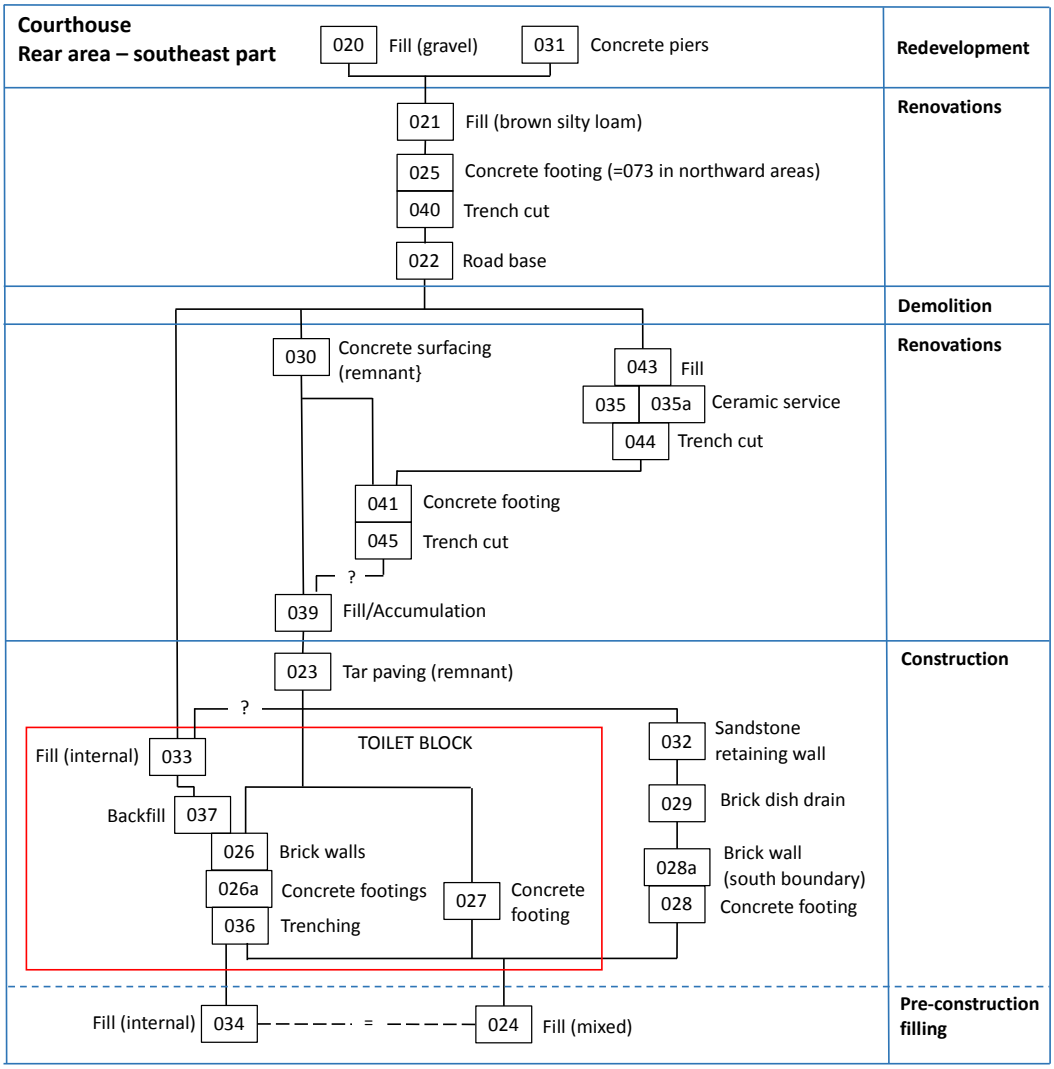


Figure 3.55 **Harris matrix for southeast corner of rear area.**
K. Hickson, June 2021.

3.5.2 Central Rear Area

Construction work in this location consisted of a service trench of limited width, but sufficiently deep to require benching that exposed structural remains which were cleaned and recorded on 24th and 25th August 2020. The remains were more of the amenities block partially exposed in the southeast corner, and a brick sump nearby to the west. Logistics required exposure of the remains in three stages, first the west end followed by the central area and east end. The smaller spaces have been identified as Cubicles 1–8 and, based on the original court house plan No. 11 (Figure 2.11–Figure 2.12), the larger spaces at each end as Urinals 1 and 2. Figure 3.63 forms a digitised plan of the overall amenities block.

As with other parts of the rear area, brown sandy loam [021] overlaid road base [022], sealing the remains of the amenities block. Two later features cut the road base; concrete footing [073] that was a continuation of footing [025] in the southeast area, and ceramic service [122]. The latter had a red fabric with grey core, orange rubber O-ring seals and a trench fill of sand and gravel. It was for stormwater and the same as service [102] at the top of the west section of a waterproofing trench eastward (see Figure 3.56).

Service [122] destroyed at least the upper part of sump [118] made with orange bricks bonded with cement (Figure 3.56). Their fine and dense fabric being very similar to the bricks used in footings [216] for steps suggested the sump was an original feature. The bricks measured 7.6 x 11.4 x 22.9cm (3 x 4½ x 9ins) and the sump 121.9cm (48ins) long and more than 62cm wide, with the internal length 73cm (28¾ins). The sump was set in cut [121] with mostly dark grey clay fill and a probable cut on the east side suggested the outlet pipe went in that direction. The cutting level of [121] was no lower than mixed clay fill [124] which underlay remnant patches of tar paving [119a], and while not clear it appeared likely that the paving had sealed the trenches. Along the south section this external tar paving (the same as [023] in the southeast area) underlay road base [022].

Urinal 1 and Cubicle 1 at the west end of the amenities block were the first parts exposed (Figure 3.57). Bonded with cement, the wall bricks [111] were again very similar to those used in the footings [216] for steps though slightly longer at 7.6 x 11.4 x 24.1cm (3 x 4½ x 9½ins). The brick length was the width of the walls. Externally on the north-south axis both parts measured 2.03m (6ft 8ins), with Urinal 1 internally 1.55 x 2.56m (5ft 1in x 8ft 4¾ ins). Cubicle 1 internally was 1.55m (5ft 1ins) by more than 1.15m (3ft 9¼ins), its full width not measurable due to absence of bricks on the east footing but likely about 1.22m (4ft). Both spaces containing remnant tar paving [119] indicated use of this material for the floors in the amenities block. It overlay mixed fill [123] that in Urinal 1 abutted the bricks, showing that it was internal fill laid over the concrete footings [110] after at least the basal wall courses had been built. Presumably to raise the floor level, this internal fill would have been laid on the pre-construction fill [124].

The next exposure consisted of Cubicles 2–8 (Figure 3.59). Demolition of the building had inflicted much greater damage on these spaces, many of the basal wall bricks barely present and most absent altogether. This prevented measurement of dimensions, though it is reasonable to assume that Cubicles 2–8 internally were the same as or very similar to the size of Cubicle 1, 1.22m wide (4ft) and 1.55m (5ft 1ins) long. The last part to be exposed, Urinal 2 internally measured 1.56 x 2.48m (5ft 1½ins x 8ft 1 5/8ins), its width a fraction larger than Urinal 1 but some 3 inches shorter.

Overall, the amenities block was approximately 17.27m (57ft) long and, based on Urinal 1 with remnant walls, 2.03m (6ft 8ins) wide. Over the length the surface level of the concrete footings dropped three times, from RL23.24m to 23.08m to 22.80m to 22.62m (AHD). This suggests fill [124] into which the footing trenches were cut had an overall eastward gradient of approximately 1:28.

Downpipes for ceramic services were exposed on the north side of Cubicles 2, 5 and 8, in the northwest corner of Urinal 2 and more central adjacent to the west wall of Urinal 1 with a pipe heading north. This pointed to the outlet pipe being along the exterior of the north wall. Parts of pipes also exposed in the central and south of Cubicles 3 and 4 raised a question about drainage in that direction (see Figure 3.60), as no service trench occurred in the southeast area near the south wall of Cubicle 8 and Urinal 2. Assuming they belonged to the amenities block and not imported with the fill, the function of these pipes is unknown unless perhaps for drainage of internal hand basins.

Along with cutting internal fill [123], service [120] in Urinal 1 appearing to have been cut through the north brick wall suggested it was a replacement, which would explain the remnant tar paving [119] also appearing to have been cut (see Figure 3.58). The downpipe being in a different location to that in Urinal 2 may also indicate a change in function. Replacement of piping in other spaces is possible but uncertain, depending on whether the concrete footing at the north of some cubicles appearing to be cut (particularly in Cubicles 2 and 3) was real or a gap had been left for trenching. In the case of Cubicles 1 and 3, brick infill suggested a gap whereas a continuous north footing in Urinal 2 suggested the piping ran below.[41] There may have been some retention of original piping and some replacement, though neither seem able to account for the lack of regular positioning of the cubicle downpipes.



Figure 3.56 **Rear area, west end, brick sump [118] cut by service [122], west wall of Urinal 1 at top. Facing east.**
AMAC Group, 24/08/2020, digital image 9824.

[41] Although not shown in Figure 3.63, the brick infill in north Cubicle 1 had been exposed earlier as part of wall [054] partially revealed along the south side of a waterproofing trench and must have been removed by machining.



Figure 3.57 Rear area, amenities block Urinal 1 and Cubicle 1. Facing east.
AMAC Group, 24/08/2020, digital image 9866.



Figure 3.58 Rear area, Urinal 1 service trench [120] adjacent to west wall. Facing east.
AMAC Group, 24/08/2020, digital image 9859.



Figure 3.59 **Rear area, toilet block Cubicles 2–8, also showing concrete footing [073] overlying Cubicles 6–7. Facing west.**
AMAC Group, 25/08/2020, digital image 9881.



Figure 3.60 **Rear area, Cubicle 3, part Cubicle 2 at left, part Cubicle 4 at right. Facing north.**
AMAC Group, 25/08/2020, digital image 9870.



Figure 3.61 **Rear area, Cubicle 8. Facing north.**
AMAC Group, 25/08/2020, digital image 9875.



Figure 3.62 Rear area, Urinal 2 adjacent to Cubicle 8. Facing west.
AMAC Group, 25/08/2020, digital image 9911.

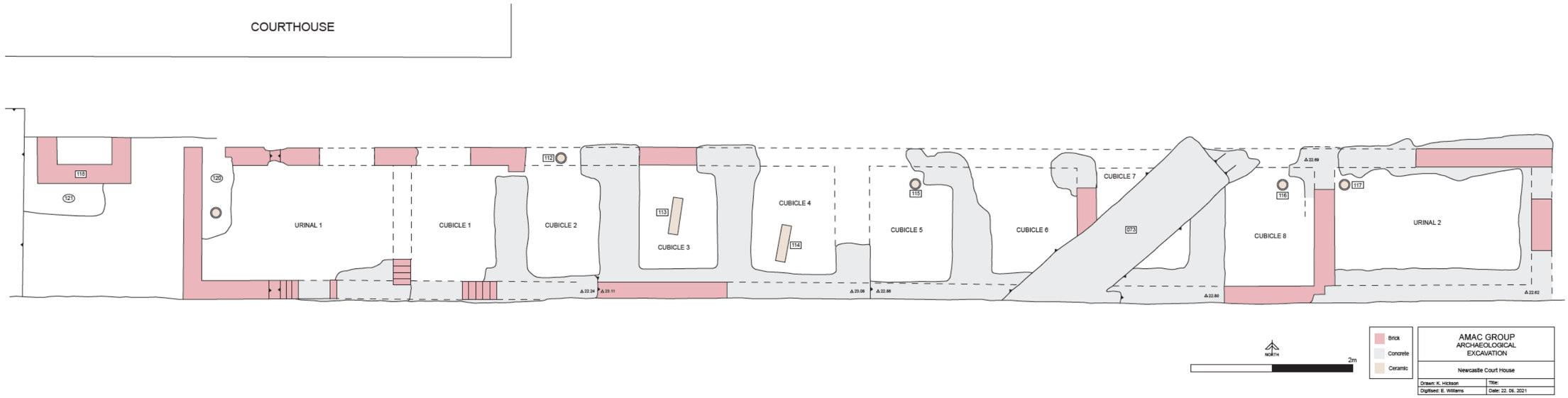


Figure 3.63 **Digitised plan of amenities block and brick sump.**
E. Williams, June 2021.

3.5.3 North Rear Area – Private Courtyards

Redevelopment works in the northeast part of the rear area consisted of deep excavation for water tanks and trenching at the west for cleaning and waterproofing the exterior of the basement walls and footings. The latter exposed structural remains and given the likelihood of further remains in the area of deeper excavation, the initial removal of brown loam [021] over road base [022] was supervised. This revealed widespread survival of structural remains and salvage excavation took place on 24th and 25th June 2020.

The remains consisted of fairly square, walled spaces behind the court house and subsequently numbered Courtyards 1 to 5 (eastward). The walls of Courtyard 1 were still standing due to a later conversion to internal toilets. The buried remains included Courtyards 2 to 5, with deeper excavation for water tanks involving removal of Courtyards 3 to 5. A sizable portion of Courtyard 2 remained intact and unexposed. Figure 3.81 forms a digitised plan of all excavated courtyards.

3.5.3.1 Waterproofing Trench

Two waterproofing trenches mechanically excavated in the rear area were able to be recorded, one along the south wall of Courtyard 1 (**Error! Reference source not found.**) and one along the north and west walls of the court house building in Courtyard 2 (see below).[42] The former was 90–100cm wide and 1.95m deep with natural white-grey sand [047] at its base at approximately RL21.90m (AHD). At that level the footing trench [048] for the original south wall [052] of Courtyard 1 was visible cutting the natural sand, with backfill [049] of dark brown loamy sand with some clay nodules. However, the west section revealed the cut was made higher (Figure 3.65).[43]

Footing trench [048] cut pre-construction fill [107] overlaying natural sand [047] and an apparent change in nature from clay to grey soil southward suggests there may have been another cut into [107]. If so, the purpose of that cut is not known. Fills [050] and [046] were laid after construction at least of the lower part of the Courtyard 1 wall, and likewise the two unnumbered deposits below a small remnant of tar paving [106]. These may have been part of fill [046]. As elsewhere in the rear area, the tar paving underlay road base [022] below dark brown loam [021]. The latest feature in section was ceramic service [102] cut into road base [022] and the same as service [122] found westward (see Figure 3.56) though here a plastic pipe also was exposed.

The uncertainties are the stratigraphic levels of ferrous pipe [105] and ceramic service [051]. A trench for [105] could not be discerned and it may have been laid during installation of fill [046]. The cut level for ceramic service [051] was not lower than fill [046] but whether also below tar paving [106] is unclear. However, a part of

[42] The deeper excavation for water tanks eastward served the same purpose of exposing the basement walls and concrete footings. This trenching presumably extended around the court house and since the monitor was not notified of any finds, it can only be assumed that no exterior structural remains were uncovered in those locations.

[43] Due to poor light the field section drawing did not show all the cuts and deposits made visible by flash photography, which enabled production of Figure 3.65 from magnification of the digital photograph. As indicated by broken lines based on change of colour and/or apparent consistency, parts of the profile are uncertain.

the north wall of the amenities block was exposed as context [054] along the top of the south baulk, and two ceramic pipes emerging at a lower level and sloping north are visible at left in **Error! Reference source not found.**. These attest the outlet pipe for the amenities block being along the exterior of the north wall and service [051] is the sole candidate. As the original outlet [051] would have been below tar paving [106] but were some or all the amenities block piping replacements, service [051] may have been likewise and cut into the original tar paving [106].



Figure 3.64 Rear area, waterproofing trench along south side of Courtyard 1, partial reveal of wall [054] belonging to the amenities block at left. Facing west.
Note natural white-grey sand [047] at base. AMAC Group, 24/06/2020, digital image 0669.

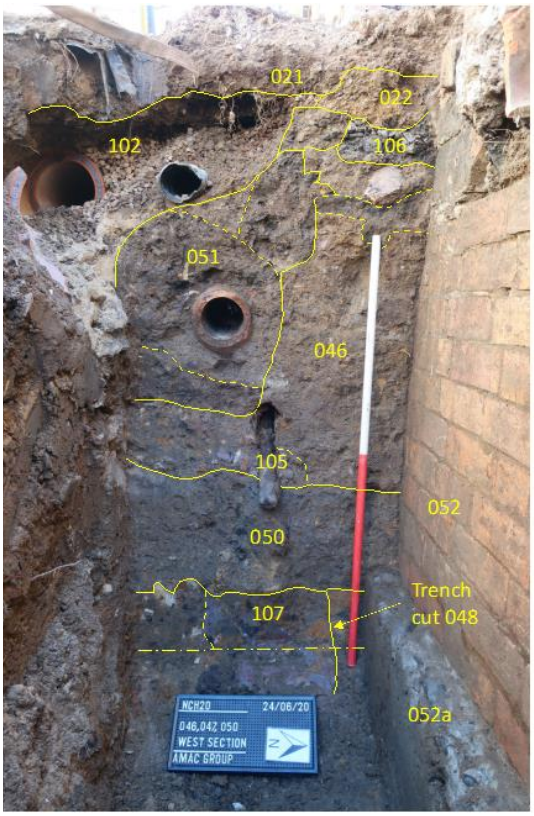


Figure 3.65 Rear area, waterproofing trench along south side of Courtyard 1, west section.
AMAC Group, 24/06/2020, digital image 0659.

3.5.3.2 Courtyard 1

Excepting for a later doorway at the southwest corner giving external egress, Courtyard 1 was still enclosed and standing due to later conversion to toilets. Undertaken after demolition of WC [085] at the southeast corner, this work involved wall changes. A skin wall of dry press bricks [084a] on a concrete footing was built against the original east wall [084] and the latter's top part reworked to create window spaces (Figure 3.66). Most of the upper part of the original south wall [052] was replaced. The original walls preserved the location of the demolished WC walls where the bricks had been keyed in, which on the east wall showed the WC had been at least 3.2m (10ft 6ins) high. The original and dry press bricks both measured 7.5 x 11 x 23cm (3 x 4 3/8 x 9ins). No deeper excavation was to occur in this space and while the interior surface at the time was largely covered by demolition debris,

Courtyard 1 having a tar paving appeared likely as indicated by numerous coal fragments.

Courtyard 1 measured 4.83m (15ft 10ins) on the north-south axis but with the records unclear about whether the width of 5.51m (17ft 9ins) was from the court house to the inner skin wall or to the outer original wall, it may have been wider.

The conversion to toilets also involved cuts through the original south wall [052] to accommodate drainage pipes, the largest closed with concrete visible at upper right in Figure 3.67. These were also visible in the waterproofing trench along the south side of that wall (Figure 3.69). The rectilinear cavity at right was original, a gap created by the bricklayers for the WC outlet pipe. Internally this cavity sat below remnant cement render painted white or cream and with two ferrous fixtures for a brace or cistern (Figure 3.68). Although the WCs in Courtyards 2–5 did not survive above foundation walls, that all were internally rendered, painted and mirrored this layout is likely.



Figure 3.66 **Courtyard 1 east walls [084] and [084a]. Facing east.**
AMAC Group, 25/06/2020, digital image 0782.



Figure 3.67 **Courtyard 1, WC walls [085] at southeast corner. Facing south.** AMAC Group, 25/06/2020, digital image 0705.



Figure 3.68 **Courtyard 1 WC, cement render and ferrous fixtures on original south wall, above cavity for pipes exit (excerpt of photograph). Facing south.** AMAC Group, 25/06/2020, digital image 0705.



Figure 3.69 **Courtyard 1, exterior of south wall with holes for service pipes. Facing northwest.**
AMAC Group, 25/06/2020, digital image 9693.

3.5.3.3 Courtyard 2

A L-shaped waterproofing trench revealed brick walls on concrete footings belonging to Courtyard 2. The north part (Figure 3.71) exposed a wall set 95cm (3ft 1½ ins) south of the court house wall, 24cm (9½ ins) wide and 3.2m (10ft 6ins) long with a preserved height of 85cm. It was keyed into the north end of the east wall [057] keyed into the court house. Slightly narrower at 23cm (9ins) and 3.81m (12ft 6ins) long, this east wall was also the west wall of Courtyard 3.

The trench along the west (Figure 3.72) exposed the brick walls of WC [055], including its south wall that was an eastward continuation of wall [052] in the waterproofing trench described above and common to all the courtyards. All three walls were 24cm (9½ins) wide and enclosed a space of 1.6 x 1.52m (4ft 1½ins x 5ft), very close to the amenities block Cubicle 1 dimensions of about 1.22 x 1.55m (4ft x 5ft 1ins). Excluding the north wall and the gap to the court house, Courtyard 2 measured 3.61 x 5.56m (11ft 10ins x 18ft 3ins). Inclusion of the north area increases the former dimension to 4.8m (15ft 9ins).

The surface levels of the exposed concrete footings along the trenches varied, the highest being for the north wall of WC [055] at RL22.28m (AHD) and that for the adjacent court house wall at RL21.88m (AHD). Along the north the west end of the court house wall footing was at RL21.72m (AHD) then stepped down to RL21.58m (AHD) at the east, and both were lower than that for the Courtyard 2 north wall at RL21.94m (AHD).

Courtyard 2 is further described below in relation to the deeper excavation that involved removal of its east wall and exposure of several features and the sequence of internal fills.



Figure 3.70 **Courtyard 2, view along north trench, wall [056] at right. Facing east.** AMAC Group, 25/06/2020, digital image 9678.



Figure 3.71 Courtyard 2, view along west trench to WC [055]. Facing east.
AMAC Group, 25/06/2020, digital image 9680.

3.5.3.4 Courtyard 3

Courtyard 3 was the best preserved of the three cleaned and recorded, with part of demolition fill [068] and most of tar paving [069] still in situ (Figure 3.72). The space measured 4.32 x 4.83m (14ft 2ins x 15ft 10ins) with WC [059] at the southeast corner, the walls of which were mostly destroyed by later service trench [065]. WC [059] otherwise contained clay fill [079], laid after wall construction.

Located in the northeast corner next to the east wall [060] and cut through by service trench [061], sandstone drain portal [070] was 76cm (2ft 6ins) wide and more than 32cm long. The north parts of [070] and brick sump [070a] below were later exposed during monitoring, the former abutted by and partly covered by the tar paving and the sump set into the underlying clay fill [075] (Figure 3.73). The sump interior was cement rendered.

Stone slab [103] at the northwest corner appeared to be an original feature, not sandstone but a very hard rock type with a fine crystalline structure (possibly granite). The bottom was not dressed like the surface and sides, and the exposed surface was 1.22m (4ft) square with the south face 23cm (9ins) high. The south

edge was supported by brick wall [092] and the west and north edges by being set into the court house wall, the former slightly and the latter by one brick width.

Due to a large and deep concrete footing [073] overlying the south wall of Courtyards 4 and 5 eastward, drainage services in section out to the south were exposed in section only in Courtyard 3. Brown salt-glazed pipe [100], 13cm in diameter, was the outlet for WC [059] and [097] forming an external junction with two downpipes 15cm in diameter (Figure 3.74). While the former appears to have been laid through an intentionally created hole in the wall, like that for the outlet pipe of the WC in Courtyard 1, service [097] had been cut through the south wall.

A copper alloy water pipe [101] found projecting from the south section during monitoring was below road base [022] but whether it sat in the same trench as ceramic service [097], or in a trench cut into the tar paving south of the courtyards was uncertain. That the pipe [101] preceded the road base that sealed all remains in the rear area indicated an association with Courtyard 3 and an up-pipe attachment was located just inside the south wall. Whether it related to ferrous pipe [089] partially exposed near the north wall of WC [059] and below tar paving [069] is not known.



Figure 3.72 **Courtyard 3 final. Facing north.**
AMAC Group, 25/06/2020, digital image 0688.



Figure 3.73 **Courtyard 3, north part of sandstone portal [070] over remnant brick sump [070a]. Facing north.**
AMAC Group, 29/06/2020, digital image 9730.



Figure 3.74 **Courtyard 3 section at southeast, service pipe [097] at right, service pipe [100] and concrete footing [073] at left. Facing south.**
AMAC Group, 25/06/2020, digital image 0737.



Figure 3.75 Courtyard 3, remnant west and south walls revealed by deeper excavation. Facing southwest.
AMAC Group, 29/06/2020, digital image 9720.

3.5.3.5 Courtyard 4

Courtyard 4 with WC [060] in the southwest corner measured 4.32m (14ft 2ins) wide by more than 4.57m (15ft 1in) long, the latter dimension being due to the south wall not being exposed (Figure 3.76). The width was the same as Courtyard 3 and in terms of deposits the same sequence occurred with demolition fill [068] over tar paving [074] over internal fill [075]. The only difference was occurrence of some residual road base [022].

Stone slab [104] at the northeast corner was a companion to [103] at the northwest corner of Courtyard 3. It was the same type of stone with the same dimensions and supported in the same manner.

At the southwest adjacent to WC [060] service trench [077] with brown salt-glazed pipes [079], 14cm in diameter, was found cutting internal fill [075] and cut by later service trench [065]. The pipes were orientated southwest to northeast and may have connected with brick sump [086] at the northeast and truncated by service trench [061]. The sump was more than 35cm (13.78ins) wide but due to disturbance the length of 60cm (23.6ins) is approximate. The bricks were the same type as used in the courtyard walls and measured 7.5 x 11 x 23cm. Like sump [070a] in Courtyard 3, sump [086] was set against the east wall but located more to the south.

A length of heavily corroded ferrous pipe [082] was found along the west side of WC [081], sitting in the surface of internal fill [075] without a trench discernible. If not a discard, the pipe likely represented provision of water to Courtyard 4.



Figure 3.76 Courtyard 4 final. Facing north.
AMAC Group, 25/06/2020, digital image 0712.



Figure 3.77 Courtyard 4, north section showing tar paving [074] over internal fill [075]. Facing north.
AMAC Group, 25/06/2020, digital image 0734.

3.5.3.6 Courtyard 5

Courtyard 5 with WC [081] at the southwest corner measured 4.45m (14ft 7ins) wide by more than 4.05m (13ft 3in long), the latter dimension again due to the south wall not being exposed. In terms of deposits, it showed the same sequence as Courtyards 3 and 4 with demolition fill [068] over tar paving [093] over internal fill [075]. Later work did not reveal a brick sump but exposed an additional concrete footing [090a] 1.57m (5ft 2ins) long and approximately 46cm (1ft 6ins) wide west of the east wall (Figure 3.79).



Figure 3.78 **Courtyard 5 final. Facing north.**
AMAC Group, 25/06/2020, digital image 0734.



Figure 3.79 **Courtyard 5, remnant lower part of east wall [090] at right, concrete footing [090a] at left found during monitoring. Facing north**
AMAC Group, 30/06/2020, digital image 9773.

3.5.3.7 Brick Fabrics and Dimensions

Where the clay fabric of bricks used in the courtyard and WC walls were visible, no significant differences could be discerned. Variability was primarily in colour (mostly orange) and the type and size of inclusions such as small stones and cinder. Weight and density suggested manufacture by dry press machinery. The bricks lacked frogs and no maker names or marks were observed.

Recorded dimensions indicate three sizes:

- 7.5 x 11 x 23cm / 3 x 4 3/8 x 9ins
- 7.5 x 11 x 24cm / 3 x 4 3/8 x 9½ins
- 9 x 11 x 23cm / 3½ x 4 3/8 x 9ins.

3.5.3.8 Later Services

Two service trenches with ceramic pipes were cut through Courtyards 3–5, both laid into road base [022] and sealed by brown loam [021]. Trench [061] across the north contained a fill of sand and gravel and pipes [063] of an unglazed red fabric with grey core and 19cm in diameter. Orange rubber O-rings sealed the joins and the pipes sloped east to connect with brick sump [091]. As previously observed, sump [091] overlay the south footing [216] and post-dated demolition of original steps at the southeast corner of the court house. Near that corner a metal downpipe on the court house wall connected to the piping showed [061] was a stormwater service. Its west end disappearing adjacent to a truncated section of the east wall of Courtyard 2 almost certainly indicated continuation westward and subsequent removal by the waterproofing trench. A turn northward and removal by the west part of the waterproofing trench also is feasible, for by trench fill, pipes and orange O-rings [061] was identical to service [102]/[122] exposed westward along the rear of the court house.

Service trench [065] contained a mixed fill and pipes [067] of an unglazed red fabric with grey core and 16cm diameter. Grey rubber O-rings sealed the joins and the pipes sloped east to connect with a circular concrete inspection pit. Excavated to a greater depth than [061], trench [065] entered Courtyard 3 through the south wall and exited through the east wall of Courtyard 5 to an unknown destination. Serving as the outlet for the toilets into which Courtyard 1 was converted appeared to be its likely function.

Service trench [094] with sand fill and yellow-brown salt-glazed pipes 12.5cm in diameter also being later is unclear. Cutting the east wall of Courtyard 5 appeared to indicate this, however photographs suggest the trench continued to the southeast and below residual road base [022]. While this could be an accident of machining, it is possible that [094] was a pre-demolition service cut through the brick wall. Either way, being cut by trench [065] showed it was earlier than service pipes [067]. Figure 3.80 shows Courtyard 3-5 at completion of the salvage excavation.



Figure 3.80 **Rear area, Courtyards 3–5 final. Facing east.**
AMAC Group, 29/06/2020, digital image 9704.

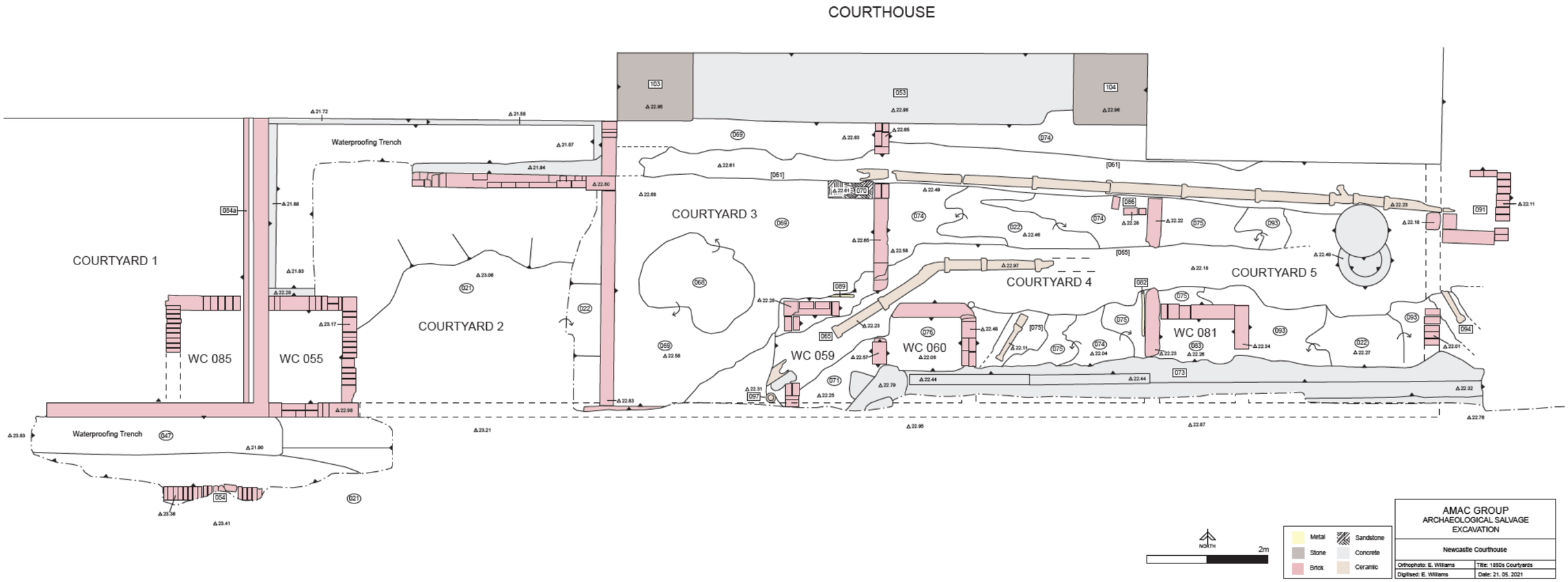


Figure 3.81. **Digitised plan of Courtyards 1–5 and waterproofing trenches.** E. Williams, July 2021.

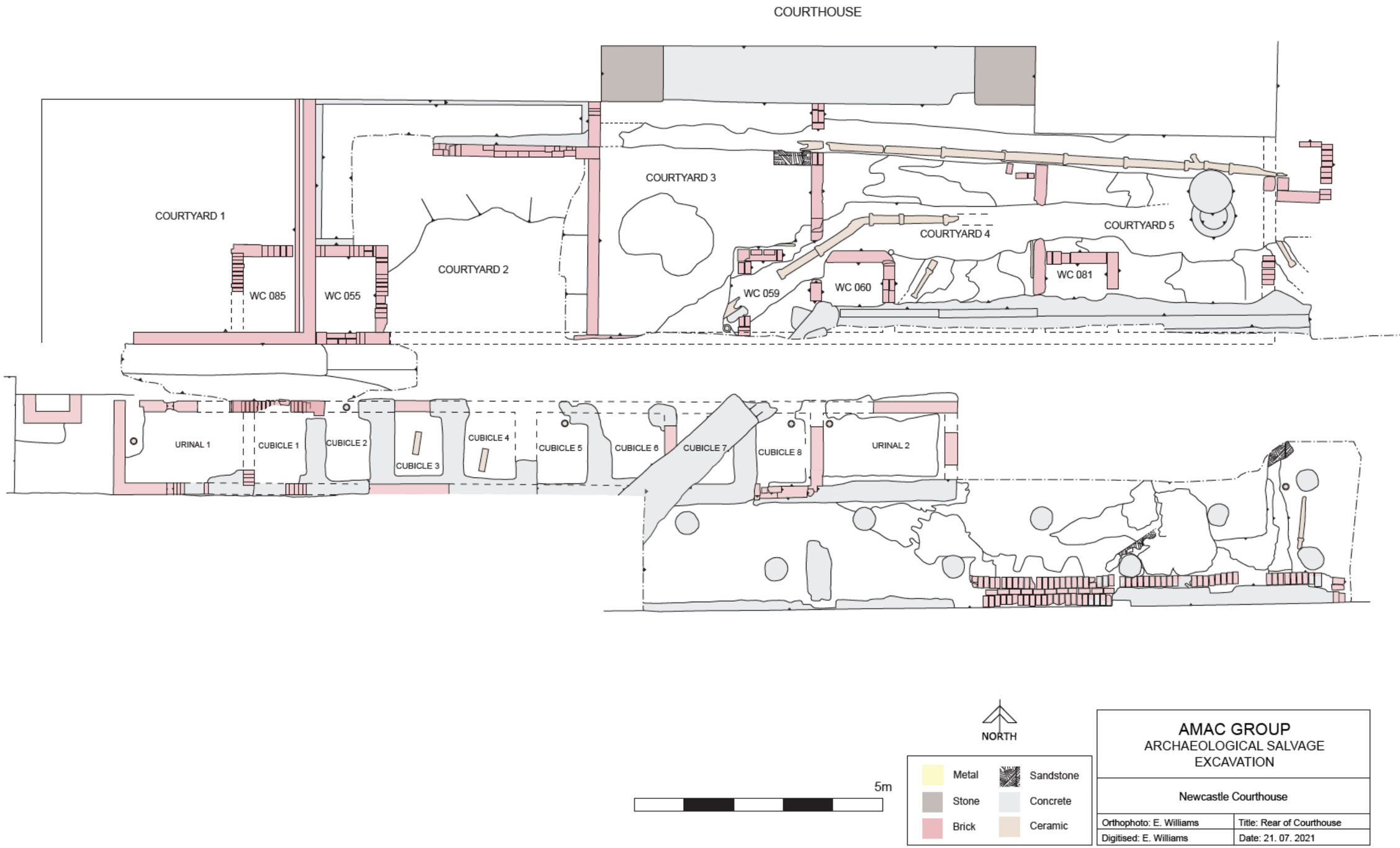


Figure 3.82 **Digitised plan showing location of courtyards and amenities block at rear of court house.**
E. Williams, July 2021.

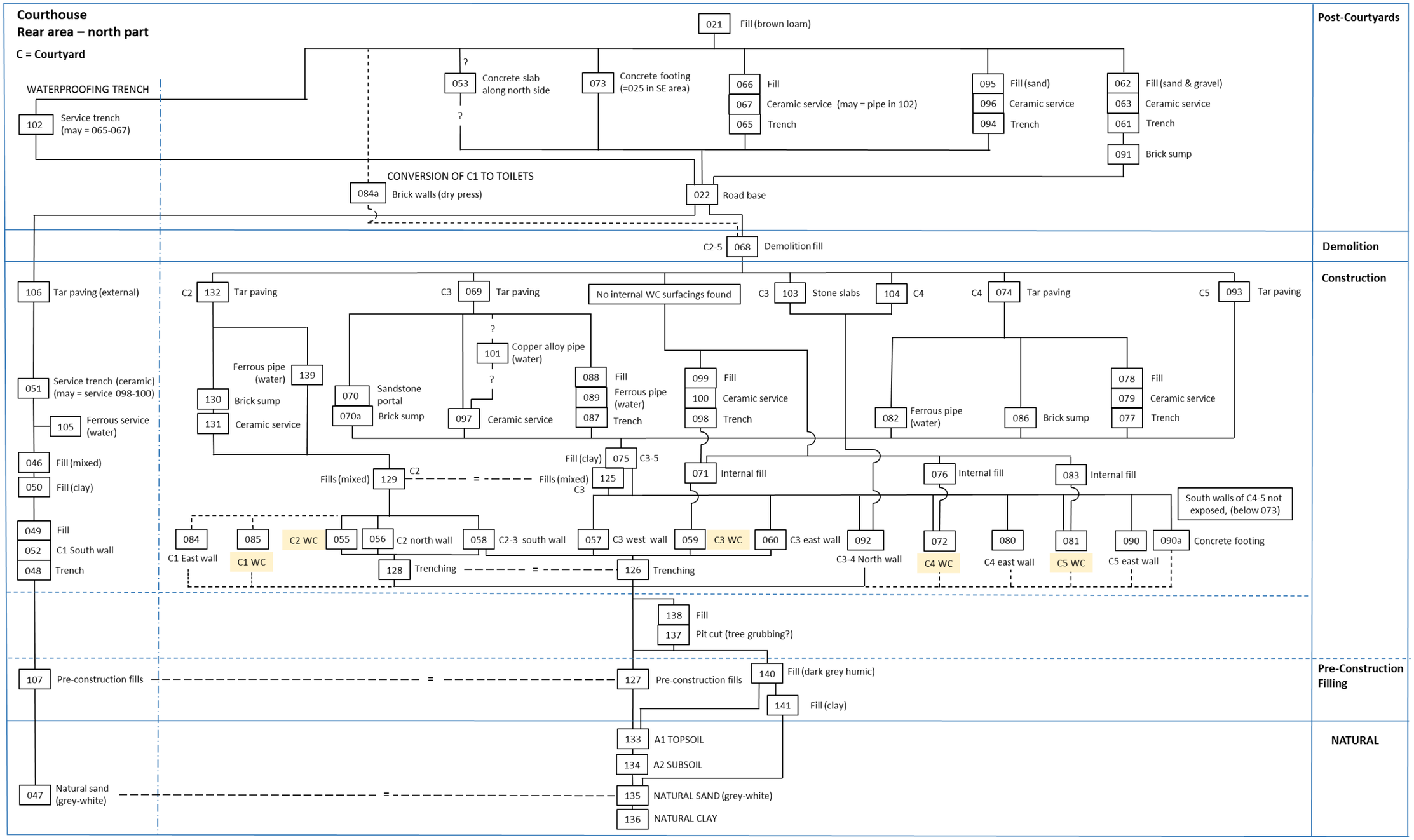


Figure 3.83 **Harris Matrix – Courtyards 1 to 5.**
K. Hickson, July 2021.

3.5.3.9 Monitoring

Deeper machining for waterproofing the external walls of the court house and for installation of water tanks had a nominal end level of RL20.5m (AHD), approximately 2.1–2.2m below the surface level of the tar paving in Courtyard 3. The excavation involved removal of almost all the remains of Courtyards 3–5, with partial survival of Courtyard 2. Excepting removal of its WC at the southwest corner for waterproofing, the Courtyard 2 south wall and footing remained intact. Benching required removal of most of the south wall of Courtyards 3–5 wall but the basal courses and footing remain in situ. The excavation proceeded in two stages, initially to a level at which several concrete foundations were laid and thence to the end level, which at RL20.15m (AHD) was deeper than the nominal level (see Figure 3.96–Figure 3.97). Context number allocated during this monitoring phase ([125] – [141]) have also been incorporated into the Harris matrix for the courtyards (Figure 3.83).

The first stage of excavation reached the level where the concrete footings for the courtyard walls could be removed. As an indication of size, Figure 3.84 shows the footing for the Courtyard 5 WC that measured 45.7cm (1ft 6ins) wide and 40.6cm (1ft 4ins) thick, the concrete having mostly stone aggregate with a small amount of orange brick visible in places. Its thickness was similar to the footing for the north wall [092] of Courtyards 3 and 4, being 43.2cm (1ft 5ins) thick, with its surface at RL21.83m (AHD) or about 80cm below the tar paving in Courtyard 3. The largest and most difficult to remove was the later concrete footing [073] with small pebble aggregate and some steel reinforcement (plain rod and spiral rod, Figure 3.85). It originated to the southwest as [025], extended across the amenities block to enter the southeast corner of Courtyard 3 then continued to the east limit of excavation. It also may have extended further as footing [218] found in the rear east area (see plan, Figure 3.21). The specific function of [073] is open to conjecture though the projecting part on the surface 10cm high and 15cm wide being kerb-like suggested it served to define a perimeter. Being a late feature was indicated by one fragment of the footing containing a clear glass bottle inscribed ‘750ML/DO NOT LITTER’ on the shoulder and ‘RECYCLABLE/NOT TO BE REFILLED’ around the foot.

Concrete slab [053] across the north of Courtyards 3 and 4 was laid between stone slabs [103] and [104] not removed by demolition, probably because they were set into the court house walls. Also set into the court house wall along the north, slab [053] was supported along the south by the remnant of brick wall [092] and centrally by the remnant of Courtyards 3–4 wall [060]. Unlike on the south sides of brick wall [092] where the courtyards had been filled, the north sides were cavities containing loose grey sandy soil and sandstone rubble (Figure 3.87). Decayed wood adhering to the underside of [053] indicated use of timber to support construction over the cavities. This post-dated demolition of the courtyards and probably preceded road base [022] since that material was absent in the cavities.

Machining in Courtyard 3 showed the yellow-brown clay fill [075] sealed by tar paving [069] to be the uppermost part of post-construction filling numbered as [125]. In the north section shown in Figure 3.86 the lower part consisted of mixed grey clayey fill over yellow sand partially revealed at this level (bottom right of the photograph). The latter sealed a dark grey sandy, clayey and very humic soil [140] at approximately RL21.40m (AHD), up to 20cm thick and overlying mottled brown-grey clay [141] (Figure 3.88–Figure 3.89).

The yellow sand at the base of fills [125] also filled the inner part of a sub-circular cut [137] in the southeast corner of Courtyard 3 (Figure 3.89 centre right, Figure

3.90). As initially revealed the feature measured 1.35m (4.43ft) east – west and 1.33m (4.36ft) north - south, with the yellow sand surrounded by an outer ring of friable brown clay 20–25cm wide. The cut level was uncertain, probably into grey soil [140] but the pit only started to become clearer in the surface of clay [141]. Full clarity emerged lower, the size increasing to 2.25m (7.38ft) east - west and more than 1.62m (5.3ft) north - south, the latter being due to the pit continuing south below the concrete footing for the south wall (Figure 3.91–Figure 3.92). With a maximum depth of 72cm (28.3ins) and width of 2.01m (6.6ft) in section, the pit fill [138] was mixed brown clay and dark grey clayey loam with some yellow sand, charcoal, several fragments of clay bricks, some fragments of sandstone and a piece of wood. Whilst very sandy, the fabric of the brick fragments appeared to be too dense to be hand-made sandstocks though not as dense as those used in the courtyards and amenities block. The feature was not a rubbish pit and may have been removal of a tree stump.

Trenching [126] for the Courtyard 3 south and west walls was exposed in the surface of grey soil [140] at the southwest corner (Figure 3.93). Containing very mixed fills, the south wall part was 32–36cm (12.6–14.2ins) wide and the west wall part 8–9cm (3.2–3.5ins) wide. The sequence of a humic and fairly clean grey soil [140] over clay [141] suggested the natural horizon, which would make pit [137] the earliest activity found in this area. However, [140] – [141] both being part of pre-construction filling [127] became evident with removal of the Courtyard 3 west wall and reveal of the soil profile in Courtyard 2.

In the higher post-construction level of fills [129] the Courtyard 2 section revealed a corroded ferrous pipe [139] of 3.8cm (1½ins) diameter, the remains of a brick sump [233] filled with demolition debris [068] and over ceramic service [131] (Figure 3.94). Albeit approximate due to disturbance, the sump cavity measured 40.6cm (1ft 4ins) wide and 61cm (2ft) from the top of the highest brick to the base of the ceramic pipe. The interior of the sump was cement rendered like sump [070a] in Courtyard 3. Service [131] aligned with a pipe out of Courtyard 1 (see Figure 3.71, centre right), and together they may represent a drainage system for the brick sumps orientated east-west and not exiting through the south wall. More salt-glazed ceramic services were observed in the Courtyards 3 and 4 post-construction fills during machining, but time constraints did not permit tracing any system.

The Courtyard 2 section also showed trench [128] for the south wall footing cut into pre-construction fills [127] (Figure 3.95–Figure 3.96). This horizon consisted of mixed grey sandy fill over yellow sand over dark grey sandy clayey soil 15–22cm thick, repeating the sequence in Courtyard 3 of yellow sand on dark grey soil [140]. However, clay [141] was absent and along with overlying a lens of white sand and a lens of small coal fragments, the dark grey soil sealed natural A1-A2 soils [133] – [134] on white-light grey sand [135]. The A1 topsoil appeared to have been disturbed and in parts possibly re-formed. Sand [135] being gritty with small pebbles was very different to the loose natural sand exposed in the waterproofing trench along the south of Courtyard 1 and to the Aeolian sand in the west area (see below). The A1-A2 soils did not occur in west Courtyard 3 and at approximately 1.8m east of the section sand [135] disappeared below clay [141]. Although less attention could be paid to Courtyards 4 and 5, the dark grey humic soil [140] occurring in Courtyard 5 extended the pre-construction filling eastward.

As shown in Figure 3.97, concrete footings were laid before the second stage of machining. Cleaning of the basement walls of the court house for waterproofing also provided a clearer view of the brickwork. The primary method was English bond of alternating courses of headers and stretchers but with some courses having header-

stretcher-stretcher-header and others a mix of headers and stretchers; this was not consistent.

The second stage of machining (Figure 3.98) reached into natural clay [136]. Figure 3.99 shows part of the west section in which 15–25cm of natural sand [135] had a diffuse and uneven interface with the clay. Given its recorded depth of more than 30cm in the Courtyard 2 section, the sand was in the order of 45–55cm thick. Clay [136] exhibited colour variation with depth, changing from a higher tan brown and light grey to a lower orange-brown, or reddish brown and light grey. It contained plentiful small ironstone gravel and the amount increased markedly at approximately 20–25cm above the end level of RL20.15m (AHD).



Figure 3.84 **Rear area, concrete footing for WC [081]. Facing northeast.**
AMAC Group, 29/06/2020, digital image 9707.



Figure 3.85 **Rear area, part of concrete footing [073]. Facing east.**
AMAC Group, 29/06/2020, digital image 9710.



Figure 3.86 **Rear area, Courtyard 3 north section showing tar paving [069] sealing post-construction fills [075] over upper [125]. Facing northeast.**
AMAC Group, 29/06/2020, digital image 9732.



Figure 3.87 **Rear area, Courtyard 3, cavity below concrete slab [053]. Facing northeast.**
AMAC Group, 29/06/2020, digital image 9748.



Figure 3.88 **Rear area, Courtyard 3 north and west walls on concrete footings and grey soil [140]. Facing northwest.**
AMAC Group, 29/06/2020, digital image 9734.



Figure 3.89 **Rear area, Courtyard 3 after removal of soil [140], showing underlying clay [141] and pit [137] in southeast corner. Facing east.**
AMAC Group, 29/06/2020, digital image 9756.



Figure 3.90 **Rear area, Courtyard 3, initial reveal of pit [137]. Facing north.**
AMAC Group, 29/06/2020, digital image 9754.



Figure 3.91 **Rear area, pit cut and fill [137] and [138]. Facing north.**
AMAC Group, 30/06/2020, digital image 9778.



Figure 3.92 **Rear area, pit cut [137] and fill [138] in south section below south wall footing. Facing south.**
AMAC Group, 02/07/2020, digital image 9806.



Figure 3.93 **Rear area, Courtyard 3, trench [126] for south and west walls cutting grey soil [140]. Facing west.**
AMAC Group, 29/06/2020, digital image 9725.



Figure 3.94 **Rear area, Courtyard 2 east section, ferrous pipe [139] and remains of probable brick sump [130] above ceramic service [131]. Facing west.**
AMAC Group, 29/06/2020, digital image 9745.



Figure 3.95 **Rear area, Courtyard 2 east section, post-construction fills [129] over trench [128] for south wall cut into pre-construction fills [127] over natural horizon. Facing west.**
AMAC Group, 29/06/2020, digital image 9782.



Figure 3.96 **Rear area, Courtyard 2 east section, detail of trench [128] for south wall cut into pre-construction fills [127] over natural horizon. Facing southwest.**
AMAC Group, 29/06/2020, digital image 9782.



Figure 3.97 **Rear area, court house walls cleaned and concrete footings laid at end of first stage of deeper excavation. Facing northwest.**
AMAC Group, 02/07/2020, digital image 9796.



Figure 3.98 **Rear area, end level of second stage of excavation in natural clay [136]. Facing west.**
AMAC Group, 02/07/2020, digital image 9812.



Figure 3.99 **Rear area, detail of west section of deeper excavation, showing remnant natural sand [135] over clay [136]. Facing west.**
AMAC Group, 02/07/2020, digital image 9801.

3.6 WEST AREA

Inspection of excavation works on the west side of the court house occurred in an observational sense for greater site context. Given the eastward slope of Church Street and properties to the west, it was likely that this was heavily truncated from below ground car park construction in the 1960s. This proved to be the case and removal of fills below the basal concrete slab within the building's footprint showed preparatory machining had reached the natural horizon.

Consisting of sand [231] over coffee rock [230], the natural horizon was first exposed in the central west and northwest areas (Figure 3.100 - Figure 3.101). The identity of apparent outcrops in the coffee rock was uncertain but seemed to be either hardened white sand or nascent sandstone. The sand elsewhere was Aeolian and a notable aspect was the exposed parts at the south being pale yellow and those at the north white. Assuming the underlying coffee rock imparted the yellow hue, this suggested that it sloped north as well as east. The disturbances in the surface of the yellow sand appeared to be bioturbation, probably by vegetation rather than the result of human activity.

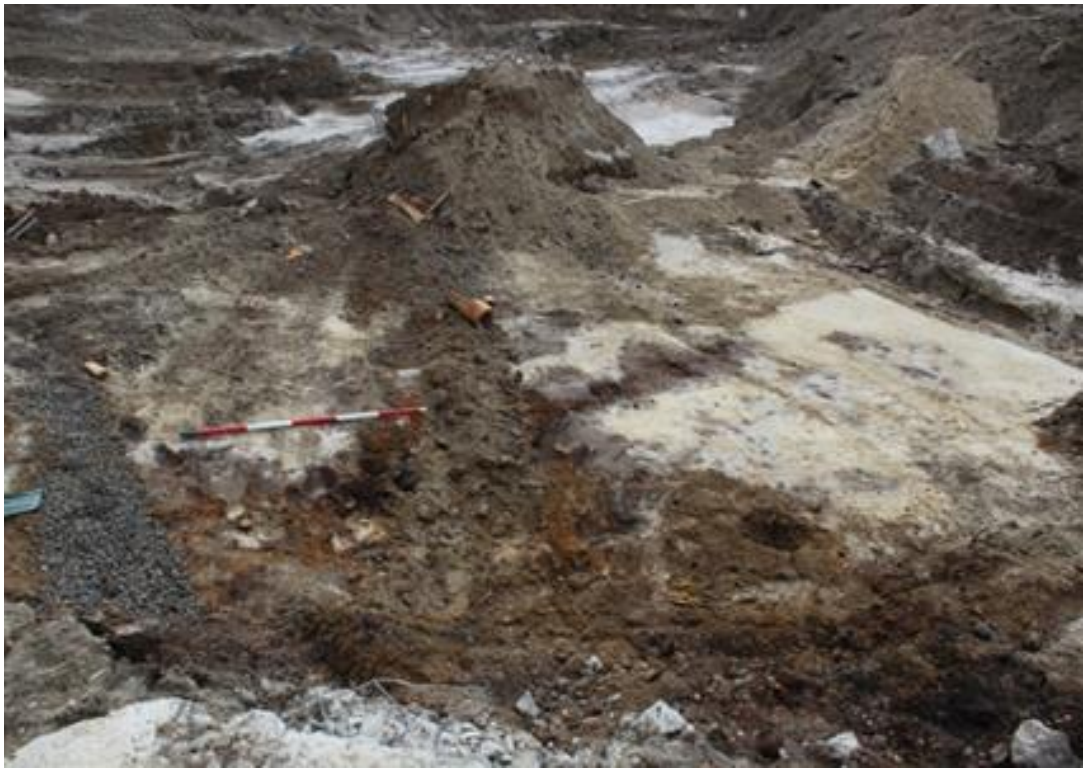


Figure 3.100 West area, reveal of the natural horizon in the central west and northwest. Facing northeast.
AMAC Group, 02/06/2020, digital image 9583.



Figure 3.101 West area, reveal of the natural horizon in the central west. Facing west.
AMAC Group, 02/06/2020, digital image 9579.

Machining along the south side of the west building removed a natural profile of grey and white sands on coffee rock sloping to the east and overlaid by fill increasing in depth accordingly (Figure 3.102–Figure 3.103). At the southwest it removed the same natural profile with white sand and coffee rock sloping north (Figure 3.104). The south face was approximately 25.3m long and the southwest face approximately 10.7m. The nominal end level of this stage was RL23.5m (AHD) and later neatening of the face and machining to a nominal end level of RL22.15m (AHD) revealed the coffee rock overlay yellow-brown sandy clay (Figure 3.105).

In the first stage of reveal along the south section were twelve visible piles numbered 1–12 eastward with the natural profile between. Appearing first between Piles 3–4, the profile where intact consisted of dark grey sandy and slightly humic A1 topsoil [238] fading into light grey A2 subsoil [237] fading into white sand [236] often with grey mottling. The latter was Aeolian and sealed coffee rock [235].

Colour intensity of the A1 topsoil varied with the darkest located between Piles 6–10 (Figure 3.106). The extent of disturbance was a factor in this variation, some parts appearing near intact and others a churned mix of dark, mid and light greys. Most of the A1 - A2 deposits were 10–15cm thick reducing to about 4cm between Piles 11–12 then barely present eastward. The white sand generally was about 80–90cm thick and the coffee rock 50–60cm. In the west section the grey A1-A2 sands were absent, the white sand ranged 23–62cm thick and the coffee rock generally 60cm down to the change to sandy clay. The southwest corner was an exception with the white sand thicker over a deposit of mixed and mottled dark grey/black and white sands in an apparent cavity in the coffee rock, which at this end of the west section was about 130cm thick (Figure 3.107). The rock-like material at upper right in the photograph was solidified upcast from boring for ground anchors and occurred in several places along the west section. Its sandy nature showed that the underlying bedrock was sandstone.



Figure 3.102 West area, south section showing natural sand and coffee rock sloping east below thickening fill. Facing southeast.
AMAC Group, 15/06/2020, digital image 9583.



Figure 3.103 West area, south section showing natural sand and coffee rock sloping east below thickening fill. Facing southwest.
AMAC Group, 15/06/2020, digital image 9604.



Figure 3.104 West area, section at the southwest showing natural sand and coffee rock sloping north below thickening fill. Facing southwest.
AMAC Group, 15/06/2020, digital image 9607.



Figure 3.105 West area, south section showing natural sand and coffee rock sloping east over yellow brown clay. Facing southwest.
AMAC Group, 15/06/2020, digital image 9673.



Figure 3.106 West area, detail of south section showing natural grey A1-A2 soils [237] – [238] over white sand [236] over coffee rock [235]. Facing south.
AMAC Group, 15/06/2020, digital image 9595.



Figure 3.107 West area, junction of south and west sections.
AMAC Group, 15/06/2020, digital image 9622.

An area approximately 2m square near the east end of the section was able to be cleaned and recorded (Figure 3.108). The surface where less disturbed and consisted of thin dark grey sand and elsewhere of a mix of dark and mid grey sands on white sand. The thinness of the grey sands in this location accorded with their being barely present east of Pile 12 in the south section. No cuts into natural were apparent in this area or along the sections, and no artefacts were observed. In the west section parts of the natural white sand underlay mixed grey-brown fill but mostly being sealed by pinkish gravel laid by the builders indicated truncation. Filling along the south section appeared to be basically on event using two types of soil. Overlying the natural sand, the lower fill [239] consisted of orange-brown sand first appearing between Piles 4–5, also with some dark grey clay/loam between Piles 8–9 then as a narrow band 4–5cm thick sloping east (see Figure 3.103). The latter sealed the natural sand shown in Figure 3.108. While it did not appear laid, how the band formed is uncertain unless it was wash downslope. Eastward from Piles 8–9, fill [240] above the band of [239] was very mixed, mainly dark grey clay/loam until the east end where orange-brown sand reappeared and abutted brick wall [241] on a concrete footing (
Figure 3.109). Made with the same bricks as the courtyards and amenities block walls and likewise bonded with cement, this wall was keyed into the south boundary wall but how far it extended northward could not be determined.

Although work in the area adjacent east of wall [241] was not monitored, lack of staining on that side and on the south boundary wall showed that fill [240] did not occur there. Wall [241] almost certainly was an original feature and being abutted by fill [240] only on the west side indicated that the filling over natural along the south of the west area post-dated construction of the court house. This filling being broadly flat or sloping eastward is uncertain due to the works above the south section, though the base level of the work suggested an eastward slope. The form northward, perhaps also sloping in that direction, was later lost to earthworks for the 1960s west building.



Figure 3.108 West area, southeast corner, surface of natural sand below fills. Facing south.
AMAC Group, 17/06/2020, digital image 9659.



Figure 3.109 West area, southeast corner, brick wall on concrete footing [241].
AMAC Group, 15/06/2020, digital image 9627.

4.0 RESPONSE TO RESEARCH DESIGN

The following is a response to the research design provided in the endorsed assessment, Research Design and Excavation Methodology prepared by AMAC Group in February 2020. The research design was developed based on the Heritage Council of NSW's Historical Themes in order to guide the methodology for the proposed archaeological excavation of the site. The research design has been set out in accordance to these themes (Table 4.1).

Table 4.1 Historical Themes concerning the study site

Australian Theme	NSW Theme	Study Site
Tracing the natural evolution of Australia	Environment – naturally evolved	Pre-European settlement environment
Building settlements, towns and cities	Utilities	Late 19th century court house amenities
Governing	Defence	Air raid shelter
Governing	Law and order	1890s court house

4.1 RESPONSE TO RESEARCH DESIGN

4.1.1 Tracing the natural evolution of Australia: Environment – naturally evolved

Prior to European occupation, the city of Newcastle formed coastal plains, with several water courses running through what is now the city centre. Indigenous habitation in Newcastle is known from archaeology to have begun thousands of years ago. The group historically associated with land use and ownership is the Awabakal people.

Tracing the natural evolution of Australia: Environment – naturally evolved
Recent Aboriginal test excavation identified the natural soil profile at varying depths, the majority of which was identifiable approximately 40cm below the current ground surface. Can any additional information be added regarding the natural topography following archaeological monitoring of the site?
Is there any evidence for the natural flora and fauna of the site prior to European occupation?

Archaeological monitoring provided physical evidence for the topographical layout of the site pre-colonisation. Inspection of the west side of the site during bulk excavation provided a visual stratigraphic profile of remnant natural soil horizons, which had survived in between piling activities. The cross section showed that from the southwest corner, the site sloped to the east on a steady gradient towards the police station site. The site also sloped towards the north, which therefore indicated that the highest point of the site was the southwest corner. Historic photographs dating to the mid-1870s and 1880s (Figure 2.4–Figure 2.6), prior to the court house development phase also visually confirms the northeast sloping profile. In particular, a photograph dated to the late 1880s clearly shows that the height of the c.1840s military barracks retaining wall along Church Street was constructed in direct relation to the natural slope, with less sandstone courses in the internal profile of the wall and buttress visible at the west end of the site compared to the east (Figure 2.6). The natural slope of the land at the study site prior to significant construction

activities was also historically recorded by the proposed construction plans for the court house building (Figure 4.1).

Where a complete profile remained in situ, the dark grey sandy A1 topsoil [238] was predominantly truncated and sat on top of an A1-A2 transition layer [237] comprising of dark grey-black sands and 10–15cm at its deepest surviving point. The A2 soil horizon, a bleached grey-white and yellow sand [236] was recorded as ranging in depth between 23–62cm along the exposed section of the coffee rock/ high ironstone content layer [235] sitting on top of the yellow-brown sandy clay B subsoil. The coffee rock formed a banded geological layer in between the A2 and B horizons, a result of the higher ironstone content and precipitated organic matter in the subsoils compacting below the A2 horizon.

The soil sections seen on the west side of the site along the southern boundary were consistent with the Killingworth soil landscape of Newcastle (see Section 3.2). Aboriginal test excavation undertaken in January 2020 and prior to historical archaeological monitoring identified soil variations in areas of disturbance predominantly caused from European development, which has resulted in the majority of the A horizon deposits being truncated, leaving only B horizon subsoils beneath introduced fills.[44] This was the case in both the east and west sides of the site where deeper excavation occurred in the mid-20th century for the administration and morgue buildings. In particular, the B subsoil clays were visible surrounding the foundations of the morgue building during monitoring (Figure 3.4).

No substantial evidence for pre-colonisation flora and fauna was identified during monitoring at the site with the exception of a single tree bowl found below the levels of the 1890s enclosed courtyards, sitting within the natural soil profile (A2-B) and truncated by foundations for those courtyards (Figure 3.91–Figure 3.92).

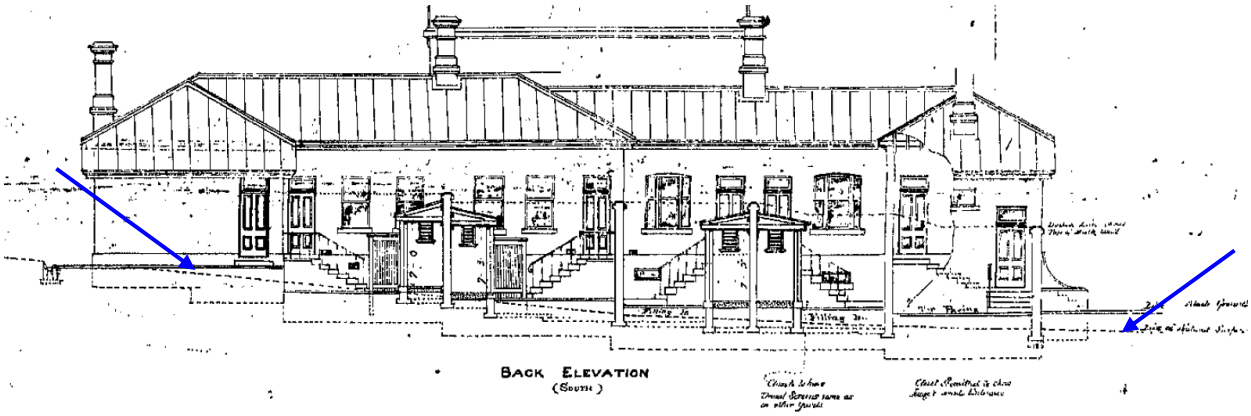


Figure 4.1 **Part of an original elevation plan for the proposed Newcastle Court House, showing the "line of natural slope" (blue arrow).**
Note that the elevation plan shows the projected rear of the court house facing north and demonstrating the easterly slope.
NSW Public Works plan reference PC386/101.

[44] AMAC Group (2020).

4.1.2 Building settlements, towns and cities - Utilities

Prior to direct occupation and development of the study site into Newcastle's second court house, infrastructure including the underground east-west brick culvert along Church Street and north-south culvert running through the site were constructed to improve water management in Newcastle. Amenities blocks with underground service connections were constructed at the rear of the site to service the court house.

Building settlements, towns and cities - Utilities
What remains of the original post 1861 brick culvert? Has it entirely been replaced by concrete? What evidence survives of its original construction phase?
How does the shape, construction and layout of the post-1861 culvert compare to the earlier constructed east-west brick culvert running along Church Street? Are there any similarities or differences from the Church Street portion excavated by AMAC in 2012?
Is a more refined construction date for the post 1861 culvert possible?

Archaeological monitoring and excavation revealed two original portions of the underground brick culvert still survived in situ at the study site, on the east side of the former court house. The north-south running underground culvert was positioned approximately 5m east of the court house external wall, its location consistent with what was shown on a mid-20th century public works plan (Figure 2.9). The concrete stormwater pipes had replaced the brick culvert through the centre of the site presumably in the location where the lower ground floor level and tunnel to the police station truncated the level of the culvert. The fact that there was surviving portions of the post 1861 culvert on the north and south sides of the site, further demonstrates that it must have been capably functioning prior to the construction of the magistrate building in the late 1940s. A more refined construction date was not determinable from the archaeological remains. No distinguishing marks on the structures or brand/ makers marks were identified on the bricks themselves to indicate a construction date range.

Both the north and south portions of the culvert were fairly uniform in width (2–4cm external and internal range), though their height (external and internal) differed between 9 and 15cm. Both sides contained two rows of machine made clay bricks bonded with cement mortar. The portion of underground brick culvert situated in Church Street at the corner of Church and Newcomen Streets and exposed in 2012, forms the only other portion of culvert associated with the Church Street line known to have been archaeologically exposed.[45] Though cameras are known to have explored inside the Church Street culvert[46] detailing its internal profile, no other external and internal cross section of the culvert has been found for comparison. Inspection of the Church/ Newcomen Street portion noted that it had been constructed from sandstock brick and bonded with lime mortar instead of cement mortar which was the bonding agent for the culvert [001] on the study site. Frogs were also noted as being present on one of the brick samples from Church/ Newcomen Street portion though no frogs or marks were noted on either the north or south culvert [001] portions.[47] This absence could still be attributed to the

[45] AMAC Group (March 2013). No other archaeological report detailing excavation of an underground brick culvert along Church Street, Newcastle, has been identified.
[46] Hunter Living Histories University of Newcastle, 'Convict Era Tunnel (c.1816) and Brick Culvert (c.1850s)', accessed 26th July 2021, https://hunterlivinghistories.com/2012/05/01/brick-culvert/
[47] AMAC Group (March 2013), p. 36.

orientation and laying of the bricks themselves instead of being wholesale absent. A comparison of photographs below (Figure 4.2–Figure 4.5) shows that the cross section of east-west Church/ Newcomen Street culvert was much more circular than the north-south culvert [001] portions uncovered at the study site. The north-south culvert [001] is more ovoid in shape, especially the northern portion which tapered into a significant point at its base (Figure 4.2). While dimensions were not obtained for the east-west Church/ Newcomen Street culvert due to lack of safe access into the trench[48], it is clear from the presence of loose bricks in the internal area, that the north-south culvert [001] running across the study site was considerably larger. 24 bricks make up the smallest internal ring of the east-west Church/ Newcomen Street culvert compared to 40 bricks in the north-south culvert [001]. What is also a noticeable difference is the quantity of mortar between the north-south culvert [001] and the east-west Church/ Newcomen Street culvert. Though the Church/ Newcomen Street culvert portion was not able to be manually cleaned, where lime mortar was visible it appeared in thinner quantities in between the brick face compared to what was seen on the north and south portions at the study site. That some of the excess concrete mortar on the cross section may relate to its later connection to the concrete piping, the patches bonding each individual brick together to construct the ovoid shape was much thicker than that seen on the east-west Church/ Newcomen Street culvert (Figure 4.2–Figure 4.5).



Figure 4.2 Culvert [001] – north portion. Facing north.
AMAC Group, 27/03/2020, digital image 6921.



Figure 4.3 Culvert [001] – south portion. Facing south.
AMAC Group, 27/03/2020, digital image 6896.

[48] AMAC Group (March 2013), p. 32.



Figure 4.4 Church/ Newcomen Street culvert. Facing west.
AMAC Group, 11/01/2012, digital image 0836.



Figure 4.5 Church/ Newcomen Street culvert. Facing west.
AMAC Group, 11/01/2012, digital image 0991.

Though no refined dates could be obtained for the north-south culvert [001], it can be suggested that on the basis of mortar types used, the north-south culvert [001] on the study site likely postdates the construction of the east-west Church/ Newcomen Street portion.

A comparison of the two underground culverts demonstrates that the north-south branch [001] running through the study site appears more robust than its Church/ Newcomen Street counterpart. The fact that almost double the number of bricks were used to construct the internal ring, also would have allowed increased water flow in this location. Of interesting note is the public works plans dated to the mid-20th century (Figure 2.9–Figure 2.10), which note a diameter measurement on both the east-west Church Street culvert and the north-south culvert [001] through the study site. The plans note that the east-west Church Street culvert has a '4 feet diameter' (at least in the portion fronting the court house) and the north-south culvert [001] has a '3 feet diameter'. Table 3.2 in Section 3.4.5 detailed internal and external measurements for the intact north and south culvert [001] portions. Knowing that both culverts contain a double brick ring, the public works plan does not specify if the feet measurement is for the external or internal diameter. However, on the basis of measurements obtained on site, the closest '3 feet' comparable measurement was the internal height (north portion: 3ft 5½ins; south portion: 3ft 9ins) and internal width (north portion: 2ft 7½ins; south portion: 2ft 9ins). If this roughly correlates to the description on the Public Works plan, it can only be assumed that the east-west Church Street culvert in front of the site has an internal diameter of approximately 4 feet. What that also highlights is that the east-west culvert portion exposed at the intersection of Church and Newcomen Streets in 2012 is nowhere near close to these dimensions, likely being less than 3 feet in diameter let alone 4 feet. This could suggest that perhaps the east-west Church/Newcomen Street culvert formed another separate phase of drainage works to the east-west portion that directly passes along the study site, or may have been intentionally constructed to be smaller in diameter.

Building settlements, towns and cities - Utilities

Is there any other data regarding additional water management systems at the site?

The site's position in a northerly slope down towards Newcastle Harbour has historically resulted in water drainage issues predating the site's first court house development phase (refer to Section 2.2.2 for expanded discussion). In addition to the post-1861 north-south brick culvert [001], a number of features were exposed along the southern boundary and east side of the site associated with water management, the majority of which appeared to relate to the court house construction phase or early 20th century.

Based on the natural topography, it is known that an extensive amount of cut and levelling occurred at the rear of the site to construct the court house building. The extant brick wall along the southern boundary of the site and James Fletcher Hospital forming a standing example of the stark difference in levels created during the 1890s (Figure 2.13). Directly butting this wall was linear brick dish drain [029] approximately 61cm wider and though only a 9m portion was exposed in situ, it is known to have continued both east and west, presumably along the entire southern boundary wall.[49] Other physical evidence of above ground water management for the site included two brick sumps east of Courtyard 5 (Figure 3.21) and also perceived to date around to the court house construction phase.

Public Works plans dating to the late 19th century for the proposed court house identifies the presence of a 'water hole' (
Figure 4.6–Figure 4.7). This is located towards the northern centre of the site and if left open after construction, would be partly underneath the northeast corner of the court house as well as in close proximity of, or overlapping part of the north-south culvert alignment (Figure 4.7). The water hole was presumably filled in preparation for construction of the court house, though no historic photographs showing portions of the study site pre-construction phase appear to show the presence of water hole though this could still have been obscured (Figure 2.4–Figure 2.6). A photograph dated to 1893 from the eastern side of the court house shows manicured gardens and pathways along the edge of the court house where the water hole should have been (Figure 2.13). If a water hole existed at the site and over partial alignment of the north-south culvert, it can be suggested that the culvert [001] may have been constructed at around the same time as the water hole was filled in. If Public Works plans are accurate, this would have been just before, during or after the construction of the court house in the early 1890s. Dependant on depth, the water hole would have needed to be filled in or drained to also facilitate construction of the culvert.

[49] Refer to Section 3.5.1 for an expanded discussion on truncation of the dish drain [029].

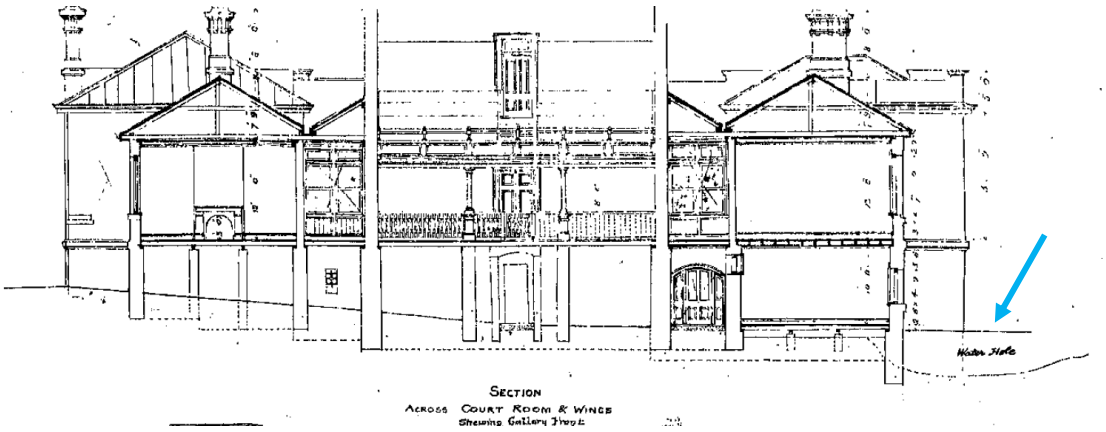


Figure 4.6 **Proposed construction plan - west section, showing 'water hole' (blue arrow).**
NSW Public Works plan reference PC386/101.

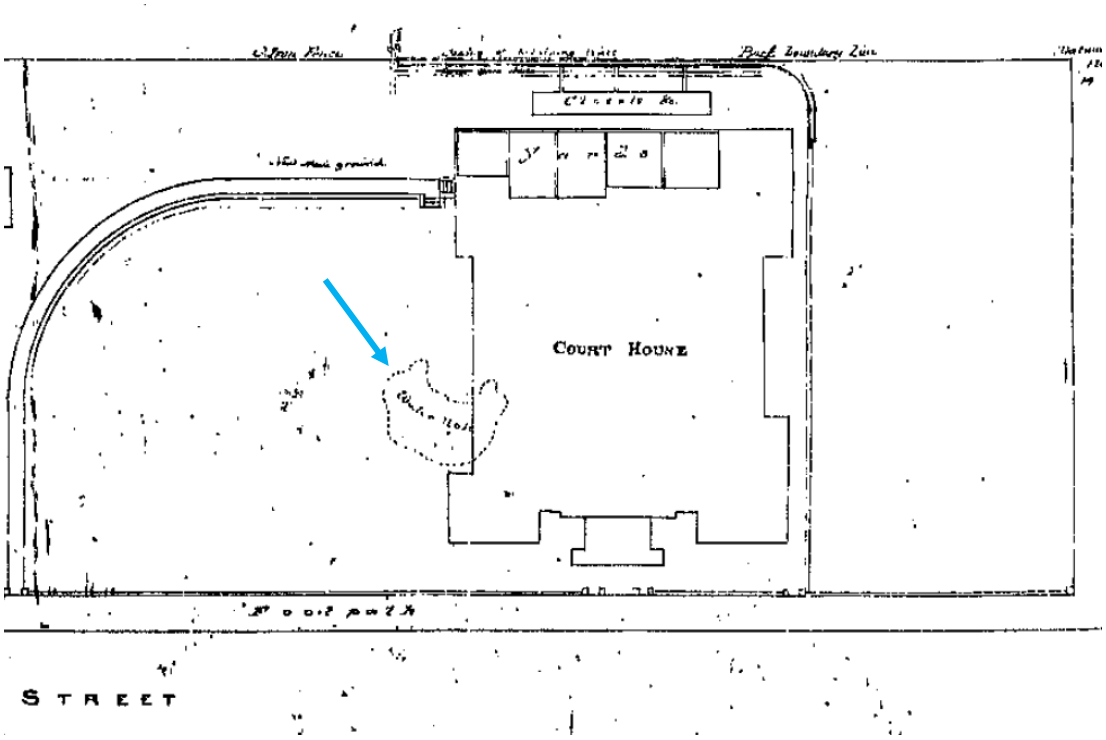


Figure 4.7 **Proposed construction plan – overall site plan showing 'water hole' (blue arrow).**
NSW Public Works plan reference PC386/101.

Building settlements, towns and cities - Utilities

Does any evidence of the c.1896 amenities block survive? If so, how does this relate to what is seen on the c.1896 plan (Figure 2.5)? What can be said of its construction and layout?

Structural remains relating to the amenities block were found across three separate monitoring phases, whereby the post-excavation collation of orthophotographs and measured plans were stitched together to show that the whole amenities block was exposed in situ and archaeologically recorded (Figure 3.54). Post-excavation research also confirmed that the amenities block predated the c.1896 date obtained

from the Hunter Water Board plans but was contemporaneous with the c.1890–1892 construction of the court house.[50] Analysis of the Public Works proposed construction plans with the excavated remains on site indicated that the physical layout of the structure mirrored exactly what was shown on plan (Figure 2.12); a urinal at either end of the block and 8 cubicles in between. Both the Public Works and Hunter Water Board plans indicated plumbed services which was also accurate among the recorded remains, no cesspits were identified. In terms of survival, only the base foundations remained in situ, as well as partly truncated services below or around them. Remnant patches of tar paving and concrete presented evidence of former surfacing around the rear of the court house which was also accurately indicated by the proposed construction plans (Figure 2.11).

Overall, the external rear of the court house remained relatively intact which is consistent with the fact that nothing else appears to have been constructed in that location following the demolition of the amenities block. Post-excavation analysis of the proposed construction plans and field data further indicated that the layout of the enclosed courtyards just north of the amenities block also mirrored what was shown on the Public Works plan (Figure 2.12), with the exception of several later services which had truncated Courtyards 4 and 5 to a greater extent and prevented some comparative data (see Section 3.5.3). The Public Works plans did show that Courtyard 2 was the only yard which had a different layout in the southeast corner (Figure 2.12). However, this was also the only courtyard where remains were preserved and not exposed by the work program, therefore, no data was obtained to compare its difference.

4.1.3 Governing – Defence

The study site has formed part of wider government grounds since European settlement. A brick barrack wall was constructed along the Church Street frontage in the 1840s, presumably knocked down for the construction of the c.1892 court house. Up to three WWII air raid shelters were constructed in the southeast corner of the site, the quantity believed to accommodate both the court house and neighbouring police station.

Governing – Defence
Does any evidence of the c.1840s brick boundary wall for the barracks survive along the Church Street site frontage? If so, where is its location in relation to the court house? How has the process of development affected the wall foundations?
Are there any unique design or construction features of the c.1840s boundary wall?

Removal of the existing driveway for regrading works in the northeast corner of the study site revealed structural remains perceived to relate to the c.1840s military barracks wall. Two lines of sandstone foundations [242] and [243] one block wide and running east-west had been exposed at the time of inspection, with the understanding that one above course was likely removed without supervision on the basis of inspection of the east section (refer to Section 3.4.6 for discussion). As the limit of excavation required for the development had already been reached at the time of inspection, it remains unclear if any courses of sandstone exist below what was exposed. A roughly linear north-south line of sandstone rubble [244] in considerably worse condition than the east-west running walls [242] and [243], was contained by the other two walls and flagged as a potential cross wall for a structure. Overall the remains were fragmentary and highly truncated by both demolition

[50] Hunter District Water Board (1896), Hunter Photo Bank, plan reference C919.442/34/009; NSW Public Works plan reference PC386/18.

activities and installation of later underground services. The east-west running north wall [242] was in better condition and more regular in shape compared to any of its surrounding features. Though the sandstone blocks making up the wall foundation were not absolutely uniform in shape or contained evidence of a dressed course, it is known that this course would have sat below ground, the construction cut visible along the south side of the wall [242]. It was clear upon recording that north wall [242] formed part of the c.1840s barracks wall that ran along Church Street. Its location was almost in line with the current court house boundary fence to which historic photographs and plans show that the north boundary did not particularly change after the court house construction phase. It is already known that the c.1840s wall would have had to have been removed when the court house was constructed in c.1890–1892. Though later photographs taken during the construction of the east magistrates building, show that the wall was still standing in a degraded state along the adjacent police station and in line with the court house boundary fence pillars (Figure 2.7).

A series of historic aerial photographs dating from the mid-1870s to late 1880s show the c.1840s wall from both front and rear profiles (Figure 2.4–Figure 2.6). The wall was constructed with considerably large and regularly spaces buttresses, of which is the sixth block (counted from the east section) in the north wall [242] is perceived to form part of a keyed in stone for the start of the buttress (Figure 3.37).[51] This block was square (49.5 x 49.5cm) and the only of its type along the exposed north wall [242], the others all rectangular (refer to Table 3.3 for all block measurements in north wall). Photographs of the rear of the wall indicate that the buttress was constructed with more than one block pre course and though no historic description of the wall dimensions have been found, it would be speculated that the photographs suggest that the buttress would have been wider than 50cm. If this were the case, the sandstone rubble adjacent to block six on its west side may also relate to the buttress foundation (Figure 2.6 and Figure 3.35). The rubble west of block six also continued south for approximately one metre which could be considered a slightly more representative size for a buttress support. The fact that the base course foundations of the barracks wall [242] survives, though in a highly truncated form, indicates that ground surfaces levels remained fairly unchanged in the northeast corner of the site in between the transition phase from undeveloped barracks land to the court house construction phase.

Post-excavation analysis of the sandstone remains uncovered in the northeast corner of the site has left speculation around the function of the east-west southern wall [243], located approximately 1.65m south of the barracks wall [242], running parallel to it. Inspection of the east section confirms that both east-west walls [242] and [243] continued in the adjacent property (Figure 3.42) and overall inspection of all structural remains and rubble presented a fairly rectangular shape (Figure 3.35). Historical plans obtained from both the original assessment phase[52] and additional post-excavation research (Section 2.2) has not located a known structure in this location apart from the barracks wall. The feature must predate construction of the court house as the proposed construction plans for the court house (Figure 4.7) and 1896 Hunter District Water Board plan shows no structures in that location, nor any immediately east in the police station site whereby an error in boundaries could

[51] Figure 3.37 shows the sixth block orientated differently as well as being a bigger block to those surrounding it, resulting in the block sitting further south and out of alignment with the internal wall face.
[52] AMAC Group (November 2018), Section 2.0.

have put a structure on the study site.[53] This location has also always been an access point for the site during the court house occupation phase. The historic aerial photographs from c.1875 to late 1880s (Figure 2.4–Figure 2.6) also only show the barracks wall with buttresses in this location and although only a wall is shown on the c.1836–1841 plan (Figure 2.3), this does not necessarily exclude the concept that an undocumented structure could have been constructed and removed in the 30 year period between the 1840s and early 1870s. The bonding material was consistent across both east-west wall foundations [242] and [243], comprising of shell lime mortar and suggesting a contemporaneous construction date. The only notable difference in construction being the regularity of the south wall [243] and its use of more rubble style blocks. The possible cross wall foundation [244] was also in an extremely rubbly state which may still relate to the structure's demolition phase rather than its original constructed state.

The lack of supporting visual and written documentation for a structure in this location and knowing that the construction material matches, leaves the suggestion that perhaps a former gated entry way or small sentry box with possible mortar surface (see Section 3.4.6) existed in this location.[54] The structure would have provided access to the military barracks from Church Street and then possibly removed prior to the 1870s after the barracks' conversion to the Industrial School for Girls and later asylum. The historic aerial photographs are from a distance to far to ascertain whether modifications were visible on the standing north wall in that location. The other possibility is that the south wall [243] could have formed a lower, underground stabilisation or wider support in association with the north wall [242] and buttress, a historic photograph dating to the 1880s (and a portion reproduced below) showing a rubble-like build up in between the buttresses in the northeast corner of the site. Considering the natural topography of the land sloped downwards towards the harbour at the north, it is possible that the wall required further stabilisation or that the gaps between the buttresses contained sediment build up from runoff and episodes of rainfall (see Section 2.2.1). Had the court house not been constructed it seems the wall presumably could have withheld continued standing like its police station counterpart (Figure 2.7).

[53] Hunter District Water Board (1896), Hunter Photo Bank, plan reference C919.442/34/009; NSW Public Works plan reference PC386/1, PC386/17.
[54] No other historic archaeological excavation reports along Church Street and identifying excavation of other parts of the Church Street barracks wall were found from libraries or digital repositories during authorship of this report.

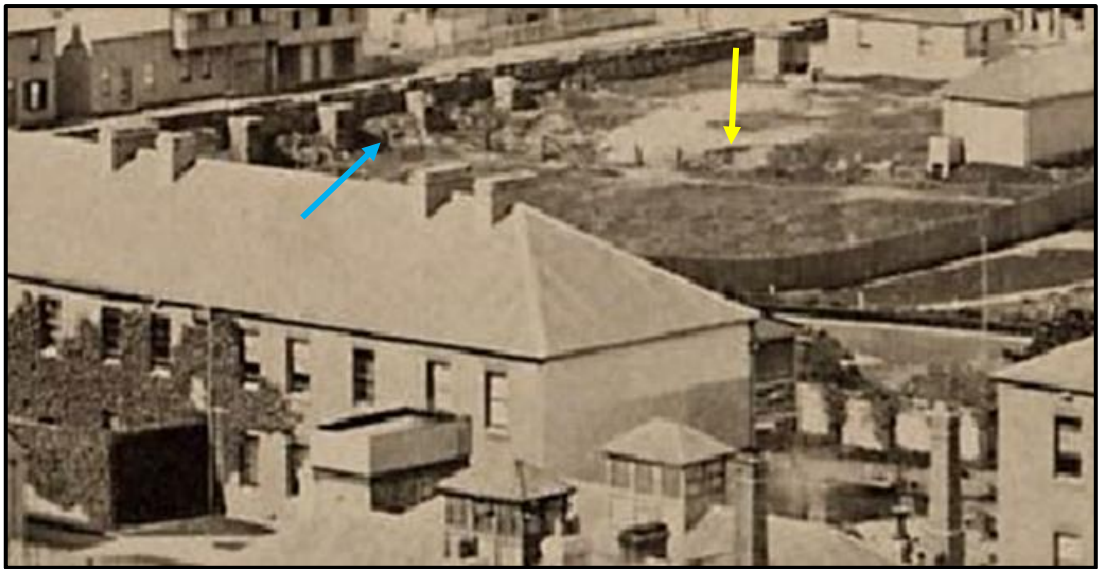


Figure 4.8 **Part of John Rae's c.1880s photograph of Newcastle, facing northeast and showing the study site and c.1840s barracks wall.**
Yellow arrow indicates the east boundary fence between the study site and the adjacent police station. Blue arrow indicates northeast corner of the study site where sandstone wall remains were exposed on site.
University of Newcastle Cultural Collections, accessed from Hunter Living Histories, 'John Rae and Newcastle', posted 13th September 2011.

Governing – Defence
Is there any evidence for any of the three air raid shelters marked on the 1940s public works plan (Figure 2.7)? If so, does the position of the structures match the location of any shown on plan? What evidence remains of this structure?
Should more than one shelter survive, are they identical in size, materials and layout?
Did these structures serve any other discernible functions?

No evidence at all was found of the four-pill box air-raid shelters which plans indicate were scattered on the east side of the court house structure. The construction of the post 1948 magistrate building and morgue building at the rear appears to have robbed out and truncated any evidence of these structures. Based on a Public Works plan noting 'pill box' and the absence of evidence for any four of these structures (including areas where no basement level existed), it seems likely that all of these shelters were above ground features and constructed on a concrete slab, which would have been removed when decommissioned for the construction of the later building expansions program at the study site. A similar scenario occurred at another Newcastle site at the corner of Hunter and Auckland Streets, whereby no evidence for an air raid shelter of the same shape was found during excavation, suggesting that the foundations may not have been excessively deep.[55] This was much the case for 'pill box' shelters which were also constructed as a smaller 'domestic surface shelter' (Figure 4.9). The fact that four shelters were present in the court house grounds suggests that the site may have been accommodating options for adjacent properties such as the police station next door.

[55] AMAC Group (March 2018), Volume 2, Section 5.0.

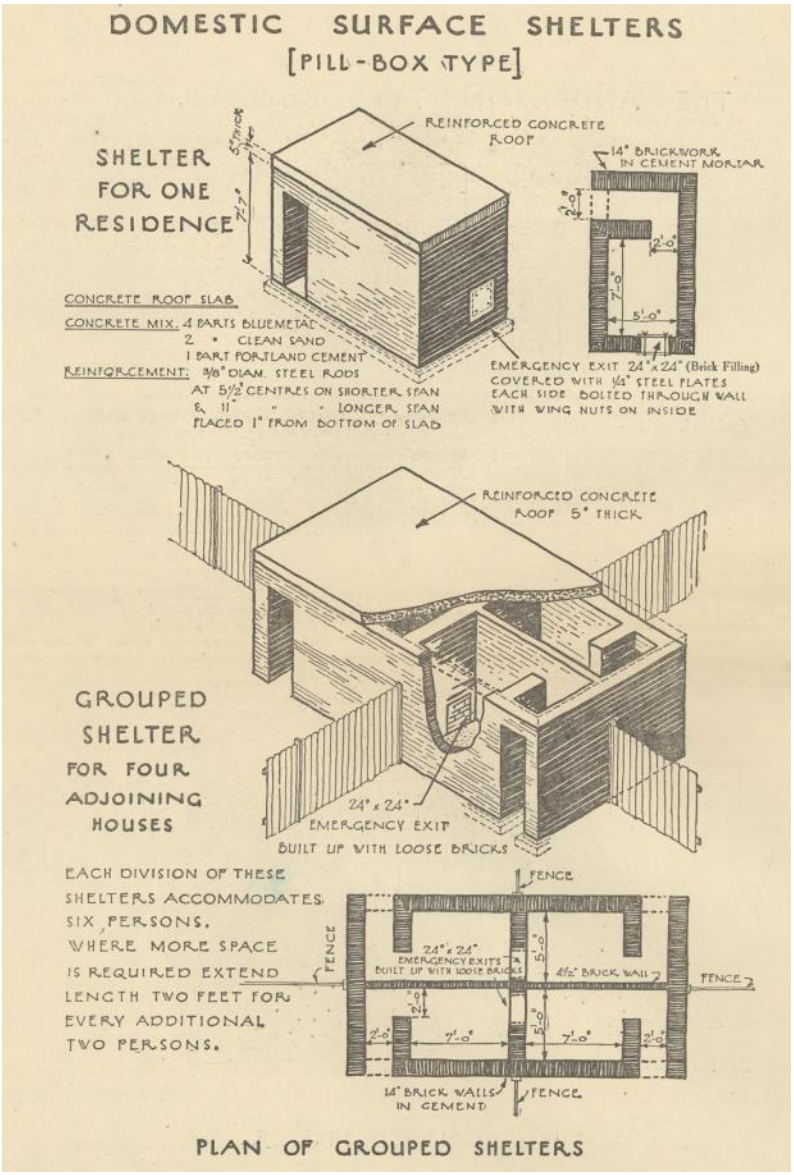


Figure 4.9 **Part of a National Emergency Services 1940s pamphlet showing standard construction requirements for pill box shelters.**
NSW State Archives, digital reference NRS 20000[18/2797] File 7.

4.1.4 Governing – Law and Order

The c.1890–1892 court house and associated mid-20th century judicial buildings represent the only known European occupation phases of the site. The site's judicial function continued up until its closure in 2016.

Governing – Law and Order
Does any undocumented evidence (rubbish pits, artefact scatters) exist at the site and can be linked to occupation of the court house?
Can any function or relationship be attributed between the early 20th century outbuildings/ rear structures and the court house?
Is the long-term occupation of the site by the government judicial system represented within the archaeological remains?

As was the case for the air raid shelters, no evidence for early 20th century structures or outbuildings were found on the east side of the court house due to site formation works for the mid-20th century construction phase of the magistrate and morgue buildings.

Historic research shows that known relics which were anticipated to survive at the study site were not expected to explicitly link to activities of the court house. The absolute lack of artefact deposits across the site is not considered to derive from site truncation; rather several other factors are understood to have contributed to this absence. The court house was a government owned development, and advancing technologies such as plumbed services were installed during the site's initial construction phase, therefore removing potential for material accumulation in features such as cesspits. The fact that all immediate surrounding areas of the court house were surfaced, the majority with tar which was both physically seen on site (Section 3.5.3) and on Public Works plans (Figure 2.11), would have further prevented accumulation of deposition. Though later mid-20th century administration buildings truncated the east and west sides of the sites, it can still be posed that rubbish removal was occurring on a regular basis in the late 19th century at this site, even if formalised rubbish collection was not in place, as opposed to digging pits in manicured lawn spaces of a site which formed part of a government law and order precinct (Figure 2.13) and held a raised prominent position at its intersection with Bolton Street.

The site's judicial function also likely prevented long term accumulation of deposition. These buildings were spaces used for short instances, not long term domestic and commercial occupation and while a judge and other court staff had dedicated office and courtyard spaces, these rooms would have presumably been cleared out when staff was rotated and material taken with them. Also, the internal and external floor surfacing would have prevented accumulation. Long term occupation and ongoing use of the study site can only really be represented through the archaeological remains in terms of evidence for instances of resurfacing or service replacement, though this type of data is not physically representative of the site's long-term function.

5.0 REVISED ASSESSMENT OF SIGNIFICANCE

5.1 METHODOLOGY

The current standard for assessment of significance of heritage items in NSW is the publication 'Assessing Significance for Historical Archaeological Sites and 'Relics'' produced by the Heritage Branch of the NSW Department of Planning (December 2009). This production is an update to the NSW Heritage Manual (1996), and the criteria detailed therein are a revised version of those of the Australia ICOMOS Burra Charter, formulated in 1979, which was based largely on the Venice Charter (for International Heritage) of 1966.

Archaeological heritage significance can also be viewed in light of the framework set out by Bickford and Sullivan in 1984.[56] Bickford and Sullivan, taking into consideration the "archaeological, scientific or research significance" of a site posed three questions in order to identify significance:

1. Can the site contribute knowledge which no other resource can?
2. Can the site contribute knowledge which no other site can?
3. Is this 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?[57]

These questions have been broadly used to shape the response to the heritage significance criteria as described in Section 6.2 and 6.3.

The criteria and the definitions provided by 'Assessing Significance for Historical Archaeological Sites and 'Relics'' have been adhered to in assessing the cultural significance of the potential archaeological site at 9 Church Street, Newcastle. An assessment of significance, under each of the criteria, is made possible by an analysis of the broad body of archaeological sites previously excavated both locally and elsewhere, in conjunction with the historical overview of the study site in particular.

The Criteria used to assess Heritage Significance in NSW are the following:

Table 5.1 Criteria for Assessing Heritage in NSW

Criterion	Description	Significance
Criterion A	An item is important in the course, or pattern, of NSW's or the local area's cultural or natural history	State significant or locally significant
Criterion B	An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's or a local area's cultural or natural history	State significant or locally significant
Criterion C	An item is important in demonstrating aesthetic characteristics and/or a high	State significant or locally significant

[56] Bickford and Sullivan (1984).
[57] Bickford and Sullivan (1984), p. 23–4.

	degree of creative or technical achievement in NSW or the local area	
Criterion D	An item has strong or special association with a particular community or cultural group in NSW or a local area for social, cultural or spiritual reasons	State significant or locally significant
Criterion E	An item has potential to yield information that will contribute to an understanding of NSW's or a local area's cultural or natural history	State significant or locally significant
Criterion F	An item possesses uncommon, rare or endangered aspects of NSW's or a local area's cultural or natural history	State significant or locally significant
Criterion G	An item is important in demonstrating the principal characteristics of a class of NSW's or a local area's - cultural or natural places; or - cultural or natural environments	State significant or locally significant

The following assessment deals only with sub-surface archaeological features and deposits. The built environment is not considered in this study.

5.2 IDENTIFICATION OF SIGNIFICANCE

Archaeological Research Potential (NSW Heritage Criterion E)

The study site held low potential to retain undocumented archaeological remains associated with agricultural activities or infrequent use of the wider grounds of the military barracks during the 19th century. Archaeological monitoring indicated that extensive cut and levelling activities occurred across the majority of the study site in c.1890 to prepare for the court house construction phase which subsequently stripped the site of the natural topsoils and 19th century ground surfaces predating the court house phase. In this way, the truncated structural remains of the c.1840s sandstone military barracks wall exposed in the northeast corner formed the only physical archaeological evidence for wider occupation of the site predating the court house phase.

Though forming infrastructure constructed during the early settlement phase of Newcastle, the c.1840s sandstone barracks wall itself holds limited research potential. It cannot provide information directly associated with occupation or operation of the barracks; however, it did have the ability to confirm its presence, construction materials and the veracity of the plans it is shown on.

No other archaeological reports could be found to identify whether other portions of the c.1840s military barracks wall along Church Street has been excavated, or whether additional portions of the post-1861 underground brick culvert passing along the front of the study site has been investigated in Newcastle.[58] Regardless of the lack of locally comparative data available at present, the use of underground circular or ovoid brick culverts was already known to be occurring across Sydney and other parts of New South Wales predating the Church Street culvert at

[58] Excepting the Church/ Newcomen Street portion further west of the study site which was inspected by AMAC Group in 2012.

Newcastle such as the large scale c.1830s Busby's Bore, or a more comparable c.1840s example excavated at the Sydney Conservatorium of Music site in the late 1990s, perceived to have been constructed to replace an earlier failing sandstone capped drain.[59] Both the study site and conservatorium site had their ovoid brick culverts constructed on the land under government ownership, the present conservatorium previously forming a government stables site in the early 19th century, with the intention of improving the flow of stormwater runoff as opposed to drinking water, which was the primary aim of Busby's Bore. Archaeological excavation and recording of the post-1861 culvert is a positive heritage outcome in that the data obtained from this excavation phase forms a physical record that can be collated with data from other archaeological sites and utilised in future research designs to enhance the growing corpus of information regarding 19th century government owned or instigated development in Newcastle. The southern portion of brick culvert [001] which still survives in situ remains locally significant under this criterion.

Though the c.1890s court house building itself forms a rare example of an intact, well preserved public building, its State significance is vested in the building itself rather than any archaeological remains relating to occupation and use of the court house. As anticipated, no occupation deposits were identified across the study site which meant only structural remains for subsidiary structures located at the rear of the court house were exposed and recorded in situ. The structural remains of the enclosed courtyards and public amenities block recorded at the rear of the court house building when compared with the sets of Public Works plans (Figure 2.11–Figure 2.12) indicated the high accuracy of the plans in that all details specified appear to have transpired into what became the final product on the ground. Apart from this observation, the excavation data revealed that the construction materials used in both the rear structures mirrored that used for the main court house building and while considered of local significance in its wider context with the c.1890s course house, the majority of these structural remains were removed following archaeological excavation and recording.

No evidence for any WWII 'pill box' air raid shelters was identified on the east side of the site, having been truncated by construction activities for the mid-20th century morgue buildings. Structural remains of the morgue are not of archaeological significance and were removed to facilitate development.

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

The study site is considered of local significance to the Newcastle community. It can be said that the local Newcastle community holds an interest and cultural value in the c.1890s court house for its symbolism as an intact, historic 19th century public building (Criterion A and D). At the same time, this significance is vested in the standing structure itself as well as written and oral histories and this significance was not borne out in the archaeological record of the site.

A level of significance can be attributed to government architects, James Barnet and Walter Liberty Vernon (Criterion B), though again this significance is attributed to the standing c.1892 court house. The study site holds links to the NSW Historic Themes of Law and Order and Towns, Suburbs and Villages as well as Newcastle's Archaeological Management Strategy theme of Maintenance of Law and Order for

[59] Casey and Lowe Associates (July 2002), Chapter 7.0, Section 7.1.1.1; AMAC Group (November 2020), Section 2.0.

its development of civic infrastructure in Newcastle. These links were not expected to be borne out in the potential archaeological record, however does highlight the site's wider role as one item operating in a larger judicial precinct on Church and Bolton Streets.

Aesthetic or technical significance (NSW Heritage Criterion C)

The post 1861 brick culvert [001] can be considered to hold some technical significance under Criterion C, in demonstrating the increasing importance for the utilisation of underground water infrastructure in Newcastle from the mid to late 19th century. Recording and extraction of this data has already led to the observation of the use of two different culvert shapes from around the same time period, circular and ovoid, which has been constructed in close proximity to each other though belonging to two different drainage branches (see Section 4.1.2). Though the majority of the culvert [001] was removed for the development works program, this data now resides within the present archaeological report and can be drawn upon as future comparative data regarding underground drainage infrastructure for other archaeological sites. The southern portion of the culvert [001] which still remains in situ is considered of local significance per Criterion C.

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

The archaeological remains uncovered at the site comprised of partially truncated structural remains void of occupation deposits, which was consistent with what was predicted by the archaeological assessment.[60] All archaeological remains demonstrate evidence of government directed building programs, their cause for creation can be specifically linked to the occupation phase of the wider government owned grounds at each point in time. For example, c.1840s sandstone foundation wall [242] was intentionally established to enclose the wider grounds of the military barracks, and the post-1861 brick culvert [001] is perceived to form a physical solution to drainage issues on the Industrial school/ later asylum further south. These remains and their function are linked to improvements or activities on government owned land in 19th century Newcastle (Criterion A).

The establishment of the second court house is an example of a late 19th century public building program by the government to improve and expand civic infrastructure in Newcastle, in response to the growth and needs of the local community (Criterion A). The study site further demonstrates its use as a place of law enforcement and justice in Newcastle for a period of more than 100 years (Criterion G). Though this significance was not expected to be physically represented by the excavated archaeological remains from this phase (courtyards, amenities block), as a collective, the former court house site is a locally significant resource for its wider symbolism as part of Newcastle's judicial system. Though the lack of deposition prevented an archaeological representation of the site's long time function, the presence of the former court house building provides a physical representation of this.

The archaeological record of the study site was not initially expected to contain evidence which would be considered of State or local significance according to Criterion C or F.[61] The archaeological remains of the underground culvert [001] is not considered rare in the sense that underground circular or ovoid shaped brick

[60] AMAC Group (November 2018), Section 4.0.
[61] AMAC Group (November 2018), Section 4.0.

culverts or barrel drains were already in use across other parts of New South Wales prior to the mid-19th century (for example, brick barrel drains in Parramatta and Thompson Square drain, Windsor),[62] which would have most definitely been used as a guide for constructing similar structures in Newcastle.[63] At the same time, the brick culvert still forms a physical representation of the increase in development of large scale water management systems and value of town improvements in Newcastle during the 19th century (Criterion F and G).

5.3 STATEMENT OF CULTURAL SIGNIFICANCE

Initially forming undeveloped paddocks of the wider military barracks, the study site was later developed into Newcastle's second court house in the c.1890s, forming another structure in the expanding development of Newcastle's civic law and justice system present along Church Street. As a collective, the former court house site is a locally significant resource for its wider symbolism as part of Newcastle's judicial system and a valuable historic asset to the local Newcastle community.

Later 20th century building activities on the east and west sides of the study site meant that physical links to the site's earlier function as undeveloped military grounds were restricted to the remnant, truncated remains of the c.1840s sandstone retaining wall along Church Street. While the archaeological remains do not provide an increased understanding as to the use of space in the pre-court house occupation phase, the presence of these wall foundations do however confirm the veracity of historic Newcastle plans where the wall is represented which can assist with the production of historic overlays at other nearby sites in future.

Excavation and recording of two portions of the post-1861 brick culvert has contributed valuable information to the historical record regarding late 19th century stormwater management systems in Newcastle. Particularly in providing physical data regarding dimensions and construction materials which have already allowed for comparative analysis with another previously exposed portion further west on Church Street (see Section 4.1.2). In its broader context outside Newcastle, the culvert is not considered a rare type of structural remains, nor the earliest in its construction type, however it does signify government adoption and extended rollout of a particular type of successful underground stormwater management system which was already being utilised across parts of Windsor, Parramatta and Sydney from as early as the 1820s.

Archaeological remains which could be attributed to the court house occupation phase were not anticipated to significantly enhance or provide rare information regarding daily operations of the court house and due to the lack of expected occupation deposition, this notion was realised. At the same time, physical comparison of the archaeological remains of the courtyards and amenities block with original construction plans have proved the plan's accuracy and detail in not only confirming what was constructed, but also providing a historic record about

[62] Higginbotham (1983); AAJV (May 2018).
[63] The early 19th century unlined, rock cut portion of the drain outlet in the cliff face at Newcastle Beach perceived to have been convict cut for draining during mining operations and later connected to the east-west Church Street culvert is not mentioned here on the basis of its construction type. It is a rock cut example and was not constructed with brick rings or mortared. Hunter Living Histories University of Newcastle, 'Convict Era Tunnel (c.1816) and Brick Culvert (c.1850s)', accessed 26th July 2021, https://hunterlivinghistories.com/2012/05/01/brick-culvert/

topographical elements of the site pre-court house phase which had been physically lost because of the development itself. When collated with the original police station site next door, the archaeological remains and the extant former court house building form a tangible piece of Newcastle's second law and order precinct operating throughout the late 19th and 20th centuries.

Large scale mid-20th building activities on the east side of the site truncated this area down to B horizon subsoils which subsequently removed any evidence for WWII 'pill box' shelters or site modification for war defence and protection.

6.0 REVISED ARCHAEOLOGICAL POTENTIAL

6.1 EAST SIDE

C.1840s Sandstone Wall Remains

The sandstone wall remains as recorded in June 2021 remain in situ. To protect the remains the area was covered with damp-proof membrane (DPM) prior to laying of a gravel base for surfacing. It was also established that the base of bollards to be installed in this area for redevelopment works would be higher and not impact upon the remains. The surfaces of the lower parts of the walls sit roughly between 21.8–21.9m AHD, with the higher east end of the north wall [242] at 22.26m AHD and the east end of the south wall [243] at 22.36m AHD. Should further excavation in the northeast corner of the site be required at a depth lower than that specified above, potential exists to truncate the remains which have been protected in situ and reburied.

As the c.1840s boundary wall extended across the whole northern frontage of the study site, moderate archaeological potential exists for more structural remains of the sandstone wall to survive in situ and presumably in the same alignment as the current boundary fence.

Post-1861 Brick Culvert

Per previous notification processes,[64] the larger north portion of brick culvert [001] and surrounding concrete pipes required removal, as they sat within the curtilage of service upgrade works which required excavation to a depth of 3m below the ground surface level of the former court house building. The smaller southern portion of the post 1861 brick culvert [001] did not require removal and was reburied in situ. Removal of the required portions of the brick culvert [001] at the northern end of the study site was supervised by the secondary excavation director.

Should future excavation be required within the north-south stormwater easement at its southern end, there is high potential that structural remains of the brick culvert [001] will be re-exposed and impacted upon.

Mid- 20th Century Morgue Foundations

Brick and concrete footings from the mid-20th century morgue building were removed to facilitate construction of the foundations for the new university building on the east side of the former court house building. These remains are not considered an archaeological relic under the *NSW Heritage Act 1977.*

6.2 CENTRAL SECTION

1890s Court House – Private Courtyards

Following archaeological recording of Courtyards 1 to 5, deep impacts through excavation for underground rain water tanks and basement level waterproofing

[64] Section 146 Notification of a relic was prepared by AMAC Group and lodged by DWP on behalf of Azusa Sekkei and Nihon University in June 2020.

around the external footprint of the former court house building, occurred in part of the courtyards' location. Excavation for the water tanks involved removal of Courtyards 3 to 5, which was supervised by the Secondary Excavation Director (Section 3.5.5.9). A sizable portion of Courtyard 2 remains intact and unexposed during the works program. The standing structure forming the conversion of former Courtyard 1 was demolished for redevelopment works.

Based on surrounding profiles, there is high potential for structural remains associated with Courtyard 2 to survive in areas which were not excavated by this works program (Figure 3.81).

1890s Court House – Amenities Block

Following completion of archaeological recording, the exposed portions of the c.1890s amenities block and late 19th/ early 20th century brick dish drain on the east side were removed under archaeological supervision, to allow installation of new underground services and a rainwater retention tank. Fragmentary portions of the amenities block remain in situ at its west end, having been subject to isolated impacts rather than requiring wholesale removal. These portions survive roughly to the south of Courtyards 1 and 2.

6.3 WEST SIDE

Inspection of soil profiles showed that the footprint of the 1960s administration building had truncated the west side of the site down to B horizon subsoils, thus removing any undocumented archaeological remains which may have existed on this side (Section 3.6).

As the c.1840s boundary wall extended across the whole northern frontage of the study site, low to moderate archaeological potential exists for more structural remains of the sandstone wall to survive in situ along the west side frontage of the site and presumably in the same alignment as the current north boundary fence. However, these remains will potentially exist in a more truncated form that what was seen in the northeast corner of the site, due to historic instances of deeper excavation for the 1960s administration building.

7.0 PERMIT COMPLIANCE

The following conditions of development consent SSD9787 for the Nihon University redevelopment relate specifically to historical archaeology:

Archaeological Salvage – Historic Archaeology

C17. *Following the completion of demolition works and prior to the commencement of construction works, all affected historical archaeological deposits are to be subject to professional archaeological excavation and recording. An Archaeological Research Design and Excavation methodology must be prepared to guide the archaeological program. This must be prepared in accordance with Heritage Council of NSW Guidelines and in consultation with Heritage NSW, Department of Premier and Cabinet.*

A Research Design and Excavation Methodology was prepared by AMAC Group and submitted to the Planning Secretary in February 2020. This document was endorsed by Heritage NSW, as delegate for the Department of Planning, Industry and Environment in March 2020. All archaeological fieldworks were undertaken in accordance with the endorsed Research Design and Excavation Methodology.

C18. *The Archaeological program must be directed by a suitably qualified and experienced Archaeologist (Excavation Director). The nominated Excavation Director must be able to demonstrate their ability to undertake this work through a response to the Heritage Council's Excavation Director Criteria (July 2011) for salvage excavation for a site of local heritage significance.*

Martin Carney was nominated and approved as Primary Excavation Director. Kevin Hickson was nominated and approved as Secondary Excavation Director.

Unexpected Finds Protocol – Historic Heritage

D25. *If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the NSW Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the NSW Heritage Division.*

No unexpected relics were uncovered during excavation works at the study site.

Archaeological Salvage – Historic Archaeology

E25. *The Applicant must prepare an archaeological report of the salvage excavation undertaken in accordance with condition C17. An interim report of the salvage excavation must be provided for the information of the Heritage Council of NSW and Council within one month of completion of the salvage work and a final report provided within 12 months of completion of the salvage work or within another timeframe agreed with the Planning Secretary. Copies of the report must also be provided to the NSW Heritage Division and Council.*

This document forms the Final Archaeological Report for the study site. A summary interim report was supplied to Built and submitted to the Planning Secretary in July 2021 for the information of the Heritage Council of NSW.

8.0 RESULTS AND RECOMMENDATIONS

8.1 RESULTS

8.1.1 Summary of Historic Development

The study site forms part of a larger portion of land reserved by the Crown for the settlement of Newcastle. Initially reserved for the 'Glebe', a plan dating from 1836–1841 shows that while still under government ownership, the wider grounds had been 'reserved for military purposes' and several new buildings had been constructed to front the extension of Newcomen Street. The study site remained undeveloped at this point in time, though a 'new barrack wall' had been constructed along the Church Street boundary in order to enclose the military grounds. The site remained undeveloped until the construction of Newcastle's second court house in the early 1890s. This new court house replaced the c.1841 degrading court house further north of the study site (on the corner of Hunter and Bolton Streets).

The 1890s court house continued to be used throughout the 20th century. Four 'pill box' air raid shelters were constructed on the east side of the site during World War II. In the mid-20th century, the justice precinct was expanded to include three-storey buildings on both the east and west sides of the court house and a morgue in the southeast corner of the site. In 2015 the 1890s court house was retired; a new court house having been constructed in Civic Place.

8.1.2 Summary of Fieldwork Program

East Side

Evidence of the c.1840s sandstone military barracks wall running along Church Street was exposed in the northeast corner of the study site in a former driveway location. The remnant structures consisted of two sandstone walls [242] and [243] orientated east-west and a possible cross wall or rubble patch [244]. The exposed, visible portion of the north wall [242] measured 3.75m long, the easternmost block continued into the section and this wall was determined to form the barracks retaining wall, seen fronting the study site on historic plans and photographs (see Section 2.2.1). Post-excavation analysis of the sandstone remains uncovered in the northeast corner of the site has left speculation around the function of the east-west southern wall [243], located approximately 1.65m south of the barracks wall [242], running parallel to it and possibly forming an undocumented gated entry way, small sentry box or lower underground courses of wall south of the buttress for increased stability and support.

Two portions of a below ground, ovoid shaped brick culvert [001] were exposed during archaeological monitoring on the east side of the 1890s former court house building. The brick culvert [001] had been truncated by concrete footings for the construction of the late 1940s administration building, the southern end particularly damaged from mid-20th century construction of a basement level tunnel connecting the former court house to the adjacent police station (not part of the study site). Both the north and south portions of the culvert [001] were fairly uniform in width (2–4cm external and internal range), though their height (external and internal) differed between 9 and 15cm. Both sides contained two rows of machine-made clay bricks bonded with cement mortar.

Central Rear

Archaeological monitoring occurred along the southern boundary of the study site and directly behind the court house building. A series of structural remains were exposed and consisted of walled spaces behind the court house, numbered Courtyards 1 to 5 in eastward order. Historic public works plans for the court house show that these courtyards were enclosed, square unroofed walled yards with a water closet in the corner of each. Courtyard 1 still partly stood at the time of archaeological monitoring, having been retained and enclosed due to a later conversion to internal toilets sometime after 1960 and prior to 1980, presumably at the time when the other four courtyards were removed. The buried remains were of Courtyards 2 to 5, with deeper excavation for new water tanks involving removal of Courtyards 3 to 5 following archaeological recording. A sizable portion of Courtyard 2 remained intact and unexposed during excavation works. Courtyard 3 was the best-preserved example of the three exposed areas cleaned and recorded, with part of the demolition fill and the majority of tar paving still in situ.

A rectangular shaped amenities block was exposed just south of the enclosed courtyards. Dry press brick footings were used to construct the amenities block, with smaller internal brick walls used to divide each cubicle. Two courses of brick sat on top of rudimentary built concrete foundations, with a slate damp course placed in-between the brick and concrete layer for waterproofing/ mould prevention. The exposed maximum external dimensions of the amenities block measured approximately 6.33m (east-west) x 1.15m (north-south). External areas of the amenities block and enclosed courtyards appear to have been repeatedly surfaced with tar, asphalt and concrete at several different points in time.

West Side

Though no known relics were expected on the west side of the site, archaeological inspection shows that large scale building activities in the 1960s for the construction of the administration building has truncated this area down to B horizon subsoils. As the c.1840s barracks wall extended across the whole northern frontage of the study site, further north of the 1960s building footprint, low to moderate archaeological potential exists for more structural remains of the sandstone wall to survive in situ along the west side frontage though in a truncated form.

8.1.3 Revised Significance

Initially forming undeveloped paddocks of the wider military barracks, the study site was later developed into Newcastle's second court house in the c.1890s, forming another structure in the expanding development of Newcastle's civic law and order system along Church Street. As a collective, the former court house site is a locally significant resource for its symbolism as part of Newcastle's judicial system and a valuable historic asset to the local Newcastle community.

The truncated structural remains of the c.1840s military barracks retaining wall, do not provide an increased understanding as to the use of space in the pre court house occupation phase. The presence of these wall foundations does, however, confirm the veracity of historic Newcastle plans where the wall is represented which can assist with the production of historic overlays at other nearby sites in future.

In its broader context outside Newcastle, the post-1861 culvert is not a considered a rare type of structural remains, nor the earliest in its construction type, however it

does signify government adoption and extended rollout of a particular type of successful underground stormwater management system which was already being utilised across parts of Windsor, Parramatta and Sydney from as early as the 1820s.

Archaeological remains which could be attributed to the court house occupation phase were not anticipated to significantly enhance or provide rare information regarding daily operations of the court house and due to the lack of expected occupation deposition, this notion was realised. Though the lack of deposition prevented an archaeological representation of the site's long time function, the presence of the former court house building provides a physical representation of this.

8.2 RECOMMENDATIONS

In compliance with Condition E25 of SSD9787, this final archaeological report must to be lodged with the Planning Secretary for sign off on that condition. Copies of the report must also be provided to the Heritage Council of NSW or its delegate, Heritage NSW.

Recommendations Regarding Future Work

Should any redevelopment works be planned in areas still known to hold archaeological potential (see Section 6.0), a revised assessment of the proposed archaeological heritage impacts will be required in advance of any planned excavation works, to provide management advice and prevent disturbance to known relics on site.

8.3 ARTEFACTS, RECORDS STORAGE AND PUBLIC INFORMATION

As discussed within Section 3.0 and 4.0, no artefacts were recovered during archaeological monitoring and excavation at the study site. A copy of all paper field records have been scanned and digitised. All original copies of field records will be stored at AMAC Group's head office in Stanmore, New South Wales.

As a matter of public information, a copy of this final archaeological report will be lodged with Newcastle Regional Library and the State Library of New South Wales.

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10.0 APPENDICES

10.1 SSD FINAL DEVELOPMENT CONSENT

Development Consent

Section 4.38 of the Environmental Planning and Assessment Act 1979

As delegate of the Minister for Planning and Public Spaces under delegation executed on 11 October 2017, I approve the Development Application referred to in Schedule 1, subject to the conditions specified in Schedule 2.

These conditions are required to:

- prevent, minimise, or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

David Gainsford
Executive Director
Infrastructure Assessments

Sydney 11th December 2019

SCHEDULE 1

Application Number:	SSD 9787
Applicant:	Nihon Daigaku Australia Newcastle Pty Ltd
Consent Authority:	Minister for Planning and Public Spaces
Site:	Lot 1 DP 1199904, 9 Church Street, Newcastle
Development:	Establishment of the Nihon University Newcastle Campus, comprising: • site preparation works including the removal of 29 trees, hardstand areas and existing drainage infrastructure. • demolition of the Administration Building and Supreme Court Building. • site remediation works and bulk excavation below existing ground level. • construction of two new part-three/part-four storey buildings (i.e. Residential Building and Education Building), minor internal alterations and additions to the existing former Courthouse Building and atrium connections between new and existing built forms. • construction of building identification sign. • establishment of an ancillary café and associated café terrace seating on the ground level of the proposed Residential Building.

- construction of a new Church Street crossover and establishment of a new service vehicle zone in the Residential Building front setback.
- construction of a new ground level car park beneath the Education Building.
- ancillary public domain works, site landscaping and rooftop communal open space.

DEFINITIONS

Aboriginal object	Has the same meaning as the definition of the term in section 5 of the *National Parks and Wildlife Act 1974*
Aboriginal place	Has the same meaning as the definition of the term in section 5 of the *National Parks and Wildlife Act 1974*
Accredited Certifier	Means the holder of accreditation as an accredited certifier under the *Building Professionals Act 2005* acting in relation to matters to which the accreditation applies.
Advisory Notes	Advisory information relating to the consent but do not form a part of this consent
Applicant	Nihon Daigaku Australia Newcastle Pty Ltd or any other person carrying out any development to which this consent applies
Approved disturbance area	The area identified as such on the development layout
Archaeological Salvage	Archaeological salvage works undertaken prior to the commencement of construction works in accordance with: • an endorsed Archaeological Research Design and Excavation Methodology; • Aboriginal Cultural Heritage Assessment, prepared by AMAC Archaeological, dated July 2019
BCA	Building Code of Australia
BC Act	*Biodiversity Conservation Act 2016*
CEMP	Construction Environmental Management Plan
Certified Contaminated Land Consultant	A person certified in accordance with the requirements of the Contaminated Land Consultant Certification Policy Version 2 (EPA November 2017) or any subsequent policies as in force from time to time
Certifier	Means a council or accredited certifier
Conditions of this consent	The conditions contained in Schedule 2 of this document
Construction	All physical work to enable operation including but not limited to the demolition and removal of buildings, the carrying out of works for the purposes of the development, including bulk earthworks, and erection of buildings and other infrastructure permitted by this consent, but excluding the following: • building and road dilapidation surveys; • investigative drilling or investigative excavation; • Archaeological Salvage; • establishing temporary site offices (in locations identified by the conditions of this consent); • installation of environmental impact mitigation measures, fencing, enabling works; and • minor adjustments to services or utilities. However, where heritage items, or threatened species or threatened ecological communities (within the meaning of the *Biodiversity Conservation Act 2016 or Environment Protection and Biodiversity Conservation Act 1999*) are affected or potentially affected by any physical work, that work is construction, unless otherwise determined by the Planning Secretary in consultation with EES Group or DPIE Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation)
Council	City of Newcastle
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Demolition	The deconstruction and removal of buildings, sheds and other structures on

	the site
Department	NSW Department of Planning, Industry and Environment
Development	The development described in the EIS and Response to Submissions, including the works and activities comprising site preparation works, demolition, site remediation, construction and operation of the Nihon University Newcastle Campus, as modified by the conditions of this consent.
Earthworks	Bulk earthworks, site levelling, import and compaction of fill material, excavation for installation of drainage and services
EES Group	Environment, Energy and Science Group of the Department of Planning, Industry and Environment (Former Office of Environment and Heritage)
EIS	The Environmental Impact Statement titled Proposed Nihon University, prepared by City Plan dated May 2019, submitted with the application for consent for the development, including any additional information provided by the Applicant in support of the application
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
EPA	NSW Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
Evening	The period from 6pm to 10pm.
Feasible	Means what is possible and practical in the circumstances
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement
Heritage Division	Heritage, Community Engagement of the Department of Premier and Cabinet
Heritage Item	An item as defined under the *Heritage Act 1977*, and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the *National Parks and Wildlife Act 1974*', the World Heritage List, or the National Heritage List or Commonwealth Heritage List under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), or anything identified as a heritage item under the conditions of this consent
Incident	An occurrence or set of circumstances that causes, or threatens to cause, material harm and which may or may not be, or cause, a non-compliance *Note: "material harm" is defined in this consent*
Land	Has the same meaning as the definition of the term in section 1.4 of the EP&A Act
LTEMP	Long Term Environmental Management Plan
Management and mitigation measures	The management and mitigation measures set out in Chapter 10 of the EIS, as updated by the RtS
Material harm	Is harm that: a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
Minister	NSW Minister for Planning and Public Spaces (or delegate)
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring

Monitoring	Any monitoring required under this consent must be undertaken in accordance with section 9.39 of the EP&A Act
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
OEMP	Operational Environmental Management Plan
Operation	The carrying out of the approved purpose of the development upon completion of construction.
PA	Means a planning agreement within the meaning of the term in section 7.4 of the EP&A Act.
Planning Secretary	Planning Secretary under the EP&A Act, or nominee
POEO Act	*Protection of the Environment Operations Act 1997*
Reasonable	Means applying judgement in arriving at a decision, taking into account: mitigation, benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
Registered Aboriginal Parties	Means the Aboriginal persons identified in accordance with the document entitled "*Aboriginal cultural heritage consultation requirements for proponents 2010*" (DECCW)
Rehabilitation	The restoration of land disturbed by the development to a good condition, to ensure it is safe, stable and non-polluting.
Response to submissions	The Applicant's response to issues raised in submissions received in relation to the application for consent for the development under the EP&A Act.
SA NSW	Subsidence Advisory NSW (formerly the Mine Subsidence Board)
Sensitive receivers	A location where people are likely to work, occupy or reside, including a dwelling, school, hospital, office or public recreational area.
Site	The land defined in Schedule 1
Site Auditor	As defined in section 4 of the *Contaminated Land Management Act 1997*
Site Audit Report	As defined in section 4 of the *Contaminated Land Management Act 1997*
Site Audit Statement	As defined in section 4 of the *Contaminated Land Management Act 1997*
TfNSW	Transport for New South Wales
TfNSW (RMS)	Transport for New South Wales (Roads and Maritime Services)
Waste	Has the same meaning as the definition of the term in the Dictionary to the POEO Act
Year	A period of 12 consecutive months

SCHEDULE 2

PART A ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

A1. In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and, if prevention is not reasonable and feasible, minimise any material harm to the environment that may result from the construction and operation of the development.

Terms of Consent

A2. The development may only be carried out:

(a) in compliance with the conditions of this consent;

(b) in accordance with all written directions of the Planning Secretary;

(c) generally in accordance with the EIS and Response to Submissions;

(d) in accordance with the approved plans in the table below:

Architectural (or Design) Drawings prepared by *Asusa Sekkei Architects*			
Dwg No.	**Rev**	**Name of Plan**	**Date**
A – 008	0	Conservation Plan	14.12.2018
A	N/A	Demolition Plan	14.12.2018
A – 010	0	Conservation Plan	14.12.2018
A – 101	02	Car Circulation Diagram & Services	30.10.2019
A – 102	0	Site Analysis Plan	14.12.2018
A – 103	N/A	Northeast Perspective	14.12.2018
A – 104	N/A	Northwest Perspective	14.12.2018
A – 105	N/A	Southeast/Southwest Perspective	14.12.2018
A – 106	N/A	Aerial Perspective	14.12.2018
A – 107	02	Site Plan	30.10.2019
A – 108	02	1st Floor Plan	30.10.2019
A – 109	0	2nd Floor Plan	14.12.2018
A – 110	0	3rd Floor Plan	14.12.2018
A – 111	0	4th Floor Plan	14.12.2018
A – 112	0	Roof Floor Plan	14.12.2018
A – 114	01	North and South Elevations	30.10.2019
A – 115	01	East and West Elevations	November 2018
A – 116	0	Courthouse Elevations & Section	14.12.2018
A – 117	0	Sections – 1	14.12.2018
A – 118	0	Sections – 2	14.12.2018
A – 119	0	Amenity Planning	14.12.2018
Landscape Drawings prepared by Moir Landscape Architects			
Dwg No.	**Rev**	**Name of Plan**	**Date**
LP01	E	Cover Sheet	19.11.2019
LP02	D	Site Analysis	27.11.2018

LP03	D	Site Photography	27.11.2018
LP04	D	Design Statement	27.11.2018
LP05	E	Landscape Plan – 1st Floor	19.11.2019
LP06	E	Landscape Plan – 4th Floor + Street Elevation	19.11.2019
LP07	E	Planting & Theming Palette	19.11.2019

A3. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:

(a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary;

(b) any reports, reviews or audits commissioned by the Planning Secretary regarding compliance with this approval; and

(c) the implementation of any actions or measures contained in any such document referred to in (a) above.

A4. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.

Limits of Consent

A5. This consent lapses five years after the date of consent unless work is physically commenced.

Prescribed Conditions

A6. The Applicant must comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the EP&A Regulation.

Planning Secretary as Moderator

A7. In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the Development, either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's resolution of the matter must be binding on the parties.

Evidence of Consultation

A8. Where conditions of this consent require consultation with an identified party, the Applicant must:

(a) consult with the relevant party prior to submitting the subject document for information or approval; and

(b) provide details of the consultation undertaken including:

(i) the outcome of that consultation, matters resolved and unresolved; and

(ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

Staging

A9. The project may be constructed and operated in stages. Where staged construction or operation is proposed, a Staging Report (for either or both construction and operation as the case may be) must be prepared and submitted for the information of the Planning Secretary. The Staging Report must be submitted to the Planning Secretary no later than one month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation).

A10. A Staging Report prepared in accordance with condition A9 must:

(a) if staged construction is proposed, set out how the construction of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish;

(b) if staged operation is proposed, set out how the operation of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant);

(c) specify how compliance with conditions will be achieved across and between each of the stages of the project; and

(d) set out mechanisms for managing any cumulative impacts arising from the proposed staging.

A11. Where staging is proposed, the project must be staged in accordance with the Staging Report, as submitted to the Planning Secretary.

A12. Where staging is proposed, the terms of this approval that apply or are relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage.

Staging, Combining and Updating Strategies, Plans or Programs

A13. With the approval of the Planning Secretary, the Applicant may:

(a) prepare and submit any strategy, plan (including management plan, architectural or design plan) or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan (including management plan, architectural or design plan) or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan (including management plan, architectural or design plan) or program);

(b) combine any strategy, plan (including management plan, architectural or design plan), or program required by this consent (if a clear relationship is demonstrated between the strategies, plans (including management plan, architectural or design plan) or programs that are proposed to be combined); and

(c) update any strategy, plan (including management plan, architectural or design plan), or program required by this consent (to ensure the strategies, plans (including management plan, architectural or design plan), or programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).

A14. If the Planning Secretary agrees, a strategy, plan (including management plan, architectural or design plan), or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.

A15. If approved by the Planning Secretary, updated strategies, plans (including management plan, architectural or design plan), or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan, program or drawing.

Structural Adequacy

A16. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with the relevant requirements of the BCA and any additional requirements of the Subsidence Advisory NSW where the building or structure is located on land within a declared Mine Subsidence District.

Notes:

- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.*
- *Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain the Chief Executive of Subsidence Advisory NSW's approval before carrying out certain development in a Mine Subsidence District.*

External Walls and Cladding

A17. The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA.

Site Contamination

A18. Following the completion of demolition works and prior to the commencement of all other construction, additional site investigations of previously untested or inaccessible areas of the site must be undertaken in accordance with:

(a) interim advice dated12 November 2019 and prepared by NSW EPA Accredited Site Auditor Ian Gregson, Principal Environmental Consultant, GHD;

(b) the recommendations provided in the Phase 1 Environmental Site Assessment – Technical Note dated 29 April 2019 and prepared by Cardno;

(c) NSW EPA Sampling Design Guidelines;

(d) Guidelines for the NSW Site Auditor Scheme (3rd edition) 2017 https://www.epa.nsw.gov.au/publications/contaminatedland/17p0269-guidelines-for-thensw-site-auditor-scheme-third-edition;

(e) Guidelines for Consultants Reporting on Contaminated Sites, 2011 www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf;

(f) The National Environment Protection (assessment of contamination) Measures 2013 as amended; and

(g) testing must include assessment of both the soil and groundwater profile.

A19. The additional site investigations report must be reviewed by a NSW EPA Accredited Site Auditor and the Conceptual Remediation Action Plan dated 28 May 2019, prepared by Cardno must be updated to reflect the findings of the additional site investigations required by condition A18. The updated remediation action plan must be approved by a NSW EPA Accredited Site Auditor and submitted to the Planning Secretary prior to the commencement of remediation works.

A20. Remediation works approved as part of this development consent must be carried out in accordance with the remediation action plan approved by a NSW EPA Accredited Site Auditor pursuant to condition A19.

Applicability of Guidelines

A21. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.

A22. Consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

Monitoring and Environmental Audits

A23. Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, Site audit report and independent auditing.

Note: *For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.*

Access to Information

A24. At least 48 hours before the commencement of construction until the completion of all works under this consent, or such other time as agreed by the Planning Secretary, the Applicant must:

(a) make the following information and documents (as they are obtained or approved) publicly available on its website:
   (i) the documents referred to in condition A2 of this consent;
   (ii) all current statutory approvals for the development;
   (iii) all approved strategies, plans and programs required under the conditions of this consent;
   (iv) regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent;
   (v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
   (vi) a summary of the current stage and progress of the development;
   (vii) contact details to enquire about the development or to make a complaint;
   (viii) a complaints register, updated monthly;
   (ix) audit reports prepared as part of any independent audit of the development and the Applicant's response to the recommendations in any audit report;
   (x) any other matter required by the Planning Secretary; and
(b) keep such information up to date, to the satisfaction of the Planning Secretary.

Compliance

A25. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

Incident Notification, Reporting and Response

A26. The Planning Secretary must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident.

A27. Subsequent notification must be given and reports submitted in accordance with the requirements set out in **Appendix 2**.

Non-Compliance Notification

A28. The Planning Secretary must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifier must also notify the Planning Secretary in writing to compliance@planning.nsw.gov.au within seven days after they identify any non-compliance.

A29. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

A30. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Revision of Strategies, Plans and Programs

A31. Within three months of:
(a) the submission of a compliance report under condition C22;
(b) the submission of an incident report under condition A27;
(c) the submission of an Independent Audit under condition D32;
(d) the approval of any modification of the conditions of this consent; or
(e) the issue of a direction of the Planning Secretary under condition A2 which requires a review,

the strategies, plans and programs required under this consent must be reviewed, and the Planning Secretary and the Certifier must be notified in writing that a review is being carried out.

If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, programs or drawings required under this consent must be revised, to the satisfaction of the Planning Secretary and/or Certifier (where relevant). Where revisions are required, the revised document must be submitted to the Planning Secretary and/or Certifier for approval and/or information (where relevant) within six weeks of the review.

Note: *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*

PART B PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

Certified Drawings

B1. Prior to the issue of the relevant Construction Certificate, the Applicant must submit to the satisfaction of the Certifier structural drawings prepared and signed by a suitably qualified practising Structural Engineer that demonstrates compliance with this development consent.

Development Contributions

B2. Prior to the issue of any Construction Certificate (not including demolition or site remediation works), a Section 7.12 levy totalling **$288,992**, is to be paid to Council in accordance with Section 7.12 of the EP&A Act and City of Newcastle Section 7.12 Newcastle Local Infrastructure Contributions Plan 2019. Prior to payment Council can provide the value of the indexed levy.

External Walls and Cladding

B3. Prior to the issue of any Construction Certificate, the Applicant must provide the Certifier with documented evidence that the products and systems proposed for use or used in the construction of external walls, including finishes and claddings such as synthetic or aluminium composite panels, comply with the requirements of the BCA. The Applicant must provide a copy of the documentation given to the Certifier to the Planning Secretary within seven days after the Certifier accepts it.

Protection of Public Infrastructure

B4. Prior to the issue of the relevant Construction Certificate, the Applicant must:

(a) consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;

(b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and

(c) submit a copy of the dilapidation report to the Planning Secretary, Certifier and Council.

Pre-Construction Dilapidation Report

B5. Prior to the issue of the relevant Construction Certificate, the Applicant must submit a pre-commencement dilapidation report to Council, NSW Heritage Division and the Certifier. The report must provide an accurate record of the existing condition of adjoining private properties, heritage items and Council assets that are likely to be impacted by the proposed works.

Ecologically Sustainable Development

B6. Prior to the issue of any Construction Certificate, unless otherwise agreed by the Planning Secretary, the Applicant must demonstrate that ESD is being achieved by either:

(a) registering for a minimum 4 star Green Star rating with the Green Building Council Australia and submit evidence of registration to the Certifier; or

(b) seeking approval from the Planning Secretary for an alternative certification process.

Operational Waste Storage and Processing

B7. Prior to the issue of the relevant Construction Certificate, the Applicant must obtain agreement from Council for the design of the operational waste storage area (where waste removal will be undertaken by Council). Where waste removal will be undertaken by a third party, the design of the operational waste storage area must be in accordance with Council's standards. Evidence of the design and Council endorsement (where relevant) must be provided to the Certifier.

Rainwater Harvesting

B8. Prior to the issue of the relevant Construction Certificate, the Applicant must ensure that a rainwater reuse/harvesting system for the development is developed for the site. A rainwater re-use plan must be prepared and certified by an experienced hydraulic engineer.

Operational Car Parking and Service Vehicle Layout

B9. Prior to the issue of the relevant Construction Certificate, compliance with the following requirements must be submitted to the satisfaction of the Certifier:

(a) all vehicles must enter and leave the Site in a forward direction;

(b) a minimum of 20 on-site car parking spaces for use during operation of the development and designed in accordance with the latest versions of AS 2890.1 and AS 2890.6;

(c) the swept path of the longest construction vehicle entering and exiting the Site in association with the new work, as well as manoeuvrability through the Site, must be in accordance with the latest version of AS 2890.2;

(d) the safety of vehicles and pedestrians accessing adjoining properties, where shared vehicle and pedestrian access occurs, is to be addressed; and

(e) traffic management devices in the form of 'Stop' and 'Give Way to Pedestrian' signs and line marking must be installed at the entry of proposed driveways within the site and constructed in accordance with AS 2890.1:2004: *Parking facilities 0 Off-street car parking*.

Bicycle Parking and End-of-Trip Facilities

B10. Prior to the issue of the relevant Construction Certificate, compliance with the following requirements for secure bicycle parking and end-of-trip facilities must be submitted to the satisfaction of the Certifier:

(a) the provision of a minimum 22 bicycle parking spaces;

(b) the layout, design and security of bicycle facilities must comply with the minimum requirements of the latest version of AS 2890.3:2015 Parking facilities - Bicycle parking, and be located in easy to access, well-lit areas that incorporate passive surveillance;

(c) the provision of end-of-trip facilities for staff;

(d) appropriate pedestrian and cyclist advisory signs are to be provided; and

(e) all works/regulatory signposting associated with the proposed developments shall be at no cost to the relevant roads authority.

PART C PRIOR TO COMMENCEMENT OF CONSTRUCTION

Notification of Commencement

C1. The Applicant must notify the Planning Secretary in writing of the dates of commencement of physical work and operation at least 48 hours before those dates.

C2. If the construction or operation of the development is to be staged, the Planning Secretary must be notified in writing at least 48 hours before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

Construction Certificate

C3. Work must not commence until a Construction Certificate in respect of the work has been issued.

Outdoor Lighting

C4. Prior to commencement of lighting installation, evidence must be submitted to the satisfaction of the Certifier that all outdoor lighting within the site has been designed to comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-2019 Control of the obtrusive effects of outdoor lighting.

Demolition

C5. Prior to the commencement of construction, demolition work plans required by *AS 2601-2001 The demolition of structures* (Standards Australia, 2001) must be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the statement of compliance must be submitted to the Certifier and Planning Secretary.

C6. Prior to the commencement of internal demolition works within the State heritage listed former Newcastle Courthouse, evidence must be submitted to the satisfaction of the Certifier confirming works planned are required to make the existing building compliant with the fire and Life Safety Upgrade Strategy, prepared by Design Confidence, dated 12 June 2019, and that impacts to areas of high significant fabric have been limited.

Environmental Management Plan Requirements

C7. Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:

(a) detailed baseline data;

(b) details of:

(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);

(ii) any relevant limits or performance measures and criteria; and

(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;

(c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;

(d) a program to monitor and report on the:

(i) impacts and environmental performance of the development;

(ii) effectiveness of the management measures set out pursuant to paragraph (c) above;

(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;

(f) a program to investigate and implement ways to improve the environmental performance of the development over time;

(g) a protocol for managing and reporting any:

(i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);
(ii) complaint;
(iii) failure to comply with statutory requirements; and

(h) a protocol for periodic review / update of the plan and any updates in response to incidents or matters of non-compliance.

Note: *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans*

Construction Environmental Management Plan

C8. Prior to the commencement of construction, the Applicant must submit a Construction Environmental Management Plan (CEMP) to the Certifier and provide a copy to the Planning Secretary. The CEMP must include, but not be limited to, the following:

(a) Details of:
(i) hours of work;
(ii) 24-hour contact details of site manager;
(iii) management of dust and odour to protect the amenity of the neighbourhood;
(iv) stormwater control and discharge;
(v) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;
(vi) groundwater management plan including measures to prevent groundwater contamination;
(vii) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting;
(viii) community consultation and complaints handling;

(b) Construction Traffic and Pedestrian Management Sub-Plan (see condition C10);

(c) Construction Noise and Vibration Management Sub-Plan (see condition C11);

(d) Construction Waste Management Sub-Plan (see condition C11(g));

(e) an unexpected finds protocol for contamination and associated communications procedure;

(f) an unexpected finds protocol for non-Aboriginal heritage and associated communications procedure;

(g) waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site; and

C9. The Applicant must not commence construction of the development until the CEMP is submitted to the Certifier and a copy submitted to the Planning Secretary.

C10. The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must address, but not be limited to, the following:

(a) be prepared by a suitably qualified and experienced person(s);

(b) be prepared in consultation with Council;

(c) detail the measures that are to be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services;

(d) detail heavy vehicle routes, access and parking arrangements;

(e) include a Driver Code of Conduct to:
(i) minimise the impacts of earthworks and construction on the local and regional road network;
(ii) minimise conflicts with other road users;
(iii) minimise road traffic noise; and
(iv) ensure truck drivers use specified routes;

(f) include a program to monitor the effectiveness of these measures; and

(g) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.

C11. The Construction Noise and Vibration Management Sub-Plan must address, but not be limited to, the following:

(a) be prepared by a suitably qualified and experienced noise expert;

(b) describe procedures for achieving the noise management levels in EPA's *Interim Construction Noise Guideline* (DECC, 2009);

(c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers;

(d) include strategies that have been developed with the community for managing high noise generating works;

(e) describe the community consultation undertaken to develop the strategies in condition C11(d);

(f) include a complaints management system that would be implemented for the duration of the construction; and

(g) include a program to monitor and report on the impacts and environmental performance of the development and the effectiveness of the management measures in accordance with condition C7(d). The program should be developed in accordance with the report titled Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting, and included, but not limited:

(i) alert triggers where project trigger noise levels are exceeded; and

(ii) procedures for respite periods when sensitive receivers become 'highly noise affected' (i.e. noise levels exceed 75 dB(A).

C12. The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the following:

(a) detail the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations; and

(b) removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.

Aboriginal Cultural Heritage Management Plan

C13. Prior to the commencement of construction (excluding demolition works), an Aboriginal Cultural Heritage Management Plan (ACHMP) must be prepared and address, but not be limited to, the following:

(a) be prepared by a suitably qualified and experienced expert in consultation with the Registered Aboriginal Parties;

(b) be endorsed by the Planning Secretary prior to construction (excluding demolition works) of any part of the development;

(c) describe the measures to protect any Aboriginal cultural deposits or relics uncovered during sub surface archaeological testing in accordance with the relevant legislation.

Construction Worker Transportation Strategy

C14. Prior to the commencement of construction, the Applicant must submit a Construction Worker Transportation Strategy to the satisfaction of the Certifier. The Strategy must detail the provision of sufficient parking facilities or other travel arrangements for construction workers in order to minimise demand for parking in nearby public and residential streets or public parking facilities.

Stormwater Management System

C15. Prior to the commencement of construction, the Applicant must design an operational stormwater management system for the development and submit it to the satisfaction of the Certifier. The system must:

(a) be designed by a suitably qualified and experienced person(s);

(b) be design in consultation with and to the satisfaction of Council;

(c) be generally in accordance with the conceptual design in the EIS as amended by the RtS;

(d) be in accordance with applicable Australian Standards;

(e) ensure that the system capacity has been designed in accordance with *Australian Rainfall and Runoff* (Engineers Australia, 2019) and *Managing Urban Stormwater: Council Handbook* (EPA, 1997) guidelines;

(f) divert existing clean surface water around operational areas of the site;

(g) direct all sediment laden water in overland flow away from the leachate management system;

(h) prevent cross-contamination of clean and sediment or leachate laden water;

(i) include details of all on-site retention/detention and water quality treatment systems are to be individually signposted in accordance with Council's Stormwater and Water Efficiency for Development Technical Manual.

Operational Noise – Design of Mechanical Plant and Equipment

C16. Prior to installation of mechanical plant and equipment, the Applicant must incorporate the noise mitigation recommendations in the Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting, into the detailed design drawings. The Certifier must verify that all noise mitigation measures have been incorporated into the design to ensure the development will not exceed the recommended operational noise levels identified in the Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting.

Archaeological Salvage – Historic Archaeology

C17. Following the completion of demolition works and prior to the commencement of construction works, all affected historical archaeological deposits are to be subject to professional archaeological excavation and recording. An Archaeological Research Design and Excavation methodology must be prepared to guide the archaeological program. This must be prepared in accordance with Heritage Council of NSW Guidelines and in consultation with Heritage NSW, Department of Premier and Cabinet.

C18. The Archaeological program must be directed by a suitably qualified and experienced Archaeologist (Excavation Director). The nominated Excavation Director must be able to demonstrate their ability to undertake this work through a response to the Heritage Council's Excavation Director Criteria (July 2011) for salvage excavation for a site of local heritage significance.

Landscaping

C19. Prior to the commencement of construction, the Applicant must prepare a revised Landscape Plan that provides a streetscape treatment that does not impede on the understanding of the former Newcastle Courthouse and its relationship to its environment and setting, and submit a copy to the Planning Secretary. The plan must

(a) be prepared by a qualified heritage landscape consultant and submitted to the NSW Heritage Council, or its delegate, for endorsement;

(b) provide an analysis of the existing site frontage hardstand, fences and gates, colours and finishes and landscape elements within the precinct;

(c) demonstrate the retention of the existing heritage cast iron fence along the site frontage, including the iron palisade fence, sandstone plinth and sandstone piers, unless removal of sections is demonstrated to be essential for the functional requirements of the proposal (e.g. clearance required to establish the approved additional driveway crossover);

(d) provide for the planting of eight trees that are sympathetic to the heritage values of the item and ensure no planting grow higher than 1.5 m in directly in front of the former Newcastle Courthouse;

(e) detail the location, species, maturity and height at maturity of plants to be planted on-site;

(f) include species (trees, shrubs and groundcovers) indigenous to the local area;

(g) include the planting of trees with a pot container of 100 litres or greater;

(h) include the provision of street tree planting. Species and spacing of trees are to be sympathetic to the heritage values of the item and are to be determined in consultation with Council.

Public Domain Works

C20. Prior to the commencement of any footpath or public domain works, the Applicant must engage a suitably qualified practicing engineer to design the following public domain works within the Church Street frontage of the site at no cost to Council and in accordance with the Newcastle City Centre Public Domain Manual guideline, design specifications and relevant Australian Standards:

(a) new full width footpath and streetscape works and driveway;

(b) reconstruct kerb and gutter, including associated road shoulder pavement and any associated drainage works;

(c) new street trees and tree planting vaults in accordance with Council's requirement and adjust service pit levels to match new footpath levels;

(d) kerb blisters and raised pedestrian crossings at the intersection of Bolton Street and Church Street;

(e) upgrade street lighting across the frontage of the site to provide P3 Pedestrian Lighting Category in accordance with Australian Standard 1158.1;

(f) upgrade of pedestrian crossing lighting to comply with Australian Standard 1158.4;

(g) any necessary adjustments to regulatory signage.

C21. Prior to the commencement of any footpath or public domain works, the Applicant must consult with Council and demonstrate to the Certifier that the public domain design and treatment, as required by condition C20, meets the Council's requirements, including addressing pedestrian management. The Applicant must submit documentation of approval for each stage from Council to the Certifier.

Compliance Reporting

C22. No later than two weeks before the date notified for the commencement of construction, a Compliance Monitoring and Reporting Program prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2018) must be submitted to the Planning Secretary and the Certifier.

C23. Compliance Reports of the project must be carried out in accordance with the Compliance Reporting Post Approval Requirements (Department 2018).

C24. The Applicant must make each Compliance Report publicly available 60 days after submitting it to the Planning Secretary and notify the Planning Secretary and the Certifier in writing at least seven days before this is done.

C25. Notwithstanding the requirements of the Compliance Reporting Post Approval Requirements (Department 2018), the Planning Secretary may approve a request for ongoing annual operational compliance reports to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an operational compliance report has demonstrated operational compliance.

PART D DURING CONSTRUCTION

Site Notice

D1. A site notice(s):

(a) must be prominently displayed at the boundaries of the site during construction for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifier and Structural Engineer is to satisfy the following requirements;

(b) minimum dimensions of the notice must measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30-point type size;

(c) the notice is to be durable and weatherproof and is to be displayed throughout the works period;

(d) the approved hours of work, the name of the site/ project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries, including construction/ noise complaint must be displayed on the site notice; and

(e) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.

Operation of Plant and Equipment

D2. All construction plant and equipment used on site must be maintained in a proper and efficient condition and operated in a proper and efficient manner.

Demolition

D3. Demolition work must comply with the demolition work plans required by *Australian Standard AS 2601-2001 The demolition of structures* (Standards Australia, 2001) and endorsed by a suitably qualified person as required by Condition C5.

Construction Hours

D4. Construction, including the delivery of materials to and from the site, may only be carried out between the following hours:

(a) between 7 am and 6 pm, Mondays to Fridays inclusive; and

(b) between 8 am and 1 pm, Saturdays.

No work may be carried out on Sundays or public holidays.

D5. Construction activities may be undertaken outside of the hours in condition D4 if required:

(a) by the Police or a public authority for the delivery of vehicles, plant or materials; or

(b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or

(c) where the works are inaudible at the nearest sensitive receivers; or

(d) where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works.

D6. Notification of such construction activities as referenced in condition D5 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.

D7. Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:

(a) 9am to 12pm, Monday to Friday;

(b) 2pm to 5pm Monday to Friday; and

(c) 9am to 12pm, Saturday.

Implementation of Management Plans

D8. The Applicant must carry out the construction of the development in accordance with the most recent version of the approved CEMP (including Sub-Plans) and ACHMP.

Construction Traffic

D9. All construction vehicles (excluding site personnel vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site before stopping.

Hoarding Requirements

D10. The following hoarding requirements must be complied with:

(a) no third-party advertising is permitted to be displayed on the subject hoarding/ fencing; and

(b) the construction site manager must be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application.

No Obstruction of Public Way

D11. The public way (outside of any approved construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances.

Construction Noise Limits

D12. The development must be constructed to achieve the construction noise management levels detailed in *the Interim Construction Noise Guideline* (DECC, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the approved Construction Noise and Vibration Management Plan.

D13. The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition D4.

D14. The Applicant must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.

Vibration Criteria

D15. Vibration caused by construction at any residence or structure outside the site must be limited to:

(a) for structural damage, the latest version of *DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures* (German Institute for Standardisation, 1999); and

(b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: a technical guideline* (DEC, 2006) (as may be updated or replaced from time to time).

D16. Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in condition D15.

D17. The limits in conditions D15 and D16 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by condition C11 of this consent.

Tree Protection

D18. For the duration of the construction works:

(a) street trees, with the exception of the one nominated street tree approved for removal to accommodate the new driveway crossover, must not be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property;

(b) all street trees to be retained must be protected at all times during construction. Any tree on the footpath, which is damaged or removed during construction due to an emergency, must be replaced, to the satisfaction of Council;

(c) all trees on the site that are not approved for removal must be suitably protected during construction as per recommendations of the Aboricultural Impact Assessment Report dated 17 November 2019 and prepared by Joseph Pidutti Consulting Arborist; and

(d) if access to the area within any protective barrier is required during the works, it must be carried out under the supervision of a qualified arborist. Alternative tree protection measures must be installed, as required. The removal of tree protection measures, following completion of the works, must be carried out under the supervision of a qualified arborist and must avoid both direct mechanical injury to the structure of the tree and soil compaction within the canopy or the limit of the former protective fencing, whichever is the greater.

Air Quality

D19. The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.

D20. During construction, the Applicant must ensure that:

(a) exposed surfaces and stockpiles are suppressed by regular watering;

(b) all trucks entering or leaving the site with loads have their loads covered;

(c) trucks associated with the development do not track dirt onto the public road network;

(d) public roads used by these trucks are kept clean; and

(e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

Erosion and Sediment Control

D21. All erosion and sediment control measures must be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works have been stabilised and rehabilitated so that it no longer acts as a source of sediment. Erosion and sediment control techniques, as a minimum, are to be in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom, 2004) commonly referred to as the 'Blue Book'.

Imported Soil

D22. The Applicant must:

(a) ensure that only VENM, ENM, or other material approved in writing by EPA is brought onto the site;

(b) keep accurate records of the volume and type of fill to be used; and

(c) make these records available to the Certifier upon request.

Disposal of Seepage and Stormwater

D23. Adequate provisions must be made to collect and discharge stormwater drainage during construction of the building to the satisfaction of the principal Certifier. The prior written approval of Council must be obtained to connect or discharge site stormwater to Council's stormwater drainage system or street gutter.

Unexpected Finds Protocol – Aboriginal Heritage

D24. In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the objects. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by EES Group and the management outcome for the site included in the information provided to AHIMS. The Applicant must consult with the Aboriginal community representatives, the archaeologists and EES Group to develop and implement management strategies for all objects/sites. Works shall only recommence with the written approval of EES Group.

Unexpected Finds Protocol – Historic Heritage

D25. If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the NSW Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the NSW Heritage Division.

Waste Storage and Processing

D26. All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.

D27. All waste generated during construction must be assess, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).

D28. The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.

Independent Environmental Audit

D29. Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the preparation of an Independent Audit Program or commencement of an Independent Audit.

D30. Prior to the commencement of construction, an Independent Audit Program prepared in accordance with the Independent Audit Post Approval Requirements (Department 2018) must be submitted to the Planning Secretary and the Certifier.

D31. Table 1 of the Independent Audit Post Approval Requirements (Department 2018) is amended so that the frequency of audits required in the construction phase is:

(a) an initial construction Independent Audit must be undertaken within eight weeks of the notified commencement date of construction;

(b) a subsequent Independent Audit of construction must be undertaken no later than six months from the date of the initial construction Independent Audit; and

In all other respects Table 1 remains the same. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified above, upon giving at least 4 weeks notice to the applicant of the date upon which the audit must be commenced.

D32. Independent Audits of the development must be submitted to the Planning Secretary and must be carried out in accordance with:

(a) the Independent Audit Program submitted to the Planning Secretary and the Certifier under condition D30 of this consent; and

(b) the requirements for an Independent Audit Methodology and Independent Audit Report in the Independent Audit Post Approval Requirements (Department 2018).

D33. In accordance with the specific requirements in the Independent Audit Post Approval Requirements (Department 2018), the Applicant must:

(a) review and respond to each Independent Audit Report prepared under condition D30 of this consent;

(b) submit the response to the Planning Secretary and the Certifier; and

(c) make each Independent Audit Report and response to it publicly available 60 days after submission to the Planning Secretary and notify the Planning Secretary and the Certifier in writing at least seven days before this is done.

D34. Notwithstanding the requirements of the Independent Audit Post Approval Requirements (Department 2018), the Planning Secretary may approve a request for ongoing annual operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an audit has demonstrated operational compliance.

PART E PRIOR TO ISSUE OF AN OCCUPATION CERTIFICATE OR COMMENCEMENT OF OPERATION

Notification of Occupation

E1. At least one month before commencement of operation, the date of commencement of the operation of the development must be notified to the Planning Secretary in writing. If the operation of the development is to be staged, the Planning Secretary must be notified in writing at least one month before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.

External Walls and Cladding

E2. Prior to issue of an Occupation Certificate, the Applicant must provide the Certifier with documented evidence that the products and systems used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the requirements of the BCA.

E3. The Applicant must provide a copy of the documentation given to the Certifier to the Planning Secretary within seven days after the Certifier accepts it.

Post-construction Dilapidation Report

E4. Prior to issue of an Occupation Certificate, the Applicant must engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of construction. This report is:

a) to ascertain whether the construction created any structural damage to adjoining buildings or infrastructure;
b) to be submitted to the Certifier. In ascertaining whether adverse structural damage has occurred to adjoining buildings or infrastructure, the Certifier must:
   i) compare the post-construction dilapidation report with the pre-construction dilapidation report required by these conditions; and
   ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
c) to be forwarded to Council.

Public Domain Works

E5. Prior to issue of an Occupation Certificate, the public domain works and footpath works required by condition C20 must be completed to Council's satisfaction.

Protection of Public Infrastructure

E6. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:

(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the development; and

(b) relocate, or pay the full costs associated with relocating any infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition B2 of this consent.

Easements

E7. Prior to issue of an Occupation Certificate, an easement under section 88A and/or restriction or public positive covenant under section 88E of the *Conveyancing Act 1919* naming the Council as the prescribed authority, which can only be revoked, varied or modified with the consent of the Council, and which provides for the drainage of water must be registered on title of Lot 1 DP 1199904. The easement must be a minimum three metres in width and must be centered over the new stormwater pipeline.

Utilities and Services

E8. Prior to issue of an Occupation Certificate, a compliance certificate under the section 50 of the *Hunter Water Act 1991* must be obtained from Hunter Water and submitted to the Certifier.

Works as Executed Plans

E9. Prior to issue of an Occupation Certificate, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the Certifier.

Green Travel Plan

E10. Prior to issue of an Occupation Certificate, a Green Travel Plan (GTP), must be submitted to the satisfaction of the Planning Secretary to promote the use of active and sustainable transport modes. The plan must:

(a) be prepared by a suitably qualified traffic consultant in consultation with Council;

(b) include objectives and modes share targets (i.e. Site and land use specific, measurable and achievable and timeframes for implementation) to define the direction and purpose of the GTP;

(c) include specific tools and actions to help achieve the objectives and mode share targets;

(d) include measures to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibilities for relevant employees involved in the implementation of the GTP; and

(e) include details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and mode share targets of the GTP, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of users of the development.

Heritage Interpretation Plan

E11. Prior to issue of an Occupation Certificate, the Applicant must submit a Heritage Interpretation Plan to acknowledge the heritage of the site to the Planning Secretary. The plan must:

(a) be prepared by a suitably qualified and experienced expert in consultation with the NSW Heritage Division and Council;

(b) outline the Stage 1 heritage interpretation strategy

(c) include provision for naming elements within the development that acknowledges the site's heritage;

(d) incorporates interpretive information in to the site of the former legal and court functions of the former Newcastle Courthouse.

Operational Management Plan

E12. Prior to issue of an Occupation Certificate, the Applicant must prepare an Operational Management Plan for the site. The plan must:

(a) include measures to ensure all wayfinding signage, security measures, and landscaping is managed to maintain their effectiveness; and

(b) include measures to manage the operation and use of rooftop terraces and ground level café terrace; and

(c) prohibit use of the rooftop terraces for events or formal teaching; and

(d) restrict the use of the rooftop terraces to no later than 9pm daily; and

(e) ensure the use of the rooftop terraces does not result in exceedances of the project noise trigger levels in the report titled Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting.

E13. The Operational Management Plan must be submitted to the satisfaction of the Certifier and implemented for the life of the approved development.

Operational Transport and Access Management Plan (OTAMP)

E14. Prior to issue of an Occupation Certificate, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and submitted to the Planning Secretary. The OTAMP must address the following:

(a) detailed pedestrian analysis including the identification of safe route options – to identify the need for management measures to ensure students and staff are able to access and leave the Site in a safe and efficient manner at all times;

(b) the location of all car parking spaces on the campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.);

(c) delivery and services vehicle management arrangements;

(d) use of the services zone limited to:

(i) 7am to 8am and 7pm to 8pm Monday to Friday;

(ii) 7am to 8am Saturday;

(iii) no use on Sundays or Public Holidays;

(e) management of approved access arrangements;

(f) potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing the car parking spaces or services zone;

(g) a monitoring and review program.

Mechanical Ventilation

E15. Prior to issue of an Occupation Certificate, the Applicant must provide evidence to the satisfaction of the Certifier that the installation and performance of the mechanical ventilation systems complies with:

(a) *AS 1668.2-2012 The use of air-conditioning in buildings – Mechanical ventilation in buildings* and other relevant codes; and

(b) any dispensation granted by Fire and Rescue NSW.

Operational Noise – Design of Mechanical Plant and Equipment

E16. Prior to issue of an Occupation Certificate, the Applicant must submit evidence to the Certifier that the noise mitigation recommendations in the Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting have been incorporated into the design to ensure the development will not exceed the recommended operational noise levels identified in the Environmental Noise Assessment.

Road Damage

E17. Prior to the commencement of operation, the cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the Subject Site as a result of construction works associated with the approved development must be met in full by the Applicant.

Fire Safety Certification

E18. Prior to issue of an Occupation Certificate, a Fire Safety Certificate must be obtained for all the Essential Fire or Other Safety Measures forming part of this consent. A copy of the Fire Safety Certificate must be submitted to the relevant authority and Council. The Fire Safety Certificate must be prominently displayed in the building.

Structural Inspection Certificate

E19. Prior to occupation of the relevant parts of any new or refurbished buildings, a Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the Certifier. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the approval authority and the Council after:

(a) the site has been periodically inspected and the Certifier is satisfied that the structural works is deemed to comply with the final design drawings; and

(b) the drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

Compliance with Food Code

E20. Prior to issue of an Occupation Certificate, the Applicant is to obtain a certificate from a suitably qualified tradesperson, certifying that the kitchen, food storage and food preparation areas have been fitted in accordance with the AS 4674 *Design, construction and fit-out of food premises* and provide evidence of receipt of the certificate to the satisfaction of the Certifier.

Stormwater Quality Management Plan

E21. Prior to issue of an Occupation Certificate, an Operation and Maintenance Plan (OMP) is to be submitted to the satisfaction of the Certifier along with evidence of compliance with the OMP. The OMP must ensure the proposed stormwater quality measures remain effective and contain the following:

(a) maintenance schedule of all stormwater quality treatment devices that addresses Council's Technical Manual: Stormwater and Water Efficiency for Development (updated April 2019);

(b) record and reporting details;

(c) relevant contact information; and

(d) Work Health and Safety requirements.

Rainwater Harvesting

E22. Prior to issue of an Occupation Certificate, signed works-as-executed Rainwater Re-use Plan must be provided to the Planning Secretary and Certifier.

Warm Water Systems and Cooling Systems

E23. The installation of warm water systems and water cooling systems (as defined under the *Public Health Act 2010*) must comply with the *Public Health Act 2010*, Public Health Regulation 2012 and Part 1 (or Part 3 if a Performance-based water cooling system) of *AS/NZS 3666.2:2011 Air handling and water systems of buildings – Microbial control – Operation and maintenance* and the NSW Health Code of Practice for the Control of Legionnaires' Disease.

Outdoor Lighting

E24. Prior to issue of an Occupation Certificate, the Applicant must submit evidence from a suitably qualified practitioner to the Certifier that demonstrates that installed lighting associated with the development achieves the objective of minimising light spillage to any adjoining or adjacent sensitive receivers and:

(a) complies with the latest version of AS 4282-2019 - *Control of the obtrusive effects of outdoor lighting* (Standards Australia, 1997); and

(b) has been mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

Archaeological Salvage – Historic Archaeology

E25. The Applicant must prepare an archaeological report of the salvage excavation undertaken in accordance with condition C17. An interim report of the salvage excavation must be provided for the information of the Heritage Council of NSW and Council within one month of completion of the salvage work and a final report provided within 12 months of completion of the salvage work or within another timeframe agreed with the Planning Secretary. Copies of the report must also be provided to the NSW Heritage Division and Council.

Signage

E26. Prior to issue of an Occupation Certificate, way-finding signage and signage identifying the location of staff car parking must be installed.

E27. Prior to issue of an Occupation Certificate, bicycle way-finding signage must be installed within the site to direct cyclists from footpaths to designated bicycle parking areas.

E28. Prior to issue of an Occupation Certificate, 'Do not drink' signage on non-potable water used for toilet flushing and to new hose taps and irrigation systems for landscaped areas must be installed within the site.

Operational Waste Management Plan

E29. Prior to issue of an Occupation Certificate, the Applicant must prepare a Waste Management Plan for the development and submit it to the Certifier. The Waste Management Plan must:

(a) detail the type and quantity of waste to be generated during operation of the development;

(b) the location and operational management procedures of the services zone located within the front setback of the Residential Building, including management/traffic controller arrangements;

(c) describe the handling, storage and disposal of all waste streams generated on site, consistent with the *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations (Waste) Regulation 2014* and the *Waste Classification Guideline* (Department of Environment, Climate Change and Water, 2009);

(d) detail the materials to be reused or recycled, either on or off site; and

(e) include the Management and Mitigation Measures included in EIS, as amended by the RtS.

Site Contamination

E30. The Applicant must prepare a Validation Report, where required by the remediation action plan approved by a NSW EPA Accredited Site Auditor pursuant to condition A19, for the development. The Validation Report must:

(a) be prepared by a Certified Contaminated Land Consultant;

(b) be submitted to the Site Auditor, the Planning Secretary and the Certifier for information within one month after the completion of remediation works; and

(c) be prepared in accordance with the remediation action plan approved by a NSW EPA Accredited Site Auditor pursuant to condition A19.

Site Audit Statement

E31. Prior to issue of an Occupation Certificate, the Applicant must submit a Site Audit Report and Section A Site Audit Statement for the relevant part of the site prepared by a NSW EPA accredited Site Auditor. The Site Audit Report and Section A Site Audit Statement must verify the relevant part of the site is suitable for the educational establishment land use and be provided for the information of the Planning Secretary and the Certifier.

Long Term Environmental Management Plan

E32. The Applicant must prepare a Long Term Environmental Management Plan (LTEMP), where identified as required by the remediation action plan approved by a NSW EPA Accredited Site Auditor pursuant to condition A19, and submit a copy to the Planning Secretary. The plan must:

(a) be prepared by a certified Contaminated Land Consultant;

(b) be submitted to the Planning Secretary within one month of the completion of remediation works, unless otherwise agreed by the Planning Secretary; and

(c) include, but not be limited to:

(i) a description of the nature and location of any contamination remaining on site;

(ii) provisions to manage and monitor any remaining contamination, including details of any restrictions placed on the land to prevent development over the containment cell;

(iii) a description of the procedures for managing any leachate generated from the containment cell, including any requirements for testing, pumping, treatment and/or disposal;

(iv) a description of the procedures for monitoring the integrity of the containment cell;

(v) a surface and groundwater monitoring program;

(vi) mechanisms to report results to relevant agencies;

(vii) triggers that would indicate if further remediation is required; and

(viii) details of any contingency measures that the Applicant is to carry out to address any ongoing contamination.

E33. The approved LTEMP must be provided to Council within once month for notation of the section 10.7 certificate for the site.

E34. Upon completion of remediation works, the Applicant must manage the site in accordance with the LTEMP.

Landscaping

E35. Prior to issue of an Occupation Certificate, the Applicant must prepare an Operational Landscape Management Plan to manage the revegetation and landscaping on-site, to the satisfaction of the Certifier. The plan must:

(a) describe the ongoing monitoring and maintenance measures to manage revegetation and landscaping; and

(b) be consistent with the Applicant's Management and Mitigation Measures at Chapter 10 in the EIS and as updated by the RtS;

E36. The Applicant must not commence operation until the Operational Landscape Management Plan is submitted to the Certifier.

PART F POST OCCUPATION

Operation of Plant and Equipment

F1. All plant and equipment used on site must be maintained in a proper and efficient condition operated in a proper and efficient manner.

Warm Water Systems and Cooling Systems

F2. The operation and maintenance of warm water systems and water cooling systems (as defined under the Public Health Act 2010) must comply with the Public Health Act 2010, Public Health Regulation 2012 and Part 2 (or Part 3 if a Performance-based water cooling system) of AS/NZS 3666.2:2011 Air handling and water systems of buildings – Microbial control – Operation and maintenance and the NSW Health Code of Practice for the Control of Legionnaires' Disease.

Community Communication Strategy

F3. The Community Communication Strategy, as approved by the Planning Secretary, must be implemented for a minimum of 12 months following the completion of construction.

Heritage Interpretation Plan

F4. Within three months of the commencement of use, the Applicant must submit an updated Heritage Interpretation Plan to acknowledge the heritage of the site to the Planning Secretary. The plan must:

(a) be prepared by a suitably qualified and experienced expert in consultation with the NSW Heritage Division and Council;

(b) incorporate the Stage 2 heritage interpretation strategy

(c) include provision for naming elements within the development that acknowledges the site's heritage;

(d) include a strategy detailing how movable heritage items and any archaeological findings will be interpreted

(e) incorporates interpretive information in to the site of the former legal and court functions of the former Newcastle Courthouse.

F5. The Applicant must implement the most recent version of the Heritage Interpretation Plan approved under conditions E11 and F4.

Operational Transport and Access Management Plan (OTAMP)

F6. The OTAMP(s) approved under condition E14 as revised from time to time) must be implemented by the Applicant for the life of the development.

Long Term Environmental Management Plan

F7. Upon completion of remediation works, the Applicant must manage the site in accordance with the LTEMP approved under condition E32, or an updated version where approved by a NSW EPA Accredited Site Auditor. Any revisions must be submitted to Council within one month of the update.

Operational Noise Limits

F8. The Applicant must ensure that noise generated by operation of the development does not exceed the noise limits in Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting.

F9. The Applicant must undertake short term noise monitoring in accordance with the Noise Policy for Industry within two months following the commencement use. The monitoring program must be carried out by an appropriately qualified person and a monitoring report must be submitted to the Planning Secretary within two months of commencement use of the development to verify that operational noise levels do not exceed the recommended noise levels for mechanical plant identified in the report titled Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting. Should the noise monitoring program identify any exceedance of the recommended noise levels or internal amenity noise levels for building occupants, the Applicant is required to implement appropriate noise attenuation

measures so that operational noise levels do not exceed the recommended noise levels or provide attenuation measures at the affected noise sensitive receivers.

Unobstructed Driveways and Parking Areas

F10. All driveways, footways and parking areas must be unobstructed at all times. Driveways, footways and car spaces must not be used for the manufacture, storage or display of goods, materials, refuse, skips or any other equipment and must be used solely for vehicular and/or pedestrian access and for the parking of vehicles associated with the use of the premises.

Green Travel Plan

F11. The Green Travel Plan required by condition E10 of this consent must be updated annually and implemented unless otherwise agreed by the Planning Secretary.

Ecologically Sustainable Development

F12. Unless otherwise agreed by the Planning Secretary, within six months of commencement of operation, Green Star certification must be obtained demonstrating the development achieves a minimum 4 star Green Star Design & As Built rating. If required to be obtained, evidence of the certification must be provided to the Certifier and the Planning Secretary. If an alternative certification process has been agreed to by the Planning Secretary under Condition B6, evidence of compliance of implementation must be provided to the Planning Secretary and Certifier.

Outdoor Lighting

F13. Notwithstanding condition E24, should outdoor lighting result in any residual impacts on the amenity of surrounding sensitive receivers, the Applicant must provide mitigation measures in consultation with affected landowners to reduce the impacts to an acceptable level.

Landscaping

F14. The Applicant must maintain the landscaping and vegetation on the site in accordance with the approved Landscape Management Plan required by condition E35 for the duration of occupation of the development.

Dangerous Goods

F15. Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with:

(a) all relevant Australian Standards;

(b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and

(c) the Environment Protection Manual for *Authorised Officers: Bunding and Spill Management – technical bulletin* (EPA, 1997).

F16. In the event of an inconsistency between the requirements F15(a) to F15(c) , the most stringent requirement must prevail to the extent of the inconsistency.

Discharge Limits

F17. The development must comply with section 120 of the POEO Act, which prohibits the pollution of waters.

Services Zone

F18. Garbage bins (recyclable and non-recyclable) must be collected and serviced from within the site.

F19. The operation of the services zone located within the front setback of the Residential Building is to only operate between 7am to 8am and 7pm to 8pm Monday to Friday, 7am to 8am Saturday and no service vehicle access permitted on Sunday and public holidays.

APPENDIX 1 ADVISORY NOTES

General

AN1. All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes any obligation to obtain, renew or comply with such licences, permits, approvals and consents.

Long Service Levy

AN2. For work costing $25,000 or more, a Long Service Levy must be paid. For further information please contact the Long Service Payments Corporation Helpline on 131 441.

Legal Notices

AN3. Any advice or notice to the consent authority must be served on the Planning Secretary.

Access for People with Disabilities

AN4. The works that are the subject of this application must be designed and constructed to provide access and facilities for people with a disability in accordance with the BCA. Prior to the commencement of construction, the Certifier must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any certified plans.

Utilities and Services

AN5. Prior to the construction of any utility works associated with the development, the Applicant must obtain relevant approvals from service providers.

AN6. Prior to the commencement of above ground works written advice must be obtained from the electricity supply authority, an approved telecommunications carrier and an approved gas carrier (where relevant) stating that satisfactory arrangements have been made to ensure provisions of adequate services.

Road Occupancy Licence

AN7. A Road Occupancy Licence must be obtained from the relevant road authority for any works that impact on traffic flows during construction activities.

SafeWork Requirements

AN8. To protect the safety of work personnel and the public, the work site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant SafeWork requirements.

Hoarding Requirements

AN9. The Applicant must submit a hoarding application to Council for the installation of any hoardings over Council footways or road reserve.

Handling of Asbestos

AN10. The Applicant must consult with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction. The requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 – 'Transportation and management of asbestos waste' must also be complied with.

Fire Safety Certificate

AN11. The owner must submit to Council an Annual Fire Safety Statement, each 12 months after the final Safety Certificate is issued. The certificate must be on, or to the effect of, Council's Fire Safety Statement.

APPENDIX 2 WRITTEN INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

Written Incident Notification Requirements

1. A written incident notification addressing the requirements set out below must be emailed to the Planning Secretary at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition A26 or, having given such notification, subsequently forms the view that an incident has not occurred.
2. Written notification of an incident must:
   a. identify the development and application number;
   b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
   c. identify how the incident was detected;
   d. identify when the applicant became aware of the incident;
   e. identify any actual or potential non-compliance with conditions of consent;
   f. describe what immediate steps were taken in relation to the incident;
   g. identify further action(s) that will be taken in relation to the incident; and
   h. identify a project contact for further communication regarding the incident.
3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
4. The Incident Report must include:
   a. a summary of the incident;
   b. outcomes of an incident investigation, including identification of the cause of the incident;
   c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
   d. details of any communication with other stakeholders regarding the incident.

10.2 CONTEXT LIST

Description of Unit List range:

Contexts	Location	Type
001-017	East area, northeast corner	Salvage excavation – brick culvert
020-045	Rear area, southeast	Salvage excavation – amenities block etc.
046-107	Rear area, north	Salvage excavation – courtyards
110-124	Rear area, central	Salvage excavation – amenities block etc.
125-141	Rear area, north	Monitoring of courtyards area after excavation
200-229	East area, rear	Monitoring
230-241	West area	Monitoring
242-260	East area, northeast	Salvage excavation

Salvage excavation of north part of brick culvert:

Context	Location	Description	Above	Below	Notes
001	East	Brick culvert	014	003	
002	East	Trench cut	005	015	
003	East	Fill of 002	001	005	
004	East	Mixed fills	003		Remnant
005	East	Dark brown/black sandy clayey loam (A1 topsoil?)	011	002	Cut by culvert trench
006	East	Brick footing (dry press)	007		
007	East	Concrete pad		006	
008	East	Concrete pipe drain		010, 017	Later 20thC diversion
009	East	Concrete piles (2)			
010	East	Concrete footing/surface	008		
011	East	Natural clay (yellow brown)	016	005	
012	East	Hole cut into in west side of culvert 001			For later insertion of a pipe
013	East	Hole in east side of culvert 001			For insertion of a pipe, possibly original
014	East	Rubble base for culvert 001	015	001	
015	East	Sand levelling fill	002	014	
016	East	Natural clay (red/grey)	-	011	
017	East	Concrete pad	008		
018-019	-	Not used			

Salvage excavation of southeast corner of rear area:

Context	Location	Description	Above	Below	Notes
020	SE Rear	Fill (recent)	021	-	Redevelopment
021	SE Rear	Fill (brown silty loam, =225)	025	020	Imported topsoil for lawn at rear of court house
022	SE Rear	Fill (yellow-brown road base)	023, 030, 033	040	=201 in rear east area
023	SE Rear	Tar paving (remnant)	026, 027, 029, 033?	022, 039	
024	SE Rear	Fill (mixed)	?	027, 028, 036	Pre-construction

Context	Location	Description	Above	Below	Notes
025	SE Rear	Concrete footing	040	021	Same as 073, no trench visible
026	SE Rear	Brick wall (remnant basal courses, =054, 111)	026a	023, 037	Amenities block
026a	SE Rear	Concrete footing		026	Amenities block
027	SE Rear	Concrete footing		023	Amenities block
027a	SE Rear	Cut for 027			
028	SE Rear	Concrete footing		028a	
028a		Brick south boundary wall	028		
029	SE Rear	Brick dish drain (cement rendered)			Survival of cement render variable
030	SE Rear	Concrete surfacing	039, 041	022	East end
031	SE Rear	Concrete piers (recent)			Redevelopment
032	SE Rear	Sandstone retaining wall	028a?	023, 029	=223
033	SE Rear	Mixed fill in WC cubicle	037	022	Sealed backfill of footings trench 036)
034	SE Rear	Mixed fill in WC cubicle	?	036	Cut by footings trench 036, not excavated
035	SE Rear	Ceramic service (down pipe)			Joined 035a
035a	SE Rear	Ceramic service			
036	SE Rear	Trenching for footings 026a		026a	
037	SE Rear	Fill of 036	026a		
038	SW Re SE Rear	Cancelled			
039	SE Rear	Fill below concrete 030	023	030	Thin, possibly accumulation on surface of tar paving 023
040	SE Rear	Cut for concrete footing 025	022	025	
041	SE Rear	Concrete footing	?	030, 042	East end of the area
042	SE Rear	Trench for downpipe 035		035	On east side of 041
043	SE Rear	Fill of 042	035		
044	SE Rear	Cut for footing 041		041	
045	SE Rear	Trench for footing 028	024?	028	

Salvage excavation of north part of rear area:

The location column utilizes the following abbreviations:
R = Rear area
C = Courtyard (1 to 5)
R/WPT = Rear area, waterproofing trench along south wall of enclosed Courtyard 1

Context	Location	Description	Above	Below	Notes
046	R/WPT	Mixed fill	050	051	Recorded in west section
047	R/WPT	Natural sand (white-grey)	-	107	=135 revealed during monitoring of C2/C3
048	R/WPT	Trench cut for 052a	107	052a	Visible in west section, to east found cutting natural 047
049	R/WPT	Fill of 048	052a	050	
050	R/WPT	Fill (clay)	049	046	Recorded in west section, abutted 052

Context	Location	Description	Above	Below	Notes
051	R/WPT	Service trench, ceramic pipe & fill	046	106?	Recorded in west section
052	R/C1 R/WPT	Original south wall	052a	049, 084a	Abutted by fill 050, =084 original east wall
052a	R/WPT	Concrete footing	048	052	Flat exterior face indicative of formwork
053	R/C3-4	Concrete slab	068	022?	Along recess at north, post-demolition, probably preceded road base 022
054	Rear	Brick wall (remnant)	046	022	Partial exposure of north wall of amenities block Cubicle 1, =026/111
055	R/C2	Brick walls on concrete footing	128	129	WC in SW corner
056	R/C2	Brick wall on concrete footing	128	129	North wall (for steps)
057	R/C2-3	Brick wall on concrete footing	126, 128	125, 129	Party wall
058	R/C2-3	Brick wall on concrete footing	126, 128	125, 129	South wall
059	R/C3	Brick walls on concrete footing	126	071	WC in SE corner
060	R/C3-4	Brick wall on concrete footing	126	125	Party wall
061	R/C2-5	Service trench	068, 022?	063	Post-demolition
062	R/C2-5	Fill of 061	063	021?	Post-demolition
063	R/C2-5	Ceramic service	061	062	Post-demolition, may = 102, same pipe type & O-rings
064	R/C3	Bore pipe (recent)			Damaged and left in place
065		Service trench	022	067	Post-demolition
066		Fill of 065	067	021	Post-demolition
067		Ceramic service	065	066	Post-demolition
068	R/C2-5	Demolition fill	069, 074, 093, 103, 104, 132	022, 053	
069	R/C3	Tar paving	070, 088, 101?	068	= 132 in C2, 074 in C4, 093 in C5
070	R/C3	Sandstone drain portal on brick sump	070a	069	Remnant, cut by service trench 061
070a	R/C3	Brick sump	075	070	Revealed by monitoring in fill 075
071	R/C3	Fill in WC 059	058, 059	098	Post-construction
072	R/C4	Brick walls on concrete footing	127	076	WC in SW corner
073		Concrete footing	022	021	Same as 025, may = 218
074	R/C4	Tar paving	075, 078, 082, 086	068	= 132 in C2, 069 in C3, 093 in C5

Context	Location	Description	Above	Below	Notes
075	R/C3-5	Fill (clay)	125	070a, 077, 082, 086, 087, 097	Upper level of post-construction filling
076	R/C4	Fill in WC 072	072	068	Post-construction
077	R/C4	Service trench	075	079	
078	R/C4	Fill of 067	079	074?	Probably below tar paving 074
079	R/C4	Ceramic service	077	078	
080	R/C4-5	Brick wall on concrete footing	127	075	Party wall
081	R/C5	Brick walls on concrete footing	127	083	WC at SW corner
082	R/C4	Ferrous pipe (d.1 5/8 ins)	075	074	Along west side of south part of wall 080, no cut visible
083	R/C5	Fill in WC 081	081	068	Post-construction
084	R/C1	Original east wall on concrete footing	127	129	= C2 west wall
084a	R/C1	Brick walls (dry press)	052, 084		Conversion to toilets
085	R/C1	Brick walls on concrete footing	107		WC in SE corner
086	R/C4	Brick sump	075	074	NE corner
087	R/C3	Service trench	075	089	
088	R/C3	Fill of 087	089	069	
089	R/C3	Ferrous pipe (d.2ins)	087	088	Along north wall of WC 059
090	R/C5	Brick wall on concrete footing	127	075	East wall
090a	R/C5	Concrete footing	127	075	Found during monitoring, for steps down to yard
091		Brick sump (fed by service 063)			Post-demolition
092	R/C3-4	Brick wall on concrete footing	230	103, 104	North wall (steps support)
093	R/C5	Tar paving	075	068	= 132 in C2, 069 in C3, 074 in C4
094		Service trench	090	096	Pre-demolition?
095		Fill of 094	096	022?	Pre-demolition?
096		Ceramic pipe	094	095	Pre-demolition?
097	R/C3	Ceramic pipe, trench & fill	069?	068	Cut through south wall
098	R/C3	Service trench	071	099	WC 059
099	R/C3	Fill of 098	100	068	WC 059
100	R/C3	Ceramic service	098	099	WC 059
101	R/C2	Copper alloy pipe			Possibly in same trench as service 097
102	R/WPT	Service trench – ceramic pipe, PVC pipe and fill	022	021	West section, same as service 122, possibly same as service 061
103	R/C3	Stone slab	092	068	West end of concrete slab 053, bottom platform of steps

Context	Location	Description	Above	Below	Notes
104	R/C4	Stone slab	092	068	East end of concrete slab 053, bottom platform of steps
105	R/WPT	Ferrous service			West section, no trench clearly discernible, possibly laid within 046
106	R/WPT	Tar paving	051?	022	West section
107	R/WPT	Fill (pre-construction)	047	048	West section, cut by C1 footing trench 048, over natural sand, =127
108-109		Not used			

Salvage excavation of central part of rear area:

Context	Location	Description	Above	Below	Notes
110	Rear	Concrete footing (=026a)		111	Amenities block
111	Rear	Brick walls (=026, 054)	110		Amenities block
112	Rear	Ceramic pipe			Cubicle 2
113	Rear	Ceramic pipe			Cubicle 3
114	Rear	Ceramic pipe			Cubicle 4
115	Rear	Ceramic pipe			Cubicle 5
116	Rear	Ceramic pipe			Cubicle 8
117	Rear	Ceramic pipe			Urinal 2
118	Rear	Brick feature (sump?)			Near Urinal 1, possibly related to service 051
119	Rear	Tar paving (remnant, =023)	123	022	Urinal 1 internal
119a	Rear	Tar paving (remnant, =023)			External to Urinal 1 and Cubicle 1, evident in south section
120	Rear	Ceramic service, trench & fill			Urinal 1
121	Rear	Cut & fill adjacent to sump 118	123		Found cutting fill 123
122	Rear	Service trench, pipes & fill (sand & gravel)	119a		Cut into brick sump 118, same as service 102
123	Rear	Fill (mixed)	111	119, 120	Urinal 1, internal fill
124	Rear	Fill (mixed)		110	Pre-construction filling, cut by footing trenches for amenities block Urinal 2 and Cubicles 2-8

Monitoring of north part of rear area after salvage excavation:

The location column utilizes the following abbreviations:
R = Rear area
C = Courtyard

Context	Location	Description	Above	Below	Notes
125	R/C3	Fills (post-construction)	057, 058, 059, 060, 092	075	Lower level of post-construction filing

Context	Location	Description	Above	Below	Notes
126	R/C3	Trench cut & fill (mixed)	127	057, 058	Apparent for south and west walls
127	R/C2-3	Fills (pre-construction)	133, 138	126	East section, cut by 128, =107
128	R/C2	Trench cut & fill	127	058	East section, same as 109
129	R/C2	Fills (post-construction)	130	131	East section
130	R/C2	Brick sump?	131	132	East section
131	R/C2	Ceramic service, trench & fill	129	130	East section
132	R/C2	Tar paving (remnant)	130	068	East section
133	R/C2-3	A1 topsoil	134	127, 137	Modified/disturbed/possibly re-formed
134	R/C2-3	A2 subsoil	135	133	
135	R/C2-3	Natural sand (grey-white)	136	134	
136	R/C2-3	Natural clay	-	135	
137	Rear	Pit cut	133	138	Below wall 058 footing in C3 south section
138	Rear	Fill of 137	137	127	Below basal 127 in C3 (yellow sand)
139	R/C2	Ferrous pipe	129	132?	Along east wall
140	R/C2-3	Fill (dark grey humic soil)	141	125	Part of 127
141	R/C3	Fill (clay)	135	140	Basal part of 127

Monitoring of east area, rear part:

Context	Location	Description	Above	Below	Notes
200	East rear	Asphalt surfacing	201	-	Carpark behind east building
201	East rear	Road base (brown)	202	200	=022 across rear area
202	East rear	Mixed fill with structural debris	203	201	Demolition fill
203	East rear	Brick walls (remnant)	204	202	Morgue
204	East rear	Concrete footings	205	203	Morgue
205	East rear	Foundation trenching	Various	204	Morgue
206	East rear	Concrete dish drain along south perimeter (remnant)	207	-	South Section 1
207	East rear	Fill	208	206	South Section 1
208	East rear	Clean sand	209	207	South Section 1
209	East rear	Mixed fill	210	208	South Section 1
210	East rear	Natural clay (red)	-	211	South Section 1
211	East rear	Natural clay (yellow brown)	210	213	South Section 2
212	East rear	Mixed fills	212	-	South Section 2
213	East rear	Dark grey sandy clayey loam	214	211	South Section 2
214	East rear	Grey-brown sandy clayey soil	211	212	South Section 2
215	East rear	Mixed fills	213	201?	Appeared to be over 213-214 disappearing northward
216	East rear	Brick footings (2)			For steps, keyed into court house wall
217	East rear	Brick sump			Bowtell brick
218	East rear	Concrete footing			May = 073
219	East rear	Water service (copper alloy)			

Context	Location	Description	Above	Below	Notes
220	East rear	Ceramic service, cut & fill		220a	
220a	East rear	Ceramic service, cut & fill	220		
221	East rear	Mixed fill	213?	222	West section adjacent to 223, =215?
222	East rear	Trench for 223	221	223	
223	East rear	Sandstone wall	222	224	=032 in SE rear
224	East rear	Fill of 222	223	201	
225	East rear	Fill (brown silty loam)	201	-	=021 across rear area
226	East rear	Brick drain portal	001		Above brick culvert 001, possibly original
227	East rear	Concrete drain portal	003		Above brick culvert 001
228	East rear	Concrete drain portal	003		Above brick culvert 001
229	East rear	Concrete drain portal			Probably connected to concrete pipes drain 008

Monitoring of west area:

Context	Location	Description	Above	Below	Notes
230	West	Coffee rock (truncated)	-	231	Central west and northwest areas
231	West	Natural sand (truncated)	230	232	Central west and northwest areas
232	West	Construction fills	231	233	For west building
233	West	Concrete slabs (flooring)	232	-	Within west building
234	West	Natural clay	-	235	South area
235	West	Coffee rock	234	236	South area
236	West	Natural sand (white)	235	237	South area
237	West	A2 subsoil	236	238	South area
238	West	A1 topsoil	237	239	South area
239	West	Fill (orange-brown sand)	238	240	South area
240	West	Fills (mixed)	239, 241		South area
241	West	Brick wall on concrete footing		240	South area

East Area – area of sandstone walls at northeast corner:

Context	Location	Description	Above	Below	Notes
242	East	North wall	246	249	
243	East	South wall	?	253, 259	No trench visible
244	East	Cross wall?	248?	249	No trench visible
245	East	Shell lime deposits	249	?	West of 244
246	East	Trench cut and fill for wall 242	247	242	Along north side of north wall
247	East	A1 topsoil or fill	?	246	Cut by 246
248	East	Sandstone rubble	?	249	Revealed by cavity adjacent to south wall
249	East	Fill (sandy with shell lime mortar)	244, 248	245	West of 244
250	East	Concrete footing	251		East section
251	East	Fill (mixed)	252	250	East section
252	East	Fill/deposit (sand)	253	251	East section & surface
253	East	Fill (sandy)	243	252	East of 244

Context	Location	Description	Above	Below	Notes
254	East	PVC pipe (white)			Possibly in 254
255	East	Fill (of trench for 254?)	258		East section
256	East	Fill lens (sand)	259	257	East section
257	East	Fill with asphalt fragments	256	258	East section
258	East	Asphalt layer (churned)	257	255	East section
259	East	Fill (clay & sandstone rubble)	243	256, 260	East section & surface, abuts south side of south wall 243
260	East	Cut and fill (service?)	259	?	Truncated walls 242 & 243, cut fill 259

10.3 PHOTOGRAPHIC REGISTER

Monitoring of East Area:

Digital	Location	Description	Facing	Date
6748	East	General view prior to earthworks	NE	9.3.20
6749	East	Ditto, rear area	E	9.3.20
6751	East	Ditto	E	9.3.20
6752	East	Commencement of machining of rear area, removal of asphalt	N	9.3.20
6753	East	Ditto	N	9.3.20
6754	East	Ditto	NE	9.3.20
6755	East	Ditto – first exposure of a brick footing (at lower right)	W	9.3.20
6756	East	Ditto	W	9.3.20
6757	East	Commencement of machining to end level, initial exposure of natural clay	W	9.3.20
6758	East	Rear area after removal of asphalt – concrete footings becoming visible	SE	9.3.20
6759	East	Ditto	SE	9.3.20
6760	East	Exposure of brick walls of morgue – east area	N	9.3.20
6761	East	Ditto	N	9.3.20
6762	East	Ditto	S	9.3.20
6763	East	Ditto	S	9.3.20
6764	East	Ditto	S	9.3.20
6765	East	Ditto	W	9.3.20
6766	East	Ditto – north central area	W	9.3.20
6767	East	Ditto	W	9.3.20
6768	East	Ditto	W	9.3.20
6769	East	Ditto – south central area	S	9.3.20
6770	East	Sample of brick type in morgue walls (scale 20cm)	-	9.3.20
6771	East	Ditto	-	9.3.20
6772	East	Ditto	-	9.3.20
6773	East	Small brick arc – central south area	E	9.3.20
6774	East	Ditto	W	9.3.20
6775	East	Ditto	W	9.3.20
6776	East	Concrete footings & remnant walls of morgue – SE area	NW	9.3.20
6777	East	Test demolition of concrete footing in SE area, showing reinforcement type	NW	9.3.20
6778	East	Ditto	NW	9.3.20
6779	East	Removal of concrete footing	NW	9.3.20
6780	East	Ditto	NW	9.3.20
6781	East	East section showing remnant wall on concrete footing set in trench into natural clay	E	9.3.20
6782	East	Ditto	E	9.3.20
6783	East	Ditto	E	9.3.20
6784	East	Ditto	E	9.3.20
6785	East	Ditto	E	9.3.20
6786	East	Concrete footing for morgue, south wall	W	9.3.20
6787	East	Ditto	W	9.3.20
6788	East	Ditto – with returns northward	E	9.3.20
6789	East	Ditto	E	9.3.20
6790	East	Morgue footings, south area	W	9.3.20

Digital	Location	Description	Facing	Date
6791	East	Ditto	W	9.3.20
6792	East	Ditto	SW	9.3.20
6793	East	Ditto	SW	9.3.20
6794	East	Ditto	SW	9.3.20
6795	East	Ditto	SW	9.3.20
6796	East	Ditto	SW	9.3.20
6797	East	Ditto	SW	9.3.20
6798	East	Ditto	SW	9.3.20
6799	East	Ditto	W	9.3.20
6800	East	Ditto	W	9.3.20
6801	East	Section at SE corner showing remnant wall on concrete footing set in trench into natural clay	E	10.3.20
6802	East	Ditto – also at right showing sub-asphalt gravel over mixed fill over natural clay	E	10.3.20
6803	East	Ditto	E	10.3.20
6804	East	Ditto	E	10.3.20
6805	East	South section in SE area – concrete drain over grey clayey/loamy soil over clean sand over mixed fill over natural clay	S	10.3.20
6806	East	Ditto	S	10.3.20
6807	East	Morgue footing after removal	SW	10.3.20
6808	East	Ditto – end profile	S	10.3.20
6809	East	Removal of morgue footings in progress, also showing external ceramic service near south wall	W	10.3.20
6810	East	Ditto	W	10.3.20
6811	East	Ditto	W	10.3.20
6812	East	Ditto	W	10.3.20
6813	East	Ditto	W	10.3.20
6814	East	Morgue footing after removal	-	10.3.20
6815	East	West end, reveal of steps footings, south part overlaid by later concrete sump	S	10.3.20
6816	East	West end, removal of overburden fills	NE	10.3.20
6817	East	West end, reveal of angled sandstone wall 032 and concrete footing	NE	10.3.20
6818	East	West end, reveal of angled sandstone wall 032	NE	10.3.20
6819	East	Ditto	NE	10.3.20
6820	East	Ditto	SW	10.3.20
6821	East	Ditto	SW	10.3.20
6822	East	West end, reveal of angled sandstone wall 032 and concrete footing	N	10.3.20
6823	East	Ditto	N	10.3.20
6824	East	NW area, removal of overburden fills and reveal of concrete drain portal	NE	10.3.20
6825	East	Machining to end level in progress	E	11.3.20
6826	East	West end, steps footings, south part overlaid by later concrete sump – keystone for closed doorway visible in wall above	W	11.3.20
6827	East	Ditto	W	11.3.20
6828	East	West end, steps footings, south part overlaid by later concrete sump	W	11.3.20
6829	East	Ditto	S	
6830	East	South section in central area (c22.3m west of police station) – fills over dark grey clayey/loamy soil	S	11.3.20

Digital	Location	Description	Facing	Date
6831	East	Ditto	SE	11.3.20
6832	East	Ditto	SE	11.3.20
6833	East	Ditto - detail	S	11.3.20
6834	East	Ditto - detail	S	11.3.20
6835	East	Ditto - detail	S	11.3.20
6836	East	Ditto - detail	S	11.3.20
6837	East	Ditto - detail	S	11.3.20
6838	East	West end, angled sandstone wall 032, concrete footing and adjacent brick sump	NE	11.3.20
6839	East	Ditto	NE	11.3.20
6840	East	Ditto	NE	11.3.20
6841	East	Ditto	NE	11.3.20
6842	East	Ditto	NE	11.3.20
6843	East	Ditto	SW	11.3.20
6844	East	Ditto	SW	11.3.20
6845	East	West end, angled sandstone wall 032	S	11.3.20
6846	East	Ditto	S	11.3.20
6847	East	Ditto	S	11.3.20
6848	East	Ditto	S	11.3.20
6849	East	Ditto	SW	11.3.20
6850	East	Ditto – west section adjacent north	W	11.3.20
6851	East	Ditto – west section adjacent north	W	11.3.20
6853	East	Ditto – north section near sandstone wall 032	N	11.3.20
6854	East	Ditto – north section near sandstone wall 032	N	11.3.20
6855	East	Machining to level in progress	NE	12.3.20
6856	East	General view of demolition in north area	NE	12.3.20
6857	East	Machining to end level in progress	NW	12.3.20
6858	East	Ditto	NW	12.3.20
6859	East	SW corner – bulk machining to end level completed	NW	12.3.20
6860	East	SW corner – drain trench	N	12.3.20
6861	East	Ditto	NW	12.3.20
6862	East	West area – bulk machining to end level completed	NW	12.3.20
6863	East	Central north area – machining in progress	N	12.3.20
6864	East	Ditto	E	12.3.20
6865	East	Central north area – morgue footings	W	12.3.20
6866	East	Ditto	SW	12.3.20
6867	East	Ditto	SW	12.3.20
6868	East	NW area - reveal of brick and concrete drains north of police tunnel	S	20.3.20
6869	East	Ditto	S	20.3.20
6870	East	Ditto – detail of concrete pipe in gravel trench fill	S	20.3.20
6871	East	Ditto – top of brick drain	S	20.3.20
6872	East	Ditto	S	20.3.20
6873	East	Ditto	S	20.3.20
6874	East	Ditto	S	20.3.20
6875	East	Ditto - detail of south end	E	20.3.20
6876	East	Ditto - detail of south end	SE	20.3.20
6877	East	Ditto	SE	20.3.20
6878	East	General view of north area at end level	E	20.3.20
6879	East	General view of north area, drains in foreground right	SE	20.3.20

Digital	Location	Description	Facing	Date
6880	East	Reveal of brick and concrete drains north of police tunnel	S	20.3.20
6881	East	Ditto	S	20.3.20
6882	East	General view of north area at end level	E	20.3.20
6883	East	General view of north area, drains in foreground right	SE	20.3.20
6884	East	Ditto	SE	20.3.20
6885	East	West central area after removal of police tunnel, brick drain visible at north	N	23.3.20
6886	East	Reveal of south face of brick drain, upper part	N	23.3.20
6887	East	West central area after removal of police tunnel, brick drain visible at north	N	23.3.20
6888	East	Demolition of police tunnel	NE	23.3.20
6889	East	Ditto	NE	23.3.20
6890	East	Reveal of south part of brick drain	N	23.3.20
6891	East	View from south part of brick drain to north part	N	23.3.20
6892	East	Ditto	N	23.3.20
6893	East	South part of brick drain in section	S	23.3.20
6894	East	Ditto	S	23.3.20
6895	East	Ditto	S	23.3.20
6896	East	Ditto	S	23.3.20
6897	East	Ditto	S	23.3.20
6898	East	Ditto	S	23.3.20
6899	East	Ditto	S	23.3.20
6900	East	North part of brick drain in section, partial reveal	N	23.3.20
6901	East	Ditto	N	23.3.20
6902	East	Ditto – east side trench cutting dark grey soil	N	23.3.20
6903	East	Ditto	N	23.3.20
6904	East	South part of brick drain in section	S	23.3.20
6905	East	Ditto	S	23.3.20
6906	East	Ditto	S	23.3.20
6907	East	North part of brick drain – detail of bricks & mortar	N	23.3.20
6908	East	Ditto	N	23.3.20
6909	East	South part of brick drain – detail of bricks & mortar	S	23.3.20
6910	East	Ditto	S	23.3.20
6911	East	Ditto – detail of arch bricks	S	23.3.20
6912	East	West area, steps footings – detail of brick type	SW	23.3.20
6913	East	Ditto	SW	23.3.20
6914	East	Ditto	W	23.3.20

Salvage Excavation of north part of brick drain, east area:

Digital	Location	Description	Facing	Date
6915	East	Commencement of machining sides of drain	NW	27.3.20
6916	East	East side trench cutting dark grey soil	N	27.3.20
6917	East	Ditto	N	27.3.20
6918	East	Drain exposed and cleaned	N	27.3.20
6919	East	Ditto	N	27.3.20
6920	East	Ditto	N	27.3.20
6921	East	Ditto	N	27.3.20
6922	East	Ditto	N	27.3.20
6923	East	Ditto	N	27.3.20
6924	East	Ditto	N	27.3.20

Digital	Location	Description	Facing	Date
6925	East	Ditto	N	27.3.20
6926	East	Ditto	N	27.3.20
6927	East	Ditto	N	27.3.20
6928	East	Ditto	N	27.3.20
6929	East	Ditto	N	27.3.20
6930	East	Ditto	N	27.3.20
6931	East	Ditto	N	27.3.20
6932	East	Ditto	N	27.3.20
6933	East	Ditto – detail of base in profile	N	27.3.20
6934	East	Ditto – detail of base in profile	N	27.3.20
6935	East	Ditto – detail of base in profile	N	27.3.20
6936	East	Brick drain and concrete diversion around west side	S	27.3.20
6937	East	Ditto	S	27.3.20
6938	East	Ditto	S	27.3.20
6939	East	Ditto	S	27.3.20
6940	East	Ditto	S	27.3.20
6941	East	Ditto	S	27.3.20
6942	East	Ditto	S	27.3.20
1871	East	Excavation in progress – east side of drain	NW	27.3.20
1872	East	Ditto – west side of drain	NE	27.3.20
1873	East	Ditto – west side of drain	NE	27.3.20
1874	East	Excavation in progress	NE	27.3.20
1875	East	Ditto – west side of drain	NE	27.3.20
1876	East	Excavation in progress	N	27.3.20
1877	East	Ditto – east side of drain	N	27.3.20
1878	East	Upper surface of drain, top and east side	SW	27.3.20
1879	East	Excavation in progress		27.3.20
1880	East	Upper surface of drain, top and east side	SW	27.3.20

Exposure of part of south end of brick culvert, east area:

Digital	Location	Description	Facing	Date
9567	Rear	Reveal of top of south part of brick culvert	N	29.5.20
9568	Rear	Ditto	N	29.5.20
9570	Rear	Top of south part of brick culvert, brick portal to south, trench visible in south section	S	29.5.20
9573	Rear	Cutting hole into top of brick culvert	SE	29.5.20
9574	Rear	Hole cut into top of brick culvert, detail	E	29.5.20

Salvage excavation of rear area, southeast corner:

Digital	Location	Description	Facing	Date
9552	Rear	SE corner after machining revealed remains, pre-cleaning	E	29.5.20
9553	Rear	Ditto	E	29.5.20
9554	Rear	Ditto	SE	29.5.20
9555	Rear	Ditto	W	29.5.20
9556	Rear	Ditto	W	29.5.20
9557	Rear	Ditto – west section	W	29.5.20
9558	Rear	Ditto – concrete feature	S	29.5.20
9559	Rear	Ditto – brick drain along south boundary	E	29.5.20
9560	Rear	Ditto – brick drain along south boundary	E	29.5.20

Digital	Location	Description	Facing	Date
9561	Rear	Ditto – partial reveal of tar paving and concrete surfaces	E	29.5.20
9562	Rear	Ditto – partial reveal of tar paving and concrete surfaces	E	29.5.20
9563	Rear	Ditto – brick drain along south boundary	E	29.5.20
9564	Rear	Ditto – brick drain along south boundary	E	29.5.20
9565	Rear	Ditto, view west, concrete footing in foreground	W	29.5.20
9566	Rear	Ditto, concrete footing	W	29.5.20
2112	Rear	West area start shot	W	1.6.20
2113	Rear	West & central areas start shot	W	1.6.20
2114	Rear	Ditto	W	1.6.20
2115	Rear	West area start shot	S	1.6.20
2116	Rear	Central & east areas start shot	E	1.6.20
2117	Rear	Ditto	E	1.6.20
2118	Rear	East area start shot	S	1.6.20
2119	Rear	Central area start shot	S	1.6.20
2120	Rear	Central & east areas after cleaning	SW	1.6.20
2121	Rear	All area after cleaning	E	1.6.20
2122	Rear	Ditto	E	1.6.20
2123	Rear	Ditto	E	1.6.20
2124	Rear	West end after cleaning	E	1.6.20
2125	Rear	Ditto	E	1.6.20
2126	Rear	All area after cleaning	E	1.6.20
2127	Rear	Ditto	E	1.6.20
2128	Rear	West area after cleaning	S	1.6.20
2129	Rear	Ditto	S	1.6.20
2130	Rear	Ditto	S	1.6.20
2131	Rear	Ditto	S	1.6.20
2132	Rear	Ditto	S	1.6.20
2133	Rear	Ditto	S	1.6.20
2134	Rear	Ditto	S	1.6.20
2135	Rear	Central area after cleaning	S	1.6.20
2136	Rear	Ditto	S	1.6.20
2137	Rear	Ditto	S	1.6.20
2138	Rear	Ditto	S	1.6.20
2139	Rear	Part east area after cleaning	S	1.6.20
2140	Rear	Ditto	S	1.6.20
2141	Rear	Ditto	S	1.6.20
2142	Rear	Ditto	S	1.6.20
2143	Rear	East end after cleaning	S	1.6.20
2144	Rear	Ditto	S	1.6.20
2145	Rear	Ditto	S	1.6.20
2146	Rear	Ditto	S	1.6.20
2147	Rear	Brick wall 026 & concrete footings 026a along north side	W	1.6.20
2148	Rear	Ditto	W	1.6.20
2149	Rear	Ditto	W	1.6.20
2150	Rear	Ditto	W	1.6.20
2151	Rear	Ditto	E	1.6.20
2152	Rear	Ditto	E	1.6.20
2153	Rear	Ditto	E	1.6.20

Digital	Location	Description	Facing	Date
2154	Rear	Ditto	E	1.6.20
2155	Rear	Ditto	E	1.6.20
2156	Rear	Ditto	E	1.6.20
2157	Rear	Ditto	E	1.6.20
2158	Rear	Ditto	E	1.6.20
2159	Rear	Concrete footing 027	W	1.6.20
2160	Rear	Ditto	W	1.6.20
2161	Rear	Ditto	W	1.6.20
2162	Rear	Ditto	W	1.6.20
2163	Rear	Ditto	S	1.6.20
2164	Rear	Ditto	S	1.6.20
2165	Rear	Brick drain 029 along south perimeter	E	1.6.20
2166	Rear	Ditto	E	1.6.20
2167	Rear	Ditto	E	1.6.20
2168	Rear	Ditto	E	1.6.20
2169	Rear	Ditto	E	1.6.20
2170	Rear	Ditto	E	1.6.20
2171	Rear	Ditto	E	1.6.20
2172	Rear	Ditto	W	1.6.20
2173	Rear	Ditto	W	1.6.20
2174	Rear	Ditto	W	1.6.20
2175	Rear	Ditto	W	1.6.20
2176	Rear	West section, contexts 020-024, 029	W	1.6.20
2177	Rear	Ditto	W	1.6.20
2178	Rear	Ditto	W	1.6.20
2179	Rear	Ditto	W	1.6.20
2180	Rear	Ditto	W	1.6.20
2181	Rear	Ditto	W	1.6.20
2182	Rear	Ditto	W	1.6.20
2183	Rear	Ditto	W	1.6.20
2184	Rear	Internal mixed fill 033, brick wall 026 along south side (number 032 in board incorrect)	N	1.6.20
2185	Rear	Ditto	N	1.6.20
2186	Rear	Ditto	N	1.6.20
2187	Rear	Ditto	N	1.6.20
2188	Rear	Ditto	N	1.6.20
2189	Rear	Ditto	N	1.6.20
2190	Rear	Brick drain 029 along south perimeter	E	1.6.20
2191	Rear	Ditto	E	1.6.20
2192	Rear	Ditto	E	1.6.20
2193	Rear	Ditto	E	1.6.20
2194	Rear	Internal fill 034 after removal of 033	N	1.6.20
2195	Rear	Ditto	N	1.6.20
2196	Rear	Ditto	N	1.6.20
2197	Rear	Ditto	N	1.6.20
2198	Rear	Ditto	N	1.6.20
2199	Rear	Trench 036 for concrete footing 026a cutting fill 034 (038 on board incorrect)	N	1.6.20
2200	Rear	Ditto	N	1.6.20
2201	Rear	Ditto	N	1.6.20
2202	Rear	Ditto	W	1.6.20
2203	Rear	Ditto	W	1.6.20

Digital	Location	Description	Facing	Date
2204	Rear	Ditto	W	1.6.20
2205	Rear	Ditto	W	1.6.20
2206	Rear	East area – concrete surface 030 over tar paving 023	E	1.6.20
2207	Rear	Ditto	E	1.6.20
2208	Rear	Concrete footing 041, part of angled sandstone footing 032	W	1.6.20
2209	Rear	Ditto	W	1.6.20
2210	Rear	Ditto	SW	1.6.20
2211	Rear	Ditto	SW	1.6.20
2212	Rear	Partial reveal of angled sandstone footing 032 below tar paving 023	NE	1.6.20
2213	Rear	Ditto	NE	1.6.20
2214	Rear	Ditto	E	1.6.20
2215	Rear	Ditto	NE	1.6.20
2216	Rear	Ditto	SE	1.6.20
2217	Rear	Ditto	S	1.6.20

Monitoring– central west area:

Digital	Location	Description	Facing	Date
9575	West	Reveal of natural white sand	W	2.6.20
9576	West	Ditto	W	2.6.20
9577	West	Ditto	W	2.6.20
9578	West	Ditto	W	2.6.20
9579	West	Ditto	W	2.6.20
9580	West	Ditto	W	2.6.20
9581	West	Reveal of coffee rock along west perimeter	S	2.6.20
9582	West	Ditto	S	2.6.20
9583	West	Reveal of coffee rock & natural white sand	NE	2.6.20
9584	West	Ditto	NE	2.6.20
9585	West	Disturbance to natural sand (vegetation?)	E	2.6.20
9586	West	Ditto	E	2.6.20

Monitoring – south west area:

Digital	Location	Description	Facing	Date
9587	West	Area after machining	W	15.6.20
9588	West	Ditto	W	15.6.20
9589	West	Ditto	W	15.6.20
9590	West	Ditto	W	15.6.20
9591	West	South section, natural soil profile between concrete piers	S	15.6.20
9592	West	Ditto	S	15.6.20
9593	West	Ditto	S	15.6.20
9594	West	Ditto	S	15.6.20
9595	West	Fill over natural soil profile between concrete piers	S	15.6.20
9596	West	Ditto	S	15.6.20
9597	West	Ditto	S	15.6.20
9598	West	Ditto	S	15.6.20
9599	West	Ditto	S	15.6.20
9600	West	Ditto	S	15.6.20
9601	West	View showing natural soil profile sloping east	SE	15.6.20

Digital	Location	Description	Facing	Date
9602	West	Ditto	SE	15.6.20
9603	West	Ditto	SW	15.6.20
9604	West	Ditto	SW	15.6.20
9605	West	Ditto	W	15.6.20
9606	West	Ditto	W	15.6.20
9607	West	West section, showing natural soil profile sloping north	SW	15.6.20
9608	West	Ditto	SW	15.6.20
9610	West	Ditto	NW	15.6.20
9611	West	Southwest corner, grout from anchoring over natural sand and coffee rock	SW	15.6.20
9612	West	Ditto	SW	15.6.20
9613	West	View showing natural soil profile sloping east	SE	15.6.20
9614	West	Ditto	SE	15.6.20
9615	West	Ditto	SE	15.6.20
9616	West	Ditto	S	15.6.20
9617	West	South section, natural soil profile between concrete piers	S	15.6.20
9618	West	Ditto	S	15.6.20
9619	West	Ditto	S	15.6.20
9620	West	Ditto	S	15.6.20
9621	West	Ditto	S	15.6.20
9622	West	Southwest corner, grout from anchoring over natural sand and coffee rock	SW	15.6.20
9624	West	Ditto	SW	15.6.20
9625	West	Ditto	SW	15.6.20
9626	West	Ditto	SW	15.6.20
9627	West	Brick wall on concrete footing at east end of south section	S	15.6.20
9628	West	Ditto	S	15.6.20
9629	West	Ditto	S	15.6.20
9630	West	Ditto	S	15.6.20
9631	West	Southern area, removal of concrete slab	SW	15.6.20
9632	West	Ditto	SW	15.6.20
9633	West	Ditto	SW	15.6.20
9634	West	Fill below slab	SE	15.6.20
9635	West	Ditto	SE	15.6.20
9636	West	West part of south section	S	15.6.20
9637	West	Junction of south and west sections	S	15.6.20
9638	West	Fill below slab	E	15.6.20
9639	West	Detail of fill below slab	S	15.6.20
9640	West	Ditto	S	15.6.20
9641	West	Detail of fill below fill below slab	E	15.6.20
9642	West	Ditto	E	15.6.20
9643	West	Detail of fill below fill below slab	E	15.6.20
9644	West	Ditto	E	15.6.20
9645	West	South area after removal of concrete and walls	SW	17.6.20
9646	West	Ditto	SW	17.6.20
9647	West	South section	SW	17.6.20
9648	West	Ditto	SW	17.6.20
9649	West	Ditto	SE	17.6.20
9650	West	Ditto	SE	17.6.20
9651	West	West section	W	17.6.20

Digital	Location	Description	Facing	Date
9652	West	Ditto	SW	17.6.20
9653	West	South section	SW	17.6.20
9654	West	Ditto	SW	17.6.20
9655	West	Southeast corner, area of preserved natural sand surface	W	17.6.20
9656	West	Ditto	W	17.6.20
9657	West	Ditto	W	17.6.20
9658	West	Ditto	S	17.6.20
9659	West	Ditto	S	17.6.20
9660	West	Ditto, showing location relative to SW corner of court house and brick wall at end of south section	E	17.6.20
9661	West	Ditto	E	17.6.20
9662	West	Southeast corner, area of preserved natural sand surface	E	17.6.20
9663	West	Ditto	N	17.6.20
9664	West	Ditto	N	17.6.20
9665	West	View across south area	W	17.6.20
9666	West	Ditto	W	17.6.20
9667	West	South section, fills over natural white sand	SE	17.6.20
9668	West	Ditto	SE	17.6.20
9669	West	Ditto	SE	17.6.20
9670	West	Ditto	SE	17.6.20
9671	West	Ditto, detail	S	17.6.20
9672	West	Ditto, detail	S	17.6.20
9673	West	South section, fills over natural white sand over coffee rock over clay	SW	17.6.20
9674	West	Ditto	SW	17.6.20
9675	West	Ditto	SW	17.6.20

Monitoring – north rear area:

Digital	Location	Description	Facing	Date
9676	Rear	Northwest central area, waterproofing trench exposing basement walls and remnant walls	W	23.6.20
9677	Rear	Ditto	W	23.6.20
9678	Rear	Ditto	E	23.6.20
9680	Rear	Ditto, remnant north wall of external WC	S	23.6.20
9681	Rear	Ditto	S	23.6.20
9682	Rear	Section against remnant wall showing road base over tar paving	S	23.6.20
9683	Rear	Ditto	S	23.6.20
9684	Rear	Remnant walls of WC against court house basement wall	N	23.6.20
9685	Rear	Ditto	W	23.6.20
9686	Rear	Ditto	SW	23.6.20
9687	Rear	Ditto	SW	23.6.20
9688	Rear	General of west central area	SW	23.6.20
9690	Rear	West area, waterproofing trench exposing brickwork at top of section (left) and fills over natural white sand at base	W	23.6.20
9693	Rear	West area, waterproofing trench exposing basement wall with holes for service pipes, and natural white sand at base	NW	23.6.20

Digital	Location	Description	Facing	Date
9695	Rear	North central area, machining for installation of water tanks, exposing brown road base	NE	23.6.20
9696	Rear	Ditto	E	23.6.20
9697	Rear	Reveal of remains of demolished parts of court house	NE	25.6.20
9698	Rear	Ditto	NE	25.6.20
9699	Rear	Concrete slab between stone slabs on brick wall along north of central area	NE	25.6.20
9700	Rear	Ditto	N	25.6.20
9701	Rear	Reveal of remains of demolished parts of court house	W	25.6.20
9702	Rear	Ditto	E	25.6.20

Salvage excavation of north rear area remains:

Digital	Location	Description	Facing	Date
0652	Rear	Waterproofing trench behind Courtyard 1, footing trench 048 found cutting natural sand 047	W	24.6.20
0653	Rear	Ditto, general view	W	24.6.20
0654	Rear	Ditto - detail of footing trench 048 found cutting natural sand 047	W	24.6.20
0655	Rear	Ditto	W	24.6.20
0656	Rear	Ditto	N	24.6.20
0657	Rear	Ditto	N	24.6.20
0658	Rear	Waterproofing trench behind Courtyard 1, west section	W	24.6.20
0659	Rear	Ditto	W	24.6.20
0660	Rear	Ditto	W	24.6.20
0661	Rear	Ditto	W	24.6.20
0662	Rear	Partial reveal of brick wall 054, north wall of amenities block	W	24.6.20
0663	Rear	Ditto	W	24.6.20
0664	Rear	Ditto	W	24.6.20
0665	Rear	Ditto	N	24.6.20
0666	Rear	Ditto – section detail, showing concrete footing below and ceramic service pipe	S	24.6.20
0667	Rear	Ditto – section detail, showing concrete footing below	S	24.6.20
0668	Rear	Ditto – section detail, showing ceramic service below	S	24.6.20
0669	Rear	Waterproofing trench behind Courtyard 1 and brick wall 054	W	24.6.20
0670	Rear	Ditto	W	24.6.20
0671	Rear	Ditto	W	24.6.20
0672	Rear	Ditto	W	24.6.20
0673	Rear	Ditto	W	24.6.20
0674	Rear	Ditto	E	24.6.20
0675	Rear	Ditto – also showing later upper part of south wall of Courtyard 1	E	24.6.20
0676	Rear	Working shot Courtyards 2-5	E	25.6.20
0677	Rear	Working shot Courtyards 2-5	NE	25.6.20
0678	Rear	Working shot – west waterproofing trench and Courtyards 2-5	E	25.6.20
0679	Rear	Working shot – Courtyard 2 tWC	N	25.6.20
0680	Rear	Working shot – Courtyards 2-5	NE	25.6.20

Digital	Location	Description	Facing	Date
0681	Rear	Working shot – waterproofing trench in north Courtyard 2	W	25.6.20
0682	Rear	Working shot – Courtyards 4-5	NE	25.6.20
0683	Rear	Working shot – Courtyards 3-4	NW	25.6.20
0684	Rear	Working shot	W	25.6.20
0685	Rear	Ditto	W	25.6.20
0686	Rear	Courtyard 3 final	N	25.6.20
0687	Rear	Ditto	N	25.6.20
0688	Rear	Ditto	N	25.6.20
0689	Rear	Ditto	N	25.6.20
0690	Rear	Ditto	E	25.6.20
0691	Rear	Ditto	E	25.6.20
0692	Rear	Ditto	E	25.6.20
0693	Rear	Ditto – detail of west side and brick wall 057	N	25.6.20
0694	Rear	Ditto	N	25.6.20
0695	Rear	Ditto	S	25.6.20
0696	Rear	Ditto	S	25.6.20
0697	Rear	Courtyard 3, southeast corner	S	25.6.20
0698	Rear	Courtyard 3 final	S	25.6.20
0699	Rear	Courtyard 3, southeast corner	S	25.6.20
0700	Rear	Ditto	S	25.6.20
0701	Rear	Courtyard 3, east, Courtyard 4 west	S	25.6.20
0702	Rear	Ditto	S	25.6.20
0703	Rear	Courtyard 1,WC walls 085	S	25.6.20
0704	Rear	Ditto	S	25.6.20
0705	Rear	Courtyard 1, southeast corner with WC walls 085	S	25.6.20
0706	Rear	Courtyard 1, WC walls 085	E	25.6.20
0707	Rear	Ditto	E	25.6.20
0708	Rear	Ditto	E	25.6.20
0709	Rear	Ditto	E	25.6.20
0710	Rear	Working shot – Courtyard 4	N	25.6.20
0711	Rear	Courtyard 4 final	N	25.6.20
0712	Rear	Ditto	N	25.6.20
0713	Rear	Ditto	N	25.6.20
0714	Rear	Ditto	N	25.6.20
0715	Rear	Ditto	N	25.6.20
0716	Rear	Ditto	S	25.6.20
0717	Rear	Ditto	S	25.6.20
0718	Rear	Ditto	S	25.6.20
0719	Rear	Ditto	S	25.6.20
0720	Rear	Working shot – Courtyards 2-5	E	25.6.20
0721	Rear	Ditto	E	25.6.20
0722	Rear	Ditto	E	25.6.20
0723	Rear	Ditto	E	25.6.20
0724	Rear	Ditto	E	25.6.20
0725	Rear	Courtyard 4, WC walls 072	S	25.6.20
0726	Rear	Ditto	S	25.6.20
0727	Rear	Ditto	S	25.6.20
0728	Rear	Ditto	S	25.6.20
0729	Rear	Ditto	S	25.6.20
0730	Rear	East Courtyard 4, west Courtyard 5, brick wall 080	N	25.6.20
0731	Rear	Ditto	N	25.6.20

Digital	Location	Description	Facing	Date
0732	Rear	Ditto	N	25.6.20
0733	Rear	Ditto	N	25.6.20
0734	Rear	Courtyard 4, north section, tar paving 074 on fill 075	N	25.6.20
0735	Rear	Ditto	N	25.6.20
0736	Rear	Ditto	N	25.6.20
0737	Rear	Courtyard 3, southeast section, WC walls 058-059 & service 100, service 097 at right, concrete footing 073 at left	S	25.6.20
0738	Rear	Ditto	S	25.6.20
0739	Rear	Ditto	S	25.6.20
0740	Rear	Courtyard 3, southwest section, walls 057-058 abutted by remnant tar paving 069, service trench 065 at left	S	25.6.20
0741	Rear	Ditto	S	25.6.20
0742	Rear	Ditto	S	25.6.20
0743	Rear	Ditto	S	25.6.20
0744	Rear	Courtyard 3, north section, concrete slab 053 on brick wall 092 abutted by tar paving 069	N	25.6.20
0745	Rear	Ditto	N	25.6.20
0746	Rear	Ditto	N	25.6.20
0747	Rear	Ditto	N	25.6.20
0748	Rear	Courtyard 5 final	N	25.6.20
0749	Rear	Ditto	N	25.6.20
0750	Rear	Ditto	N	25.6.20
0751	Rear	Ditto	N	25.6.20
0752	Rear	Ditto – west part	N	25.6.20
0753	Rear	Ditto – east part	N	25.6.20
0754	Rear	Ditto – east part	N	25.6.20
0755	Rear	Courtyards 3- 5 final	W	25.6.20
0756	Rear	Ditto	W	25.6.20
0757	Rear	Ditto	W	25.6.20
0758	Rear	Courtyards 4- 5 final	W	25.6.20
0759	Rear	Courtyard 5 WC 081	N	25.6.20
0760	Rear	Courtyard 5, west part with WC 081, east part of Courtyard 4	N	25.6.20
0761	Rear	Courtyard 5 WC 081, remnant tar paving 093	W	25.6.20
0762	Rear	View west from Courtyard 5 WC 081	W	25.6.20
0763	Rear	Courtyard 5, south section above concrete footing 073	S	25.6.20
0764	Rear	Courtyard 5 WC 081, remnant tar paving 093, ferrous service at right along west wall in Courtyard 4	S	25.6.20
0765	Rear	Courtyard 5 east wall 090 abutted by tar paving 093, cut by service 096	W	25.6.20
0766	Rear	Ditto	W	25.6.20
0767	Rear	Ditto	N	25.6.20
0768	Rear	Ditto	N	25.6.20
0769	Rear	Ditto	N	25.6.20
0770	Rear	Courtyard 5, service 063 associated with brick sump 091	N	25.6.20
0771	Rear	Ditto	N	25.6.20
0772	Rear	Ditto	N	25.6.20
0773	Rear	Ditto – also showing concrete portal to service 067	W	25.6.20
0774	Rear	Ditto	W	25.6.20

Digital	Location	Description	Facing	Date
0775	Rear	Courtyard 5, south section above concrete footing 073	S	25.6.20
0776	Rear	Ditto	S	25.6.20
0777	Rear	Courtyards 3- 5 final	E	25.6.20
0778	Rear	Ditto	E	25.6.20
0779	Rear	Ditto	E	25.6.20
0780	Rear	Ditto	E	25.6.20
0781	Rear	Courtyard 1, conversion to toilets, dry press brick wall 084a against original east wall 084,WC 085 at bottom right	E	25.6.20
0782	Rear	Ditto	E	25.6.20
0783	Rear	Courtyard 1, conversion to toilets, dry press brick wall 084a over original south wall 052	S	25.6.20
0784	Rear	Ditto	S	25.6.20

Monitoring – northeast rear area:

Digital	Location	Description	Facing	Date
9704	Rear	Area at completion of excavation	E	29.6.20
9705	Rear	Removal of part of concrete footing 073	E	29.6.20
9706	Rear	Ditto	E	29.6.20
9707	Rear	Concrete footing for WC 081	NE	29.6.20
9708	Rear	Ditto, removal of part of concrete footing 073	NE	29.6.20
9709	Rear	Ditto	NE	29.6.20
9710	Rear	Ditto	E	29.6.20
9711	Rear	Ditto	E	29.6.20
9712	Rear	Machining in progress, section showing depth of tar paving at west end	NE	29.6.20
9713	Rear	Machining in progress	S	29.6.20
9714	Rear	SW corner, yellow clay fill over dark grey very sandy loam soil, first reveal of trench 128 for south wall	E	29.6.20
9715	Rear	Ditto	E	29.6.20
9716	Rear	NW corner, north section showing fills below tar paving	N	29.6.20
9717	Rear	Ditto, detail	N	29.6.20
9718	Rear	Ditto, detail	N	29.6.20
9719	Rear	Courtyard 3, remnant walls	SW	29.6.20
9720	Rear	Ditto	SW	29.6.20
9721	Rear	Ditto, south wall	S	29.6.20
9722	Rear	Ditto	S	29.6.20
9723	Rear	Ditto, detail of ceramic service 097 in cut through wall	S	29.6.20
9724	Rear	Ditto	S	29.6.20
9725	Rear	Courtyard 3, trench 128 for south and west walls	W	29.6.20
9726	Rear	Ditto	W	29.6.20
9727	Rear	Courtyard 3, north section	N	29.6.20
9728	Rear	Ditto	NE	29.6.20
9729	Rear	Ditto	NE	29.6.20
9730	Rear	Sandstone drain portal 070, north part on brick sump	N	29.6.20
9731	Rear	Ditto	N	29.6.20
9732	Rear	Courtyard 3, north section	NE	29.6.20
9733	Rear	Courtyard 3, north section	N	29.6.20
9734	Rear	Courtyard 3 at level of grey soil	NW	29.6.20

Digital	Location	Description	Facing	Date
9736	Rear	Ditto	NE	29.6.20
9739	Rear	Courtyard 3, west wall demolished	NW	29.6.20
9740	Rear	Ditto, section behind showing fill sequence	SW	29.6.20
9741	Rear	Section on west side of Courtyard 3 west wall	SW	29.6.20
9743	Rear	Ditto, north part	W	29.6.20
9744	Rear	Ditto, north part, detail of ceramic and ferrous service	W	29.6.20
9745	Rear	Ditto	W	29.6.20
9746	Rear	Removal of Courtyard 3 north wall, revealing cavity below concrete slab 053	NE	29.6.20
9747	Rear	Ditto	NE	29.6.20
9748	Rear	Ditto	NE	29.6.20
9749	Rear	Concrete footing for Courtyard 3 north wall over grey clayey soil 140	N	29.6.20
9750	Rear	Ditto	N	29.6.20
9751	Rear	Courtyard 3, west part after removal of grey clayey soil 140	NE	29.6.20
9752	Rear	Ditto	NE	29.6.20
9753	Rear	Courtyard 3, southeast corner, initial reveal of pit cut & fill 137-138 cut into soil 140	E	29.6.20
9754	Rear	Ditto	N	29.6.20
9755	Rear	Courtyard 3 after removal of grey clayey soil 140	NE	29.6.20
9756	Rear	Ditto	E	29.6.20
9757	Rear	Removal of Courtyard 4 north wall, revealing cavity below concrete slab 053	NE	29.6.20
9758	Rear	General view of west rear area, work in progress	W	30.6.20
9759	Rear	Courtyard 2, removal of WC walls at SW corner	NW	30.6.20
9760	Rear	Courtyard 2, general of upper fill	NW	30.6.20
9761	Rear	Waterproofing trench along exterior of Courtyard 1, trench for court house footing cutting natural sand	W	30.6.20
9762	Rear	Ditto	W	30.6.20
9763	Rear	Waterproofing trench along west side of Courtyard 2, grey soil patches in surface of cream sandy clay	W	30.6.20
9764	Rear	Ditto	W	30.6.20
9765	Rear	Courtyard 3, surface of natural clay	S	30.6.20
9766	Rear	Ditto	S	30.6.20
9767	Rear	Courtyard 5, machining in progress	NE	30.6.20
9768	Rear	Courtyard 5, reveal of dark grey clayey soil	NW	30.6.20
9769	Rear	Ditto	NE	30.6.20
9770	Rear	Courtyard 5, north wall and concrete footings	N	30.6.20
9771	Rear	Ditto	N	30.6.20
9772	Rear	Ditto	N	30.6.20
9773	Rear	North recess, clearance of stone & concrete slabs	NE	30.6.20
9774	Rear	Courtyard 3, pit cut & fill 137-138, continuing below south footing	S	30.6.20
9775	Rear	Ditto	S	30.6.20
9776	Rear	Ditto	W	30.6.20
9777	Rear	Ditto	W	30.6.20
9778	Rear	Ditto	N	30.6.20
9780	Rear	Ditto	E	30.6.20
9781	Rear	Ditto	E	30.6.20
9782	Rear	Courtyard 2, east section showing fill sequence over natural horizon	W	30.6.20
9783	Rear	Ditto, south part	W	30.6.20

Digital	Location	Description	Facing	Date
9784	Rear	Ditto, south end showing trench cut for courtyard footing	SW	30.6.20
9785	Rear	Ditto	SW	30.6.20
9786	Rear	Courtyard 2, view along section	S	30.6.20
9787	Rear	Courtyard 3, NW corner, initial machining into natural horizon	W	30.6.20
9788	Rear	Ditto	W	30.6.20
9789	Rear	Ditto	NW	30.6.20
9790	Rear	Ditto	NW	30.6.20
9791	Rear	Work area after laying of support slabs	E	2.7.20
9792	Rear	Ditto	W	2.7.20
9793	Rear	Ditto	W	2.7.20
9794	Rear	Ditto	NW	2.7.20
9795	Rear	Courtyard 5, basement wall & footing cleaned	NW	2.7.20
9796	Rear	Courtyards 2-4, basement walls & footings cleaned	NW	2.7.20
9797	Rear	Courtyard 2, basement wall & footing cleaned	NW	2.7.20
9798	Rear	Courtyard 3, west area, machining into natural horizon	NE	2.7.20
9799	Rear	Ditto	NE	2.7.20
9800	Rear	Ditto	NE	2.7.20
9801	Rear	Courtyard 3, west area, section of natural horizon	W	2.7.20
9802	Rear	Ditto	W	2.7.20
9803	Rear	Courtyard 3, pit cut & fill 137-138 in south section	S	2.7.20
9804	Rear	Ditto	S	2.7.20
9805	Rear	Ditto	S	2.7.20
9806	Rear	Ditto	S	2.7.20
9807	Rear	Ditto	S	2.7.20
9808	Rear	Courtyards 3-4, end level in natural clay 136	E	2.7.20
9809	Rear	Ditto	SE	2.7.20
9811	Rear	Ditto	W	2.7.20
9812	Rear	Ditto	W	2.7.20

Salvage excavation of central rear area:

Digital	Location	Description	Facing	Date
9817	Rear	Initial reveal of west end of amenities block	E	24.8.20
9818	Rear	Ditto	E	24.8.20
9819	Rear	West end of amenities block cleaned, Cubicle 1 in foreground	W	24.8.20
9820	Rear	Ditto	W	24.8.20
9821	Rear	Brick sump 118 northwest of Urinal 1, remnant tar paving 119 on clay fill westward	E	24.8.20
9822	Rear	Ditto	E	24.8.20
9823	Rear	Ditto	E	24.8.20
9824	Rear	Ditto	E	24.8.20
9825	Rear	Ditto, tar paving 119 also visible in south section below road base 022	SE	24.8.20
9826	Rear	Ditto	SE	24.8.20
9827	Rear	Urinal 1	E	24.8.20
9828	Rear	Urinal 1 and Cubicle 1	W	24.8.20
9829	Rear	Ditto	W	24.8.20
9830	Rear	Brick sump 118, southwest corner, cut by service 102	N	24.8.20

Digital	Location	Description	Facing	Date
9831	Rear	Ditto – southeast corner	N	24.8.20
9832	Rear	Brick sump 118 east wall at left, Urinal 1 west wall at right	N	24.8.20
9833	Rear	Urinal 1 north brick wall 111, internal service 120	N	24.8.20
9834	Rear	Urinal 1 north brick wall 111	N	24.8.20
9835	Rear	Ditto	N	24.8.20
9836	Rear	Ditto	N	24.8.20
9837	Rear	Ditto	N	24.8.20
9838	Rear	Location of Urinal 1/Cubicle 1 wall 111	N	24.8.20
9839	Rear	Cubicle 1 northwest corner	N	24.8.20
9840	Rear	Cubicle 1 northeast area	N	24.8.20
9841	Rear	Cubicle 1 northeast corner, east and north walls	N	24.8.20
9842	Rear	Ditto	N	24.8.20
9843	Rear	Ceramic service 112 at northwest corner of Cubicle 3	N	24.8.20
9844	Rear	Remnant tar paving 119 over clay fill	S	24.8.20
9845	Rear	Ditto	S	24.8.20
9846	Rear	Ditto	S	24.8.20
9847	Rear	Urinal 1 west and south walls	S	24.8.20
9848	Rear	Ditto, ceramic downpipe at bottom right	S	24.8.20
9849	Rear	Urinal 1 south wall	S	24.8.20
9850	Rear	Ditto	S	24.8.20
9851	Rear	Ditto - concrete footing 110 at top right	S	24.8.20
9852	Rear	Ditto - concrete footing and partial east wall	S	24.8.20
9853	Rear	Ditto	S	24.8.20
9854	Rear	Cubicle 1, southwest area	S	24.8.20
9855	Rear	Cubicle 1, partial south wall and east wall	S	24.8.20
9856	Rear	Ditto	S	24.8.20
9857	Rear	Cubicle 1 east footing	S	24.8.20
9858	Rear	Urinal 1, service XXX adjacent to west wall	E	24.8.20
9859	Rear	Ditto	E	24.8.20
9860	Rear	Cut 121 adjacent to brick sump 118	N	24.8.20
9861	Rear	Ditto	N	24.8.20
9862	Rear	General of Urinal 1 and brick sump118	SE	24.8.20
9863	Rear	Ditto	E	24.8.20
9864	Rear	Ditto	E	24.8.20
9865	Rear	Urinal 1 & Cubicle 1 final	E	24.8.20
9866	Rear	Ditto	E	24.8.20
9867	Rear	Ditto	W	24.8.20
9868	Rear	Ditto	W	24.8.20
9869	Rear	Cubicle 2 with ceramic service 112	N	25.8.20
9870	Rear	Cubicle 3 with ceramic service 113	N	25.8.20
9871	Rear	Cubicle 4 with ceramic service 114	N	25.8.20
9872	Rear	Cubicle 5 with ceramic service 115	N	25.8.20
9873	Rear	Cubicle 6, partly overlaid by concrete footing 073	N	25.8.20
9874	Rear	Cubicles 6-7, partly overlaid by concrete footing 073	N	25.8.20
9875	Rear	Cubicle 8 with service 116	N	25.8.20
9876	Rear	Ditto	N	25.8.20
9877	Rear	Cubicles 2-8	E	25.8.20
9878	Rear	Ditto	E	25.8.20
9879	Rear	Ditto	E	25.8.20
9880	Rear	Ditto	W	25.8.20
9881	Rear	Ditto	W	25.8.20

Digital	Location	Description	Facing	Date
9882	Rear	Ditto	W	25.8.20
9883	Rear	Cubicle 2, northwest corner	N	25.8.20
9884	Rear	Cubicle 2, northeast corner	N	25.8.20
9885	Rear	Cubicle 2, northwest corner	N	25.8.20
9886	Rear	Cubicle 2, northeast corner	N	25.8.20
9887	Rear	Cubicle 3, north part	N	25.8.20
9888	Rear	Cubicle 4, northwest corner	N	25.8.20
9889	Rear	Cubicle 4, northeast corner	N	25.8.20
9890	Rear	Northeast Cubicle 4, northwest Cubicle 5	N	25.8.20
9891	Rear	Cubicle 5, northeast corner	N	25.8.20
9892	Rear	Cubicle 5 east wall, overlaid by concrete footing 073	N	25.8.20
9893	Rear	Concrete footing 073	N	25.8.20
9894	Rear	Cubicle 8 north part	N	25.8.20
9895	Rear	Cubicle 8 northeast corner	N	25.8.20
9896	Rear	Cubicle 2 south part	S	25.8.20
9897	Rear	Southeast Cubicle 2, southwest Cubicle 3	S	25.8.20
9898	Rear	Cubicle 3 south part	S	25.8.20
9899	Rear	Cubicle 4 south part	S	25.8.20
9900	Rear	Southeast Cubicle 4, southwest Cubicle 5	S	25.8.20
9901	Rear	Cubicle 5 south part	S	25.8.20
9902	Rear	Cubicle 6 south part, concrete footing 073	S	25.8.20
9903	Rear	Ditto	S	25.8.20
9904	Rear	Cubicle 7 south part, concrete footing 073	S	25.8.20
9905	Rear	Cubicle 8 south part	S	25.8.20
9906	Rear	Cubicle 8 southeast corner	S	25.8.20
9907	Rear	Ditto	S	25.8.20
9908	Rear	Amenities block, Urinal 2	N	25.8.20
9909	Rear	Ditto	N	25.8.20
9910	Rear	Ditto	N	25.8.20
9911	Rear	Ditto	W	25.8.20
9912	Rear	General of amenities block exposure, Urinal 2 in foreground	W	25.8.20
9913	Rear	Ditto	W	25.8.20
9914	Rear	Urinal 2 northwest corner	N	25.8.20
9915	Rear	Urinal 2 central north area	N	25.8.20
9916	Rear	Urinal 2 northeast area	N	25.8.20
9917	Rear	Urinal 2 northeast corner	N	25.8.20
9918	Rear	Urinal 2 southwest corner	S	25.8.20
9919	Rear	Urinal 2 central south area	S	25.8.20
9920	Rear	Urinal 2 southeast corner	S	25.8.20
9921	Rear	Ditto	S	25.8.20

Monitoring – east area, northeast corner:

Digital	Location	Description	Facing	Date
0197	East	Location shot	E	16.6.21
0198	East	Location shot – relative to NW corner of police station	NE	16.6.21
0199	East	Ditto	E	16.6.21
0200	East	Location shot – relative to NE corner of new east building	SW	16.6.21
0201	East	Ditto	SW	16.6.21

Digital	Location	Description	Facing	Date
0202	East	Location shot – relative to NW corner of police station	NE	16.6.21
0203	East	Sandstone blocks in spoil heap from machining	E	16.6.21
0204	East	Ditto	E	16.6.21
0205	East	Ditto – detail of block showing residual shell lime mortar	-	16.6.21
0206	East	General view of area with north wall 242 and south wall 243	E	16.6.21
0207	East	Ditto	E	16.6.21
0208	East	Ditto	E	16.6.21
0209	East	Ditto	N	16.6.21
0210	East	Ditto	N	16.6.21
0211	East	Ditto	N	16.6.21
0212	East	Ditto	SW	16.6.21
0213	East	Ditto	SW	16.6.21
0214	East	North wall 242	E	16.6.21
0215	East	Ditto	E	16.6.21
0216	East	Ditto	E	16.6.21
0217	East	South wall 243	E	16.6.21
0218	East	Ditto	E	16.6.21
0219	East	Ditto	E	16.6.21
0220	East	South wall 243, block in east section	E	16.6.21
0221	East	Ditto	E	16.6.21
0222	East	Ditto	E	16.6.21
0223	East	East section between walls, showing fill over concrete footing 250 over fill 251 over sand 252	E	16.6.21
0224	East	Ditto	E	16.6.21
0225	East	Ditto	E	16.6.21
0226	East	Possible cross wall 244	N	16.6.21
0227	East	Ditto	N	16.6.21
0228	East	Ditto	N	16.6.21
0229	East	East end of north wall 242	E	16.6.21
0230	East	Ditto	E	16.6.21
0231	East	General view of area with north wall 242 and south wall 243	E	17.6.21
0232	East	Ditto	E	17.6.21
0233	East	Ditto	N	17.6.21
0234	East	Ditto	N	17.6.21
0235	East	Ditto	SW	17.6.21
0236	East	Ditto	SW	17.6.21
0237	East	North wall 242	E	17.6.21
0238	East	Ditto	E	17.6.21
0239	East	South wall 243	E	17.6.21
0240	East	Ditto	E	17.6.21
0241	East	Ditto - detail showing shell lime mortar	E	17.6.21
0242	East	Ditto - detail showing shell lime mortar	N	17.6.21
0243	East	North wall 242, east part	E	17.6.21
0244	East	Ditto	E	17.6.21
0245	East	East section between walls, showing fill over concrete footing 250 over fill 251 over sand 252	E	17.6.21
0246	East	Ditto	E	17.6.21
0247	East	East section south of wall 243	E	17.6.21
0248	East	Ditto	E	17.6.21

Digital	Location	Description	Facing	Date
0249	East	Cut 260 along west side area (service?)	N	17.6.21
0250	East	Ditto	N	17.6.21
0252	East	Possible cross wall 244	N	17.6.21
0253	East	North wall 242, block protruding southward	N	17.6.21
0254	East	Ditto	W	17.6.21
0255	East	General view of area with north wall 242 and south wall 243	W	17.6.21
0256	East	Ditto	W	17.6.21
0257	East	Ditto	W	17.6.21
0258	East	Ditto	W	17.6.21
0259	East	South wall 243	W	17.6.21
0260	East	Ditto	W	17.6.21
0261	East	North wall 242	W	17.6.21