

5.0 RESPONSE TO RESEARCH QUESTIONS

5.1 RESEARCH QUESTIONS

Following the writing of the ARD for 3PS (post office site) in 2013 and the 3PS western precinct in 2016, Dr Mary Casey undertook further development of a suitable research framework for addressing research outcomes for archaeology of Parramatta. Specific themes have been added to those identified previously, these new themes are: Environment, Climate, Agriculture & Water. This theme has some overlap with the previous research themes but is considered to allow for a greater integration of apparently less significant results to create a higher-level overview of the importance of the archaeology of Parramatta and increase its contribution to understanding this archaeology and its meaning. They also more specifically address the environmental data which offers innovative ideas to understanding the archaeology. The archaeological phases which have informed the interpretation of the archaeology are outlined in Table 5.1. Where themes are now being explored in relation to Environment, Climate, Agriculture and Water they will be deleted from subsequent themes. Due to the nature of this site and its archaeology, four main themes are being addressed below. The key research themes identified for the project and updated for this report are:

ENVIRONMENT, CLIMATE, AGRICULTURE & WATER

- Description and analysis of site hydrology, geology and palynological evidence for native flora as a basis for understanding the site and how and why it was extensively modified by the British settlers.
- Nature of early agricultural practices, evidence for Public or Government farming by early convicts, such as clearing and cultivation, as well as later dairying and cattle grazing. Address this issue through the analysis of archaeological features, pollen and soil samples, related artefacts and the landscape of the site had how it was modified. Consider the role of climate in understanding new evidence.
- Analysis of how water was managed on the site, especially the convict Town Drain, the creekline and how it was managed and why it was modified during the 18th and 19th centuries.

CULTURAL CONTACT

- Is there evidence for the Parramatta Fairs or the Annual Feasts held for Aboriginal people? If so, what does this information tell us about:
 - the interaction between Aboriginal and colonial society, particularly at the Annual Feasts?
 - the nature of colonial society as expressed at the half-yearly Parramatta Fairs?
- Evidence for Aboriginal and British peoples' activities and contact during early settlement?

LANDSCAPE OF COLONIAL PARRAMATTA

- How does the evidence from this site feed into the current perceptions of the convict-period landscape of Parramatta? Was it a landscape of control or more a result of Georgian design influences? Other issues to be considered are resistance to the way in which control may have manifested itself in the landscape and in daily life. Issues of power are central to the expression of landscapes of control.
- Evidence for the pre-European landscape, especially in relation to the placement of the drain, the presumed swampy ground in this area, the marked ponds on the 1858 map within the rear of this site. How was this landscape modified to make it useable? (See theme 1 above).

- Nature and effect of modification of the pre-European landscape.
- Remaking of the landscape, the social, cultural and political context and how it was manifest in this landscape.¹ Are many of the same issues influencing the way in which the landscape was formed similar to those which affected the Sydney Domain? This is much more likely due to the relationship of St John's church to the site and how the Macquarie's remade the colonial landscape with the architecture and the use of neo-classical architecture.
- Order and amenity; was the layout of houses and other structures the result of cultural and social practices? What was the role of these practices in changing the landscape and modifying people's behaviour?²
- Was the pond at the southern boundary infilled and was it a short-term communal infilling or site-specific infilling? Does it contain quantities of artefacts associated with the lives of the surrounding residents?

CONVICT/UNFREE AND FREE LIFE IN COLONIAL PARRAMATTA³

- What differences were there between the lives of free and unfree or institutionalised settlers?
- How did the deprivations of a frontier life alter the ways in which free people lived in early colonial Parramatta?
- Local-pottery manufacturing, is typically found on early Parramatta sites where it is both glazed and unglazed. Was the pottery of Thomas Ball found? What does this pottery suggest about the use of his pottery and the condition in which it was sold?⁴
- Evidence associated with the occupation of this site by known individuals may reveal interesting insights into family patterns and behaviour.
- Consumption and commerce in colonial Parramatta:
 - How does it link into issues associated with local, regional and global economies?
 - What does it tell us about cultural and social practices in colonial Parramatta, relating to lifeways, diet and other issues associated with consumption?
 - How do patterns of consumption further our understanding of how early residents of Parramatta used material culture in the construction of personal and group identity, including ethnic identity?
 - Evidence for evolving patterns of consumption and commerce from early colonial period into the early 20th century.

A new theme and set of questions are included below:

DEVELOPMENT OF THE MIDDLE CLASS

A new research theme Casey & Lowe have started to develop with Parramatta Square, where we investigated three substantial sites, is how people, emancipated convicts and their families, refashioned their lives to be successful free people and provided for their future generations. This idea started to develop with Hugh Taylor on 15 Macquarie Street and Samuel Larken at the Parramatta Children's Court site. We now add to this group of successful emancipists John Holland, and his wife Harriet who arrived free in the colony. Further, as part of this analysis, this is also one of the first sites in Parramatta we have had a clear story to tell about the lives of women, with Harriet and her daughters. But this development of understanding of the middle class is focused on all Casey & Lowe projects

¹ This general topic was the focus of Mary Casey's PhD thesis but in relation to the Sydney Domain (Casey 2002).

² Some of these issues were the focus of analysis in Casey 2002.

³ I have drawn on some of the more relevant questions in PHALMS 2000 Figure 6.4, p. 167-175.

⁴ This question was updated to reflect 2020 questions on Thomas Ball rather than ones from 2013.

on Parramatta Square and will be discussed further in each of the reports: 3, 4&6 and 8 Parramatta Square. This theme is closely linked to previous theme/question Convict and Free Life in Parramatta.

At 3PS we will focus on developing a profile of housing and artefacts to identify the nature of middle-class lives which will be explored in more detail in 8PS and 4&6PS.

This analysis includes examining the following specific aspects of the site:

- Size and number of rooms within the house.
- Owners/builders of the house or tenants to a landlord.
- Location of the house within the streetscape and nearby facilities, nature of the environment in terms of nearby commercial and semi-industrial activities.
- Evidence from the various documents, including wills, probate, rates and other items.
- Remains of interior building fabric, such as tessellated tiles and fittings.
- Quantity and range of artefacts from the house and cesspits.

Table 5.1: Site-wide phasing of archaeology across the site.

Phase	Date	Phase Title	Lot 28 & Lot 1 (181)	Lot 30	Lot 32
1		Natural Landscape			
2		Aboriginal Occupation			
PHASE 3: BEGINNINGS OF BRITISH SETTLEMENT					
3.1	1788-1790	Government Farming: clearing and agriculture	Government Farming: clearing and agriculture	Government Farming: clearing and agriculture	Government Farming: clearing and agriculture
3.2	1790-c.1819	Land modification and early uses	Timber drain in creekline	Used for Fairs from 1814	
PHASE 4: EARLY OCCUPATION (c.1819-1870/80s)					
4.1	c.1819-1850s	Agriculture, construction, and early cottage occupation.	Plough Lines Lot 1(181) & 28 Town Drain, timber-lined drain, storage pit	House 4 construction by 1822 (levelling fills) – first sump, early occupation	Maughan’s garden fenced in by 1819. White Horse Inn (from 1830) drains and outbuildings.
4.2	1850s-1870s	Later phase cottage occupation	Reconfiguration and extension of house - fences and outbuildings – levelling above the Town Drain	Extension to House 4 – construction of outbuilding on eastern part of Lot 30 -continued occupation until 1883.	Hilt’s Coach Service (from 1851) outbuildings, occupation and rebuilding
4.3	1870s-1880s	Demolition (Lot 30)	Occupation of Wyverne	Demolition of House 4 (by 1884)	Demolition of former White Horse Inn and outbuildings
PHASE 5: REBUILDING AND OCCUPATION (1870S TO 1960s)					
5.1	1870s-1960s	Construction and occupation	Construction of plaster works (Lot 28). Continued occupation of Wyverne (Lot 27/8).	Levelling fills, construction & occupation of Cranbrook, Northiam and Harleyville (1880s).	Construction and occupation of 1870s houses -Late-19th century outbuilding. -Single storey shop (1950s)
5.2	Late 1950s-1960s	Demolition	Demolition of Plasterworks and Wyverne to make way for Civic Place (Lot 28)	Demolition of Cranbrook, Northiam and Harleyville to make way for the Post Office	Demolition of Macquarie flats in 1978
PHASE 6: MID TO LATE 20TH-CENTURY USES					
6	1960s-2015	Post Office & Civic Place	Civic Place construction and use	Post office construction occupation and demolition	Post office construction occupation and demolition

5.2 ENVIRONMENT, CLIMATE, AGRICULTURE & WATER

- Description and analysis of site hydrology, geology and palynological evidence for native flora as a basis for understand the site and how and why it was extensively modified by the British settlers.
- Nature of early agricultural practices, evidence for Public or Government farming by early convicts, such as clearing and cultivation, as well as later dairying and cattle grazing. Address this issue through the analysis of archaeological features, pollen and soil samples, related artefacts and the landscape of the site had how it was modified.
- Analysis of how water was managed on the site, especially the convict Town Drain, the creekline and how and why it was managed during the 18th and 19th centuries.

5.2.1 NATURAL ENVIRONMENT

The evidence for the sites natural environment was discussed in detail in Section 3.2, the key findings of which are outlined below.

5.2.1.1 TOPOGRAPHY, SOILS & HYDROLOGY

The excavation uncovered traces of the pre-1788 natural environment and landscape within the 3PS study area. These included a gently sloping topography from the southern higher ground down to a natural drainage channel (Figure 5.1). The soil profile indicated that the site was located on the edge or boundary of the residual Blacktown and the fluvial Birrong soil landscapes. Silty and light clayey alluvial sediments once covered most of the site with a dense clay beneath. Much of the original dark surface topsoil was heavily disturbed or removed but the physical features of the subsurface layers appeared largely intact.

The dominant soil materials were a dark brown silty clay loam occurring as a topsoil (A1 horizon), with a bleached hard setting clay loam occurring as an A2 horizon. An orange mottled silty clay subsoil (B horizon) and a brown mottled clay (C horizon) overlaid a light grey mottled clay (C horizon). A yellowish-brown light clay was found as subsoil on the lower slopes where the Birrong and Blacktown soil landscapes overlap.⁵

The lowest natural profile reached was a deeply weathered layer, c.2m thick, that is probably Pleistocene in age (it could be older), and may have formed either on the old colluvium or on a very old deposit of alluvial sediments. This dense impermeable mottled clay was exposed by excavation at the southeast corner of the site (Figure 3.9). The top of this ancient clay slopes down towards the site's northwest corner, where it is covered by an increasingly thick layer of younger alluvial sediments. This dense impermeable mottled clay was covered by a thick layer of younger alluvial sediments. The older clay had a major effect on profile drainage, impeding downwards movement causing perched water tables, especially where there may be depressions in the upper surface.

The site's elevation is 10m to 12.5m AHD. Lawrie considers that at the time of settlement and clearing the ground surface was about 1m lower and the drainage pattern on the lower northern part (below 1880s fill), across the wavy, undulating surface of the alluvial terrace, was erratic with several small, probably natural, depressions. Even though they no longer carry water (due to a succession of infilling activities which have raised the surface of the site), the wetter or poorly drained areas in the low-lying parts of the site have distinctive soil profile features. Modern drainage structures can alter the natural pattern of

⁵ Chapman & Murphy 1989: 82-83.

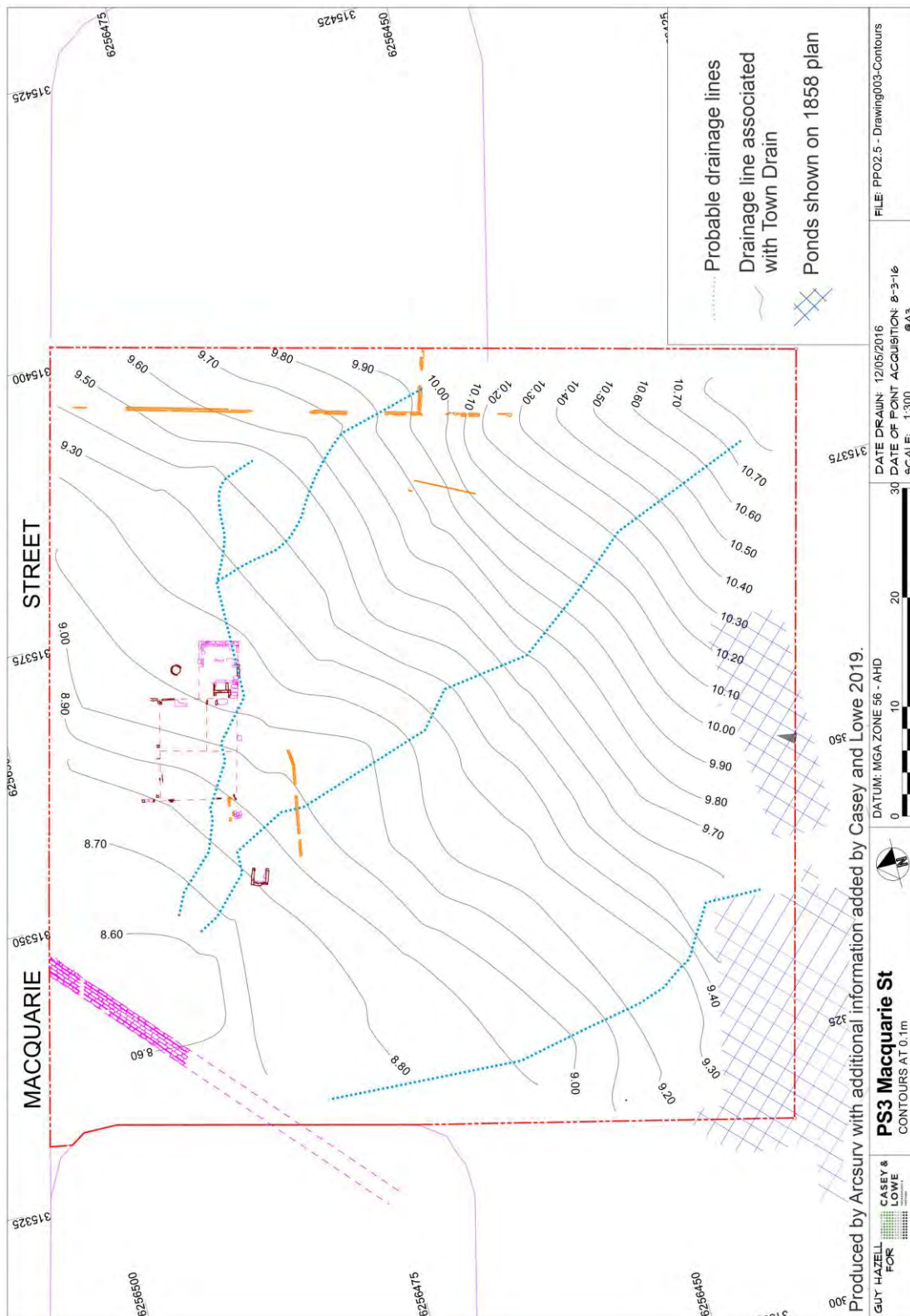


Figure 5.1: Contour and drainage plan of the pre-1788 environment based on the archaeological evidence and the top of A2 horizon subsoil (TOSS), across 3PS. The survey of the Town Drain within the creekline is shown in pink. Shallow seasonal drainage channels fall from the south and southeast through the site (blue dashed lines). These natural channels would have persisted until the land to the south was developed in the 1850/60s. The natural groundwater flow had to be managed or 3PS would have been continuously flood prone. The two ponds show a mid 19th-century attempt to capture water upslope and contain it. The presence of ancient impermeable clays at the base of the two ponds meant that ground water could not escape and flow across the site. G. Hazell (ArcSurv) & Casey & Lowe

water movement, often drying out areas once frequently waterlogged, and making other previously dry areas wetter.⁶

Archaeological excavation revealed that at most places on the site subsoil chemical properties were altered, mainly by the downward movement of nutrients and alkaline elements leached out of the surface soil. The clayey nature of the soil profiles has a strong influence on drainage. Low subsoil permeability tends to push water laterally, towards any nearby depressions or downslope to the drainage line on the western boundary. This natural drainage feature was rather narrow.⁷

A creekline crossed through the northwest corner of the site, flowing to the northeast and the Parramatta River (Figure 5.1). A number of smaller channels (seasonal?) flowed from the southeast and south down to the main creekline. Chemical properties of the creekline or drainage channel fill indicate that it was a dynamic environment, regularly flushed with fresh water. The creekline sediment was characterised by a high percentage (14%) of exotic cereal pollen suggesting that it was modified in the early period of post-contact cultivation rather than representing an undisturbed natural deposit, this was further confirmed the presence of historical artefacts in the matrix. Buried subsoils and remnant buried topsoil did not contain elevated trace metal levels and appeared largely undisturbed. Pollen analysis of the buried topsoil and subsoils indicated that the area was originally a savanna grassland landscape with frequent she-oaks and ferns lining the creekline with occasional eucalypts, wattle and sclerophyll shrubs.

Therefore, the natural environment was able to be reconstructed to a reasonable degree, more so than many other Parramatta sites due to its complexity and the depth of historic fills which buried the site. It was originally modified by some form of Aboriginal fire technology and then by the wholesale land clearance undertaken by British settlers with the establishment of the settlement. Issues of Phosphorus levels and nutrients available in the natural soils and their relationship with post-1790 land clearance and cultivation will be discussed further below in the Agriculture section.

Environmental changes occurred quickly following the establishment of the penal settlement at Parramatta in November 1788. Land was cleared of trees and agriculture commenced. Archaeological evidence of the natural environment was recorded across the site in the form of A2 horizon subsoils, sloping topography towards a creekline or water channel and tree boles. The underlying parent clays were also encountered within deep trenches. The A1 horizon topsoil was only encountered intact in pockets as it had been heavily modified throughout the historic period. This section draws on the specialist reports, soil and pollen (Vol. 3, Sec. 8.6 and 8.7), and the geotechnical and hydrology reports for the project and the contour maps produced by Guy Hazell (Arcsurv) for the project.⁸

5.2.2 CLIMATE & EARLY AGRICULTURE⁹

Section 3.4 provides a detailed historical description of the struggles the British had to establish successful cultivation of grain crops to make the settlement sustainable and how

⁶ Lawrie 2019, Vol. 3, Sec. 8.7: 2-3.

⁷ Lawrie 2019, Vol 3, Sec. 8.7: 21.

⁸ Lawrie 2019 Vol 3, Sec. 8.7, Macphail 2019 Vol. 3, Sec. 8.6; Douglas Partners, 2015.

⁹ This section uses extensive private historical research and analysis Dr Mary Casey previously undertook for separate publication on public farming in Parramatta. This research is used in this report but was not funded by this project. Therefore, any discussion on the historical context of public farming is the Intellectual Property and Copyright of Dr Casey, see also Casey 2020. Further it also draws on research completed for other projects and

quickly the cleared ground was abandoned to pasture and new ground was cleared. The central reason typically outlined for abandoning the cleared ground after one or two years of cropping, was the lack of animal manure. Henry Dodd, who managed farming for the governor, considered that after the first single crop it was essential to fertilise the ground.

In summary the key historical reasons outlined for the relatively poor agricultural outcomes were:

- Absence of manure to nourish the ground between crops and increase the yield for the next planting.
- The frequent presence of drought and inconsistent climate.
- The use of hoes to break up the ground because they could not use ploughs due to the presence of tree roots every 20m or so. The presence of extensive root systems also made the use of ploughs difficult.
- Poor attitude of convicts to undertaking an appropriate level of labour which was exacerbated by short rations in times of food shortages.
- Insufficient skilled convict supervisors who could manage both farming in a foreign environment and successfully encourage convicts to undertake the required labour.

To this story we can now add the poor soil qualities where low levels of phosphorus were present in the natural soils. The well-preserved 3PS topsoil (16224) found buried beneath the c.1822 cottage (House 4), for example, has a phosphorus content (Colwell test) of only 6.3 mg/kg; a 1 tonne/ha wheat crop would use up half of this. This means it was poor soil for growing imported crops, such as wheat, maize, and oats.¹⁰

The low amounts of phosphorous meant that every cropping season would further reduce the yield from planting. Additionally, the planting of maize (corn) had a greater uptake of phosphorus than other grains. Historical records suggest maize appeared to be more successful during dryer periods but it also meant the next crop was likely to produce a lower yield.

It is noted that the need for fertiliser does represent the solution to the low phosphorous level but this was not specifically understood as an issue to be solved. The digging of animal fertiliser into the ground appears to be a standard response to a low yield and inability to continuously replant rather than an understanding of the role of low phosphorus in the soil.¹¹ The native vegetation did not require phosphorus in the soil to grow successfully.¹² Therefore, any interpretation of the visual qualities of Parramatta with trees set at distances apart, with no undergrowth and only grass growing did not in fact represent fertile ground for growing British crops. It was a misreading of this ground thought to be the result of Aboriginal firestick clearing to provide open ground for hunting kangaroos.

The British administration and its convict labour force were expected to become self-sufficient within a relatively short period of time, approximately 4-years after settlement. The 3PS archaeological program has allowed us to hypothesise additional reasons for the short-term results from early farming at Parramatta:

1. The early public farming of Parramatta was limited by a combination of:

the Intellectual Property and Copyright is a mixture of Dr Casey and Casey & Lowe Pty Ltd. See Casey 2009, in prep.

¹⁰ Lawrie Vol. 3, Sec. 8.7: 21.

¹¹ Tench, W. 1979:195, November 16, 1790; Collins, 1975(1):103, July 1790.

¹² Lawrie Vol 3, Sec. 8.7; Collins 1975:113; HRNSW 1(2): 470, 4 March 1791; Collins 1975:123, 127. 130; HRNSW 1(2):570.

- Low levels of Phosphorous in the soil and an inability to replace it via lack of animal manure.
- Planting of corn, wheat and oats drew out the phosphorus from the soil, reducing the yield with each season, eventually making the return from seed grain inadequate to both feed the population, animals and to plant for the next season.
- Climate fluctuations of dry and wet (ENSO) which provided a challenge to the British who were used to a stable and predictable climate broken into four seasons.
- Presence of large tree roots which dotted the landscape and which were not easy to remove even though they were frequently burnt out. This meant hoeing was the preferred method of tilling rather than use of animal drawn ploughing which could not plough in a straight line due to the tree roots. This also limited the productivity of the soil.
- Augmented by the inadequate labour of untrained convicts who did not want to do this labour or were too tired due to poor rations and an absence of adequate supervisors to extend farming beyond the Parramatta district until after 1796.

CLIMATE

The development of an understanding of El Niño Southern Oscillation (ENSO), and La Niña and the cyclical nature of climate in eastern Australia and the Pacific is not really commenced until the mid 1980s when scientists focused more on ENSO and El Niño and La Niña and how they operated together.¹³

Historically, the poor quality of the Parramatta soils was eventually recognised but not typically stated until as late as 1796:

At Sydney, the little ground that was in cultivation belonged to individuals; the whole labour of the convicts employed in clearing ground being exerted at Parramatta, where the soil, though not the best for the purposes of agriculture (according to the opinion of every man who professed any knowledge of farming) was still better than the sand about Sydney, where, to raise even a cabbage after the first crop, manure was absolutely requisite.¹⁴

Added to the poor quality of the soil were the cycles of flood and drought. In 1791 there was little rain but by April 1792 floods damaged huts and destroyed corn crops.

The weather had been for some days extremely bad, heavy storms of wind and rain having generally prevailed from Monday the 9th till Friday the 13th, when fair weather succeeded. At Parramatta the gale had done much damage; several huts which were built in low grounds were rendered almost inaccessible, and the greater part of the wattled huts suffered considerably. A large portion of the cleared ground was laid under water, and such corn as had not been reaped was beaten down.¹⁵

It is likely Sydney and Parramatta was caught up in an La Niña and El Niño cycle between 1788 and 1791. By 1791 the cycle had flipped to 'a very strong El Niño year'.¹⁶ While the documentary records suggest this type of climate action the scientific analysis is not as clear cut. The colonists lack of awareness of climate fluctuation common in colonial New South Wales is consistent with their poor understanding of the climate-related issues which beset the Australian continent since British settlement. Their assumptions that climate in NSW would be like Britain, have a consistent and predictable pattern, when added with

¹³ Wang and Picaut 1987:22.

¹⁴ Collins 1802 (1975):388, 10/03/1796.

¹⁵ Collins (1802 (1975):172.

¹⁶ Gergis, Karoly and Allan 2009:95.

their poor understanding of chemical soil properties, together undermined long-term successful farming before they arrived at the Hawkesbury. This means the labour expended in clearing and tilling during the early years of settlement was only good for providing ground for housing or for growing grass for pasture.

Typically, the issues arising from planting in low Phosphorus soil was blamed on the drought, heat or heavy rain, although the lack of suitable manure was acknowledged by a few with farming experience. It is only with the analysis and interpretation of soil from a sealed environment during the excavation of 3PS archaeology that we gain a new understanding of early public farming in Parramatta (Rose Hill) and the associated difficulties.¹⁷

5.2.3 WATER MANAGEMENT

Throughout Section 3, Phase 1, 2, 3 and 4, there is considerable description of water management in response to site topography, the creekline, the ironbark timber barrier along the creekline, the c.1840 Town Drain and two stages of fill across the site; as well as management of water during occupation of houses and buildings on Lots 30 and 32.

The management of water in historic Parramatta is an ever-present issue as the town is located at the bottom of a major water catchment which collects water from the higher surrounding areas and then flows into the Parramatta River (Figure 5.3). Considerable parts of the historic CBD were flood prone and 3PS particularly so. While there was an awareness historically of the need to manage ground water across Parramatta, as it flows downslope towards the river, the 3PS archaeological excavation where original ground levels were exposed provided new insight into water management issues which were exacerbated at 3PS. Further, 3PS is an unusual site in Parramatta in that there was considerable filling of the site during the 19th century for each new building phase. Typically, archaeological sites in Parramatta have little archaeology stratigraphy, as they are mostly quite flat and have been cut down rather than raised.

5.2.3.1 HISTORIC SETTLEMENT

The Parramatta Square block was not included in the early town layout established by Governor Phillip and surveyor August Alt in June 1790 (Figure 2.1, Figure 2.2). While Macquarie Street was laid out by 1792 the land on either side of the street, to the east of Church Street, was not subdivided (Figure 2.3). The Macquarie Street properties were subdivided by 1804 but were still not built on, neither was the northern or southern side of the street and the land to the south was granted as early as 1799 to D'Arcy Wentworth and Lieutenant John Piper, of the New South Wales Corps (Figure 2.4).¹⁸ By 1814 the southern side of Macquarie Street is open ground to be used for civic purposes, such as fairs and the market place (Figure 2.5). By 1823 the land on either side of the street was leased out and houses were built along Macquarie Street (Figure 2.9, Figure 5.2). There were no structures shown within Wentworth's land to the south and it was presumably used for grazing or similar agricultural activities.

The lack of early housing to the east of Church Street, along both the southern and northern sides of Macquarie Street prior to c.1819 is interesting as it is close to the key parts of the town, St Johns Church and the market place.¹⁹ As part of understanding this site and the need to manage flood-prone ground it is quite likely there were areas of less flood-prone ground they could occupy without settling in this part of the town. It is notable that by

¹⁷ Casey 2009.

¹⁸ Casey & Lowe 2012:56.

¹⁹ Casey & Lowe 2012:47-49,

c.1804 there were already institutions and some private leases to the north of the river. These leases had expanded considerably by 1814 when there were eight city blocks outlined on Governor Macquarie's new street grid to the north of the river. By 1823 there were a lot of leases and houses to the north when there were only seven private lots and four houses on the Parramatta Square Macquarie frontage (Figure 5.2). A lot of leases, many with houses, were subdivided to the west of Church Street by 1823.



Figure 5.2: Stewart's 1823 map of Parramatta showing the extent of subdivision and houses to the west of Church Street and to the north of the river. Other than the few houses south of Macquarie Street, within Parramatta Square (black dashed line), there was no other private occupation to the east of Church and to the south of 3PS (red line) is open vacant ground owned by the Wentworth Estate and other landholders to the east and south of Macquarie Street. The vacant land extends to the south of the 'Great Western Road' and the higher ground of Mays Hill. SARNSW Item No 4907.

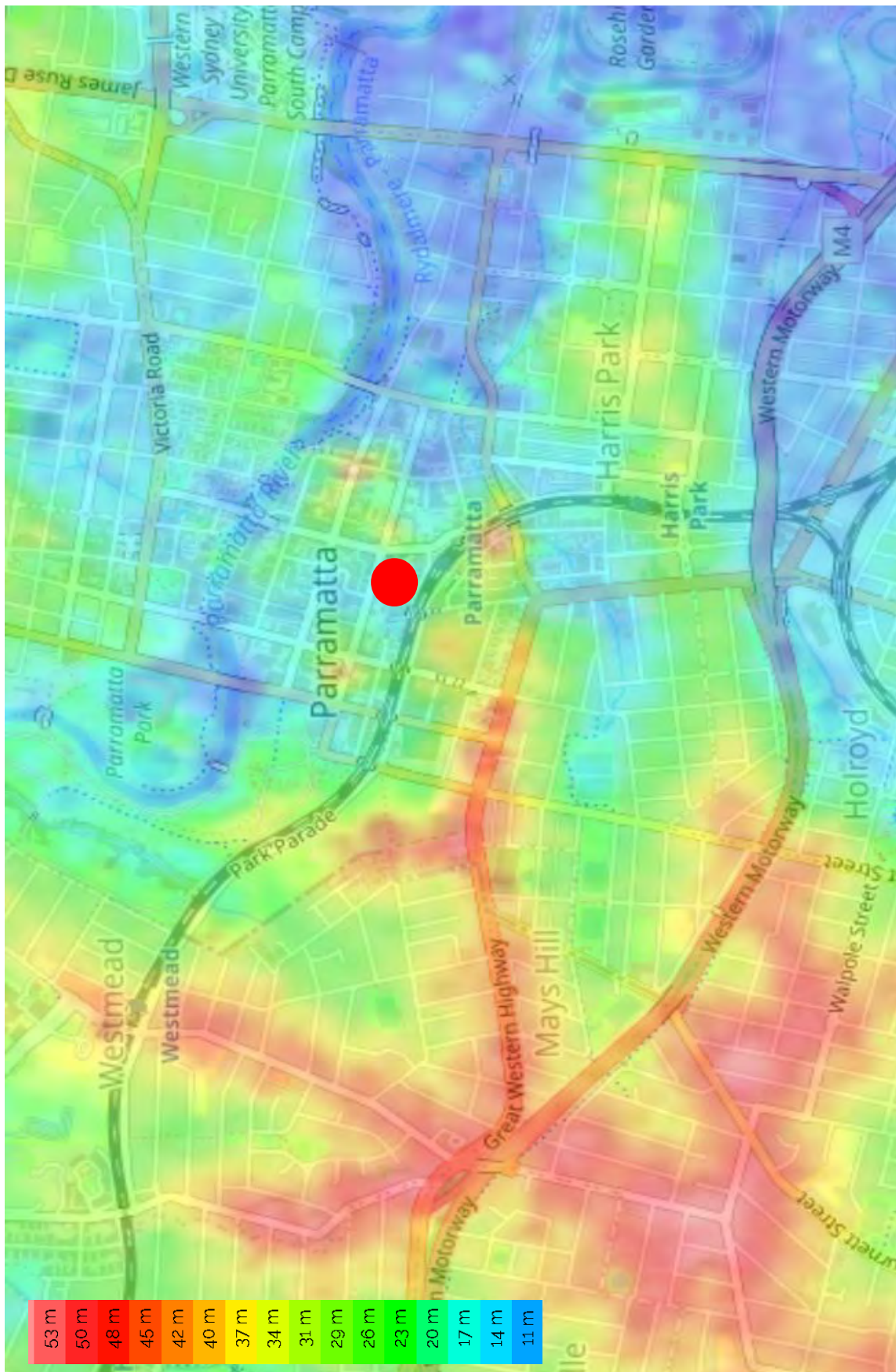


Figure 5.3: Contour map showing the low-lying ground of Parramatta and the Parramatta Square study area. The elevation of the study area is 15 to 16m, falling to the south. <https://en-au.topographic-map.com/maps/jacx/Parramatta/>; © OpenStreetMap contributor, accessed 3/9/2020

The absence of leases or structures within the land to the east of Church Street may be for historical ownership reasons but there is also another factor which plays into the uses of this space which the archaeological evidence around water management at the site provides useful insight. The topographic plan of Parramatta illustrates the ridge lines fanning out from the higher ground to the southwest at Mays Hill (Figure 5.3). The Mays Hill ridgelines extend up to 53m AHD while the modern ground level at 3PS is approximately 10m AHD rising to 12.65 (southeast corner) and 10.6m (southwest corner) (Table 5.2).²⁰ Creating an approximate fall of 43 to 39.4m from the high ground down to the low levels of the modern study area. The use of modern maps showing flood-prone land is not as useful as first glance might suggest as the 1790s ground levels in Parramatta were adjusted during the 19th and 20th centuries, notably within 3PS.

The modern ground surface levels in 2013, prior to redevelopment from 2016, within the site fell gently from the southeast toward the northwest across the site, and was subject to greater variation along the southern extent of the site than the north. Ground levels in the most elevated southeast corner of Parramatta Square occur at approximately 12.65m AHD, with ground levels falling away to toward the west and north respectively (Table 5.2). Ground levels in the vicinity of Church Street, at the west were approximately 10.6m while ground levels in the vicinity of the northern most site boundary facing Macquarie Street occur at approximately 9.9 (west and south) to 10.10m AHD (east).²¹

The catchment for this part of Parramatta is quite large, has a steep incline from the south and has different sources of water (Figure 3.5, Figure 3.6, Figure 5.3, Figure 5.4). There is water from the Parramatta River, from the higher ground at Mays Hill and around the perimeter of 3PS within Parramatta Square and also Clay Cliff Creek to the southeast and within 3PS the historic creekline. Prior to excavation and construction of the railway line in the 1850s the ground water would have flowed directly down to 3PS from all directions from the south and southeast. Once the railway was excavated in the 1850s it would have substantially altered the amount of groundwater flowing across the Parramatta Square site as this was cut off by the raised embankment made for the railway line (Figure 2.15, Figure 2.41).²²

5.2.3.2 AHD ON THE TOP OF SUB SOIL

Figure 3.6, Figure 3.14, Figure 3.15 and Figure 3.16 are contour plans for all of Casey & Lowe projects (2016-17) within Parramatta Square.²³ The contours were produced using Australian Height Datum (AHD) levels in a consistent way across 3PS, 4&6 PS and 8PS during the archaeological programs. Some data was also taken within 5PS and data from 7PS will eventually be included. The contours are based on levels taken on the top of the surviving subsoil (TOSS), typically the A2 horizon, to provide a consistent set of data across the project. Topsoil (A1) does not survive everywhere on these types of sites and can often be extensively modified if it does survive. These contours show the fall on TOSS from 10m at the southwest end of the site and around 11.10m along the southern side falling to the northeast (Table 5.2). In the northern part of the site, near the Town Drain, the TOSS fell down to 8.6m. The contours along Macquarie Street would have been approximately 9.5m falling westwards down to 8.6m. This indicates a general raising of ground levels from c.1822 to 1960s along the northern edge of 3PS along Macquarie Street.

²⁰ The online plan suggests it is 13m while the detailed Craig & Rhodes survey indicates it is 10m.

²¹ Craig & Rhodes survey, 22/02/2013, 025-00, sheets 7, 8.

²² Kass, Liston and McClymont 1996:216, phot shows the embankment.

²³ None of the other projects, 1PS and 5PS appear to have produced this type of data.

Table 5.2: AHD levels on Top of Sub Soil (TOSS) compared with ground levels in 2013.

3PS	Archaeology AHD on TOSS	2013 AHD	Depth of raised ground levels
Northwest, near Macquarie Street	8.60m	10	1.4m
Northeast cnr (Macquarie St), 3PS	9.50	10.10	0.60
Centre of site (southern boundary of 3PS)	10.0	10.40	0.40
Southeast cnr 3PS	10.7	10.75	0.05
South PS: mid 4PS south (Darcy St)	11.0	11.70	0.70
South PS: mid 6PS south (Darcy St)	10	10.90	0.90
Southwest cnr PS	10.0	10.63	0.63
West (Church St) mid 8PS	10.0	10.66	0.66
West, northwest cnr 8PS (Church St)	10.0	10.7	0.70

5.2.3.3 NATURAL DRAINAGE CHANNELS & THEIR MANAGEMENT

Three or four seasonal channels flowed from the southeast down to the Town Drain main creekline (Figure 3.6, Figure 3.14). During excavation in January 2016 the area of House 4, once we had removed the 1880s fills and further when we removed the c.1822 sandy fills, was constantly flooded during heavy rain. This reinforced our understanding of the flood-prone nature of the site in heavy summer rains as the it quickly and repeatedly flooded (Figure 3.3). Groundwater was a key element of this, it quickly flowed down from the two south eastern channels where TOSS levels were exposed across the site. Once it entered the northwest corner there was nowhere for it to flow away.

It was then we realised how low lying the ground was in this area, from where water would have flowed into the Town Drain, it therefore needed to be managed during the historic occupation of the site. Prior to exposing the TOSS there was no way to understand the presence of smaller channels which flowed northwest to the Town Drain creekline (Figure 3.10). This essential requirement, to manage stormwater flows in association with the occupation of the two western houses, started to emerge as a key concern which needed to be managed prior to building on the site by c.1822. Making us question how the people who built the house were able successfully do this and to wonder how damp these two houses were while they were being lived in?

This provided insight into understanding the importance of the two major layers of fill we had removed which were associated with two separate phases of construction for House 4 (c.1822) and House 1 (1888), (Figure 3.10). Each of the fills were used to raise the two houses out of the wet site. Yet House 4 was not just occupied for 10 or 20 years it was occupied for at least 60 years. Plausibly suggesting that House 4 was liveable for most of this time. Further the extent of fill used to raise the site for House 1, 170mm up to 850mm deep, would suggest that by the 1880s House 4 had become unliveable, most likely due to damp conditions on the site which would have weakened the timber weatherboard house. Certainly, unsuitable for its then owner, Harriet Holland to reside within it.

The main channel which flowed southeast through 8PS, 5PS and into the western section of 3PS cut through the site and would have also carried considerable water which flowed northeast towards the river (Figure 3.10, Figure 3.14, Figure 3.16). Another factor which

influenced the amount of groundwater within the site, was the presence of a deep layer of dense impermeable mottled clay (c.2m in depth) which inhibited the movement of water down at depth into the soil profile (Section 3.2.1.3). This layer was buried by younger alluvial sediment. The wetter or poorly drained areas in the low-lying parts of the site had distinctive soil profile features. The soil around these former depressions may have had a darker, thicker topsoil, with a grey or pallid subsoil, with mottling or dark iron/manganese-rich concretions (Figure 3.8). Modern drainage structures can alter the natural pattern of water movement, often drying out areas once frequently waterlogged, and making other previously dry areas wetter. Further the loamy topsoil included clay which increased its water holding capacity, decreasing the speed at which the ground would have dried out.²⁴

The eastern channels were buried under fills used to raise the ground level to build both houses (see below). They would have remained part of the stormwater flow from the east to the western creekline but were never channelised (Figure 3.6, Figure 3.10). The western creekline was managed during the 19th century in two separate ways. The earliest attempt was the use of an ironbark split slab timber barrier along the western side of the creekline (Section 3.4.4; Figure 3.46, Figure 3.47). This barrier appears to be intended as an attempt to both straighten the channel and then retain and redirect water to the east. As the channel which contained the creek was reasonably deep it would not necessarily have overflowed to the east, outside of a major rain/stormwater event. Perhaps it was possible to manage overflowing water during the early period, prior to building the c.1822 house, by this simple barrier. The presence of timber barriers was identified in c.1809 painting (Figure 3.31, Figure 3.32) but not found archaeologically in association with the Town Drain or other creekline prior to excavation at 3PS. This barrier reveals how the creekline was being manipulated or formalised (c.1810) before the stone drain was built, possibly for as much as 20 to 30 years.

The next phase of draining the site is construction of the sandstone box drain c.1840, the Town Drain, appears to be linked into the early brick barrel drain built c.1819/20, possibly on the western side of Smith Street within modern Macquarie Lane which flowed towards the river (Section 3.5.3, Figure 3.45).²⁵ If the Town Drain within the study area is built c.1840 then House 4 was present for approximately 18 years before the Town Drain was built. The artefacts found in association with the construction of the Town Drain date to between 1830 and c.1860, indicating the date of the drain c.1840 is consistent with these artefacts. The construction and continued occupation of House 4 probably required various attempts at managing this ground water.

INTERNAL DRAINAGE

There were a series of drains within Lot 30 and Lot 32 which were designed to carry water away from the buildings (Sections 3.5.3.1, 3.5.3.6). Within Lot 30 a system was built to drain the house which included a channel, a brick sump, a drain with timber capping which probably connected into the Town Drain (Figure 3.75) although this part of the site (western footpath of Leigh Place) was not subject to excavation. This drainage may have been built as early as c.1822

The drainage within Lot 32 did not flow into the Town Drain, or at least through Lot 30, instead it independently drained towards Macquarie Street (Figure 3.91; Section 3.5.3.6). Although there was a drainage channel or ditch at the southern edge of the site which drained to the west possibly emptying into a man-made pond (Section 3.5.3.6.4). It is unknown what it drained into but it may have drained a cesspit in the eastern part of the

²⁴ Lawrie 2019a.

²⁵ Casey & Lowe 2020.

site. The trench ran towards a pond at the southern end of Lot 30 suggesting that the channel may have been draining waste or water from the cesspit into the pond. However, as the pond is only known by 1858 onwards this drainage pattern is not certain. There was no evidence for *in situ* fills or accumulations in the base of the channel that may show water activity.

A network of small sandstock brick and sandstone drains and gutters was found within Lot 32 surrounding a long rectangular outbuilding identified as a stable. These drained downslope from the south to the north towards Macquarie Street. An earlier sandstock brick box drain was also identified predating the stable that curved gently towards Macquarie Street and the eastern boundary of Lot 30 which was probably associated with the house on Lot 32 known to have been built by 1819 or to The White Horse Inn from 1833. Pollen analysis of the drain fill (16611) suggested that the surrounding ground was poorly drained with sedges, ferns and hornworts growing on damp bricks or sediment within the drain.

5.2.3.4 FILLING THE SITE

HOUSE 4

The use of two filling events indicated that when the two houses were built on the western part of 3PS the low lying and flooding nature of the site was understood by the builders and owners of the site. The sandy fill for House 4, the c.1822 cottage, consisted of two thick sand deposits which were not part of the natural soil profile (Section 3.6.3). The sandy fills were laid onto the original topsoil and were associated with the footprint of the first phase of the early cottage and were relatively clean sands and contained few artefacts.

The reasoning behind raising the ground level was because the northern part of Lot 30 was low lying and susceptible to waterlogging due to its closeness to the creekline on Lot 28, to the west and the water carried by the eastern channels. The intention behind raising these would be to raise the house out of the ground water. Clean sandy fills would have provided better drainage than the less permeable waterlogged clays, notably the ancient Pleistocene clays in the southern area. The sand layers were thicker (up to 310mm) at the northern half of the house, below Rooms 1 and 3, getting shallower upslope to the south, following the underlying topography (80mm) and respecting the original landform (Figure 3.101).

HOUSE 1

The c.1822 sand layers remained in place after the demolition of House 4 and were buried beneath further fills (Figure 3.105). Prior to the construction of the terraces in 1883 (House 2 & 3) and Cranbrook (House 1) in 1888, levelling fills were intentionally imported into Lot 30 to raise and level the ground. The northern part of Lot 30, particularly the northwest corner close to the creekline on Lot 28, was low and susceptible to waterlogging. This was seen with the construction of the early 19th-century timber cottage (Phase 4.1) where ground raising and water management were essential. With the original landform sloping to the north and west, the process of raising the levels across the north of the site was repeated when the allotment was redeveloped in the 1880s (Section 3.10).

Bulk levelling fills were a combination of sand, clayey sand and industrial waste material. These fills were only found in the northern half of Lot 30. Many of the bulk fills were relatively clean with few artefacts. As part of the large-scale ground raising event on Lot 30, a number of artefact-rich deposits provide evidence of opportunistic dumping or possibly intentional dumping to fill dips and hollows in the landscape just before the bulk

levelling event (Figure 3.238). Shallower sandy levelling fills were also found beneath House 2 and 3 which were between 200 to 400mm deep (Section 3.11).

Three separate types of levelling fill were used to raise the site beneath House 1. The first levelling fill was a loosely compacted black, gritty, cindery deposit with common charcoal, burnt coke and coal inclusions (clinkers), common slag chunks, glass and ceramic artefacts. The industrial waste fill was dumped quite soon after House 4 was demolished in 1884. Its sandy gritty nature was also good for drainage and was the first of three levelling fills used to prepare and raise the ground for the construction of Cranbrook. It was deepest at the northern end where it extended right up to Macquarie Street, levelling out the sloping ground underneath. Towards the west it extended as far as the property boundary with Lot 28 and eastwards just crossing the western boundary with the terraces where it was only evident in pits or depressions. It phased out towards the south, becoming patchier in places, just south of the early house (House 4). The fill was generally 70-200mm deep, filling all the dips between the demolition rubble and was predominantly exposed in section within test trenches and wall trenches. The second levelling fill was a layer of sandy material from 100-200mm thick which was only found at the northeast end of the site.

The lower c.1884 sand and industrial waste fills were buried by bulk clay fills with some lenses of red sand with rubbish dumps. The clay layer covered the footprint of House 4, west to the boundary with Lot 28 and to the southern rear of Lot 30. The clay varied in depth from 170-350mm in the south up 560-850mm in the north end of the site. This raised the ground level across the site but would also have impeded the rising of ground water above the clay barrier of fill under House 1. Further, the brick footings of House 1 were quite deep and cut through the fills. By raising the ground level at the lowest point on the site it would leave it less vulnerable to flooding and waterlogging and ensure the stability of the substantial brick footings of the houses. Among the rubbish dumps, within the clay fill, were a large number of glass beverage bottles, the latest manufacturing dates were Newling and Walker aerated water bottles (1876-1896) and Lamont patent stoppers and bottles (1876-1900). A number of the bottle dumps appear to be within the deeper parts of the site, near the drainage lines (Figure 3.249).

5.2.3.5 PONDS

There were two ponds on the 1854 historic plan along the southern slope of 3PS (Figure 2.15, Figure 3.10, Figure 3.14, Figure 3.22, Figure 3.149, Figure 3.150). The ponds and the surrounding clay are discussed in Sections 3.2.4.3 and 3.7.3.6. They were investigated to see if they were naturally formed or possibly man-made, with the latter being the final conclusion. The first pond was to the east on the southern boundary behind House 4 with the second pond to the west at the southern boundary of Lot 28 (Section 3.7.4; Figure 3.186, Figure 3.187, Figure 3.188, Figure 3.189). Both ponds appear to have had a similar function within the landscape. The deepest part of the western pond was c.1.2m below TOSS at 8.03m, while the depth of the eastern pond was slightly shallower at 8.63m. Both ponds had a floor of Pleistocene clays sloping down to the south where they cut through the subsoils and underlying clays. The sloping section indicates the floor of these ponds was cut into the clay, most likely to make the pond large enough to collect a sufficient quantity of water flowing overland from the south and west. The footprint of the ponds taken from the 1858 plan and overlaid onto the archaeological plans suggests that these two ponds would have captured the water at the southern boundary of Lot 30, the western pond also extended into Wentworth's Estate.

As the base of the ponds was formed by the Pleistocene clays the water would have sat in these ponds and could be used for stock, water gardens etc. We were unable to investigate the ponds further in PS4&6 due to the presence of asbestos contamination in this area.

The placement of the two ponds on the southern boundary of these lots and partly within the Wentworth Estate indicates they were excavated after these two boundaries were established by 1823 (Figure 3.187). This was deliberate locating on this boundary to capture the upslope water which was then reused for animals and gardening.

5.2.3.6 CONCLUSION

In summary it is likely that the site of 3PS and the larger Parramatta Square was not subdivided and built on before c.1822 due to the frequent inundation of ground water from the south, west and east, which would have collected within the lower ground of 3PS. While the site of 3PS was used for early public farming, as evidenced by hoe marks, it would have been reasonably successful during the first few years even though there was considerable groundwater. The early likelihood of an El Niño weather pattern would have reduced the amount of water flowing into the area and make it more useful. The higher density of clay would also have made the alluvial deposits hold in the ground water better in dryer weather.

The persistent attempt to manage water showed that channelling water was understood and could be managed. The sandstone box-drain construction c.1840, was approximately 18 years after the House 4 was built. This suggests water was able to be managed during this period but needed to be better controlled by c.1840. Some of the sections of this late convict-built drain is thought to have been a civic construction, but the segments within 8PS suggest a different pattern, some sections were actually being built between two houses and had some differences in construction to the 3PS section. As the drain crossed over roads and presumably connected into the earlier c.1820 brick barrel drain, this supports it being a civic construction rather than private construction. This requires further research and analysis.

The use of fills to raise the ground levels provides certainty that the builders knew the ground water was an issue and neither house could be erected without this being adequately managed. An aspect of the site which this fill perhaps sheds light on was how low the ground was near Macquarie Street. When Cranbrook was built in 1888 the northwest corner of the site was raised by c.1.40m. This suggests the raising to this level served another function. Most likely a new road was made at a similar time. We know the creekline and the drain crossed over Macquarie Street which would also have been beneath the modern ground level. Yet the capping stones of the drain are very close c.300mm beneath the modern road surfaces. It may mean that the roadway in Macquarie Street had to be remade to the east of the drain which also meant the construction of House 1 had to meet the level of the existing road or a newly made road.



Figure 5.4: Parramatta River Catchment and sub-catchment of Parramatta River (yellow). Land to the south would have drained into the low-lying ground of Parramatta Square. A seasonal creekline crossed diagonally southwest from 8PS to northwest of 3PS (red dot) and eventually to the river. Parramatta River Catchment Group.

5.3 CULTURAL CONTACT

- Is there evidence for the Parramatta Fairs or the Annual Feasts held for Aboriginal people? If so, what does this information tell us about:
 - the interaction between Aboriginal and colonial society, particularly at the Annual Feasts?
 - the nature of colonial society as expressed at the half-yearly Parramatta Fairs?
- Evidence for Aboriginal and British peoples' activities and contact during early settlement.

3PS contains little evidence relating to this research question.

5.3.1 EVIDENCE FOR THE PARRAMATTA FAIRS

Very little evidence was found for this activity.

- Discovery of gun shot and flints within the topsoil may represent loss of artefacts by people visiting the site for the fairs or possibly hunting across what was mostly open ground until c.1822.

The use of the land within 3PS for the fairs is an odd choice due to our understanding of the flood prone nature of this low-lying site. It is more likely the fairs were held on the higher southern part of 3PS and probably into the south area within 4PS rather than close to the drainage line. There is limited evidence which we can link into use pre-dating the c.1822 house.

A small number of artefacts made prior to the 1820s were found in the modified topsoils or reburied in early fills. These included coins, buttons, and fragments of ceramic vessels, glass bottles and smoking pipes that perhaps had been dropped by stall holders or visitors to the fairs. Gunflints and numerous lead shot from different flintlock guns were also recovered. Due to their colour and size, they would be easily lost on trampled ground. They were possibly sold at the fair, lost during cleaning of weapons or used in target practice. However, similar shot, not gunflints, were found in large numbers inside the rooms of the c.1822 cottage on Lot 30, along with evidence for musketball casting.

5.3.2 EVIDENCE FOR CULTURAL CONTACT

The historical excavation found little evidence for cultural contact. The Aboriginal report for 3PS does not mention any contact-related archaeology being identified. But there appears to be contact in the higher ground to the south in 4&6PS where an Aboriginal hearth was found dating to c.1830.²⁶

²⁶ Comber Consulting 2018, 2019: 32.

5.4 LANDSCAPE OF COLONIAL PARRAMATTA

- How does the evidence from this site feed into the current perceptions of the convict-period landscape of Parramatta? Other issues to be considered are resistance to the way in which control manifested itself in the landscape and in daily life. Issues of power are central to the expression of landscapes of control.
- Evidence for the pre-European landscape, especially in relation to the placement of the drain, the presumed swampy ground in this area, the marked ponds on the 1858 map within the rear of this site. How was this landscape modified to make it useable? (See Section 5.2.3 for discussion on this).
- Nature and effect of modification of the pre-European landscape.
- Remaking of the landscape, the social, cultural and political context and how it was manifest in this landscape.²⁷ Are many of the same issues influencing the way in which the landscape was formed similar to those which affected the Sydney Domain? This is much more likely due to the relationship of St John's church to the site and how the Macquarie's remade the colonial landscape.
- Order and amenity; was the layout of houses and other structures the result of cultural and social practices? What was the role of these practices in changing the landscape and modifying people's behaviour?²⁸
- Was the pond at the southern side infilled and was it a short-term communal infilling or site-specific infilling? Does it contain quantities of artefacts associated with the lives of the surrounding residents?

As discussed under Water Management above (Section 5.2.3)

5.4.1 LANDSCAPE

- How does the evidence from this site feed into the current perceptions of the convict-period landscape of Parramatta?

This site is outside of the convict settlement (1788-1790) and the layout of the township (1790-c.1822). This area was part of the original public farming as evidenced by the presence of hoe marks gouged into the A2 horizon (Section 3.4.3.4.1). As discussed in Section 5.2.3, the flood-prone nature of the site meant once the initial farming use was discontinued it probably became overgrown with grass and used for grazing. This is represented by the 1799 leases to Wentworth and Piper at the edge of the southern boundary. The decision or accident of not alienating (subdividing into leases pre-c.1819/22) this land is more likely due to its water-logged nature, the overflow of the early channel and the collection of stormwaters during heavy rain.

The finding at 3PS of the ironbark timber barrier in the creekline, probably used to straighten the creek to manage and redirect water, is the first time the ironbark timber barrier has been identified as part of early water management in c.1810 Parramatta. The evidence of the timber barrier offers new insight into early practices in the use of barriers in relation to managing creeklines. Aspects of Evans' c.1809 painting can be interpreted through this barrier, in association with the 1804 plan (Figure 3.31, Figure 3.32, Figure 3.44). Where creek lines are indicated on the c.1804 plan (Figure 3.44), diagonal lines are shown on the c.1809 painting (Figure 3.32). As this was one of the earlier convict hut sites the need to redirect and manage the water flowing through the two former creeklines would have been essential. Studying the timber barrier at 3PS, the c.1809 painting and the plan of 1804 survey, these diagonal lines are considered to represent an early attempt to manage this stormwater at these sites. The diagonal lines on Evans painting have long

²⁷ This general topic was the focus of Mary Casey's PhD thesis but in relation to the Sydney Domain (Casey 2002).

²⁸ Some of these issues were the focus of analysis in Casey 2002.

resisted a definitive interpretation as they were not property boundaries, which were then still based on the convict hut boundaries, and appear to be almost cutting off the frontage of the huts. In one case there is almost a ponding effect at the front of a lot created by a V-shaped fence (Figure 3.32). If these non-boundary lines are shorter timber barriers rather than fences, intended as attempts to manage stormwater during heavy flows this makes more sense.



Figure 5.5: The second view by Brambila in April 1793 showing the layout of the township and the presence of ditches. See detail below. This copy is in the Spanish Naval Museum.



Figure 5.6: Detail of second Brambila drawing of Parramatta in 1793, showing ditches running east-west from Church Street, others flow from the south into these two long ditches. The water flowing to the west appear to drain into deeper ditches or channels associated with the original creeklines on Evans drawing and then flow to the north. Spanish Naval Museum.

During a visit by the Malaspina expedition in April 1793, on behalf of the Spanish navy and the Spanish king, Italian artist Brambila produced two versions of a drawing of Parramatta looking eastwards over the town with its newly built convict huts (Figure 5.5, Figure 5.6, Figure 5.7, Figure 5.8). One of the drawings was taken back to Spain and the other version was sent to King George III as a gift from the Spanish expedition.

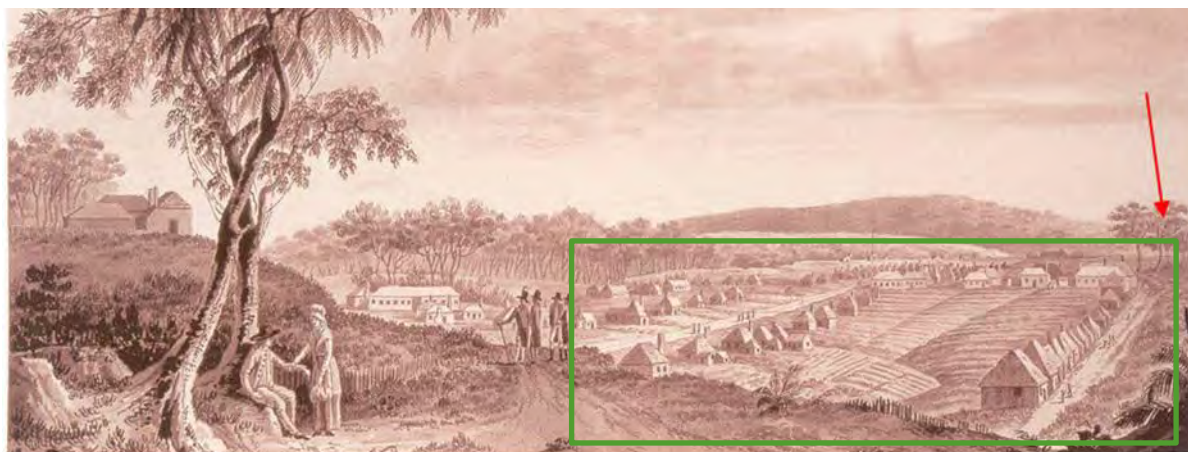


Figure 5.7: Fernando Brambila's view of George Street, looking east, showing convict huts aligned along George Street (middle ground) with Government House (middle left) at the western end, 1793. The convict huts are also aligned along the northern side of Macquarie Street (right) while there are none to the south. The approximate location of the study area is arrowed. Brambila, 1793, British Library, MAPS T.TOP.124 SUPP F44.

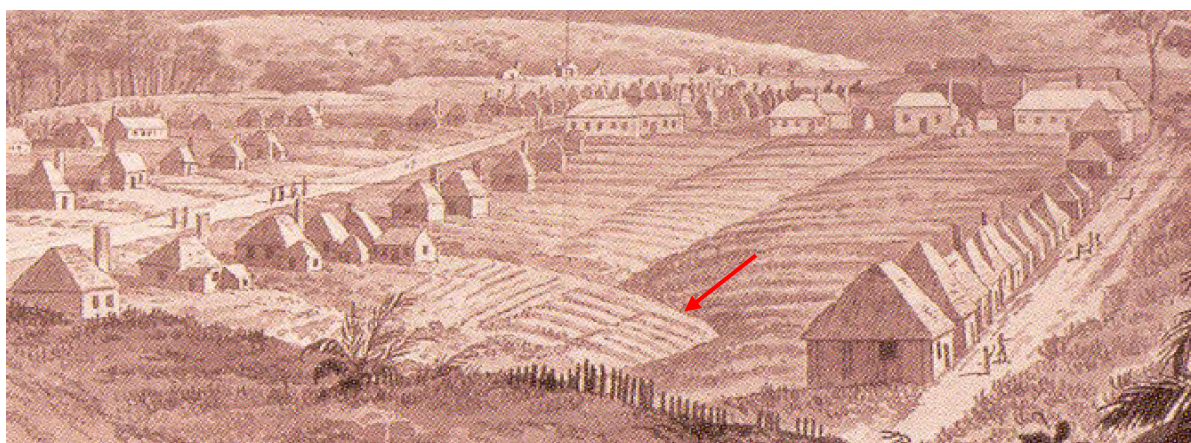


Figure 5.8: This detail shows a deeper channel into which the west-flowing ditches emptied stormwater. This deeper channel was probably the western creekline shown on the 1792 plan (Figure 2.3) and the 1804 plan (Figure 3.44). Brambila, 1793, British Library, MAPS T.TOP.124 SUPP F44.

When the evidence for the timber barrier is considered in relation to the April 1793 drawings, together they suggest the use of these ditches to manage water flow notably from Church Street westwards into the creekline close to the two lots on the southern side of George Street (Figure 5.8 red arrow; also Figure 2.1, Figure 3.31, Figure 3.32, Figure 3.44), these ditches may have operated as channels to move water around the public farming lands as well as to drain them into the two north-south natural drainage lines on the southern side of George Street (Figure 3.44).

This new understanding provides further opportunities for interpretation of the early images of Parramatta. It is likely the 1793 drawings were actually showing the changes to the landscape as it shifted from the early use for public farming and then to how the land was being managed from July 1790 as convict huts were built and property boundaries subdivided the agricultural fields. The two Brambila drawings (Figure 5.5 to Figure 5.8) show the early changes to the landscape from the public farm with the placement of convict huts but there were no boundary fences representing the 100 feet by 200 feet lots

as established in Phillip's and Alt's layout of the new town. It is basically showing the farming landscape with huts set out along the newly laid out streets. These two drawings were made three years and three months after the layout of the town (June 1790) and four months after Governor Phillip left the colony (December 1792), the focus would have been on building huts to accommodate convicts rather than on changing the landscape from a farm into a townscape. By c.1809 Evan's painting of the landscape, the last period the huts were used to accommodate convicts was quite different to the 1793 drawings (Figure 3.31). There are fencelines, surrounding properties, some of which had been leased out by 1804 to former convicts and free settlers, while the nature of the resident residing in the other huts is uncertain, they may even have been empty (Figure 3.44). There is no indication on the Brambila drawing of the laneway intended to run parallel between the George (High) and Macquarie (South) Street frontage laid out on the 1792 plan (Figure 2.3) nor are they illustrated on the 1804 plan other than as a fenceline. The key consistent element is the planting beds or hoed rows for crops, easily misinterpreted as plough lines due to the way they are artistically represented. In summary this new interpretation is that the 1793 drawings show the landscape of the public farm evolved with additions of convict huts and remains of the drainage ditches used to manage water in the farming landscape. By c.1809 the convict farming landscape was replaced with bounded landscape defined by fences, with diagonal timber barriers to manage creeklines, replacing earlier drainage ditches and with riparian vegetation regrowing along creeklines.

- **Evidence for the pre-European landscape, especially in relation to the placement of the drain, the presumed swampy ground in this area, the marked ponds on the 1858 map within the rear of this site. How was this landscape modified to make it useable? (See Section 5.2.3 for discussion on this).**

The Town Drain was located within a former creekline, the drain channelised this creekline allowing for management of the stormwater. This was discussed in detail in Section 5.2.3. Further, the ponds marked on the 1858 map are man-made and are also an attempt to capture water within a large pit, the base of which was within impermeable clays. The water would not have run away into the site and could be used for animals and to water gardens. These were backfilled and buried by 1884-88 when the levelling fill was laid down to cover the western part of the site to build Cranbrook.

- **Nature and effect of modification of the pre-European landscape. Nature and effect of modification of the pre-European landscape.**

This is discussed in detail in Section 5.2.3.

- **Remaking of the landscape, the social, cultural and political context and how it was manifest in this landscape.²⁹ Are many of the same issues influencing the way in which the landscape was formed similar to those which affected the Sydney Domain? This is much more likely due to the relationship of St John's church to the site and how the Macquarie's remade the colonial landscape.**

The two phases of housing and what this means in terms of social and class changes is discussed in Section 5.6.

²⁹ This general topic was the focus of Mary Casey's PhD thesis but in relation to the Sydney Domain (Casey 2002).

- **Order and amenity; was the layout of houses and other structures the result of cultural and social practices? What was the role of these practices in changing the landscape and modifying people's behaviour?**³⁰

The c.1822 house was probably consistent with other houses on either side of Macquarie Street. It had four rooms and a kitchen extension. There was considerable attempt to improve the amenity of the site by managing the water flowing from the east and south. This need was inspired by the early attempts to raise the level of the site above ground by laying down sand before building House 4. By the 1850s it had neat gardens. There were two attempts to channelise the water in the creekline but there was still a lot of issues associated with ground water which required considerable infilling to build House 1 and make it safe from the ground water running through the site. It must have succeeded to a certain extent as House 4 was not demolished until c.1883-4.

The three houses built by Harriet Holland within 3PS were consistent with the developing middle-class nature of Parramatta and the subdivision of the surrounding estates (see Section 5.6 for a detailed discussion). The sheer size of House 1 meant it provided a strong contrast to the Star Inn where Harriet and John had lived for more than 30 years with their three surviving children. Further the erection of the two terraces is testimony to Harriet's and John's success as commercial operators of the inn who were able to acquire land and housing to make themselves financially successful. This is discussed further in Section 5.6.

- **Was the pond at the southern side infilled and was it a short-term communal infilling or site-specific infilling? Does it contain quantities of artefacts associated with the lives of the surrounding residents?**

Two ponds were located in the southern portion of the 3PS study area. One was located at the rear of Lot 1 (181) and the other at the rear of Lot 30. Both ponds extended south of 3PS limit of excavation, and both were investigated via machine test trenches. The ceramics represent a sample of the contents of the ponds.

The pond in Lot 1 (181) was found to contain a single lead-glaze lid sherd. Little can be said other than that it was probably made in Australia or imported from Britain and was used to store food. The absence of a greater number of ceramics indicates the pond was not used as a rubbish dump. This is notable as disused holes and hollows were often favoured as an opportunistic place to dispose of unwanted rubbish. The absence of rubbish therefore suggests that the pond at the rear of Lot 1 (181) was backfilled with imported material, and that this was a fairly rapid process. This backfilling may have coincided with the 1870s rebuilding/reconfiguration of the house on Lot 27 (Wyverne), which extended into the eastern boundary of Lot 28/1 (181).

Forty-seven ceramics were found in the pond at the rear of Lot 30. The high number of artefacts suggests rubbish was used to backfill this pond. This is supported by the prevalence of large ceramic sherds characteristic of primary rubbish fills. It is therefore probable that the pond was filled with rubbish from Lot 30. Additionally, the ceramic assemblage contained a significant proportion of vessels associated with the service of food. These items comprised more than a quarter of the assemblage (27.7%). This is consistent with a clean out event, where items no longer considered useful or fashionable were discarded. The prevalence of serving vessels also suggests that the rubbish was discarded as a single event or over a short period of time and came from a single source.

The latest *TPQ* of the ceramics was c.1860, which suggests that the rubbish fill was associated with the later occupants of House 4, rather than Cranbrook (House 1). It also

³⁰ Some of these issues were the focus of analysis in Casey 2002.

suggests that the backfill post-dates the death of owner/occupant George Cavill, who died in 1863 when the pond was probably still in use. The cottage was owned by the Holland family from this time; however, it was leased out to tenants. Eleazar Little and his family occupied the house from c.1863 to 1874, and from 1875 to 1877 it was leased to Benjamin Selkild. Finally, it was rented to Henry Burton in 1882-3, before Harriet Holland had it demolished in 1884. It is not possible to tell specifically who the rubbish was associated with based on the ceramics alone, however the fill is unlikely to relate to the Little family, as the pond was still relatively new during their occupancy. It is more likely to relate to clean out at the end of Burton's tenancy, or perhaps rubbish brought to the site by Harriet Holland.

5.5 CONVICT AND FREE LIFE IN COLONIAL PARRAMATTA³¹

- What differences were there between the lives of free and forced or institutionalised settlers?
- How did the deprivations of a frontier life alter the ways in which free people lived in early colonial Parramatta?
- Local-pottery manufacturing, is typically found on early Parramatta sites where it is both glazed and unglazed. Was the pottery of Thomas Ball found? What does this pottery suggest about the use of his pottery and the condition in which it was sold?³²
- Evidence associated with the occupation of this site by known individuals may reveal interesting insights into family patterns and behaviour.
- Consumption and commerce in colonial Parramatta:
 - How does it link into issues associated with local, regional and global economies?
 - What does it tell us about cultural and social practices in colonial Parramatta, relating to lifeways, diet and other issues associated with consumption?
 - How do patterns of consumption further our understanding of how early residents of Parramatta used material culture in the construction of personal and group identity, including ethnic identity?
 - Evidence for evolving patterns of consumption and commerce from early colonial period into the early 20th century.

5.5.1 LIVES OF THE FREE & UNFREE

- What differences were there between the lives of free and unfree or institutionalised settlers?
- How did the deprivations of a frontier life alter the ways in which free people lived in early colonial Parramatta?

Aspects of this research questions have been discussed in Sections 5.2 and 5.6.

The 3PS site was not occupied by convicts and was not a specific part of the convict town laid out in July 1790. Many of the early huts on George Street became houses for emancipated convicts and freed persons from c.1809. Following the cessation of public farming the vacant ground of 3PS was used for a short period as the site of bi-annual fairs, mainly to sell animals. House 4, the c.1822 house was 60 per cent larger than a convict hut and had four rooms with a later kitchen extension (Table 5.7). It was weatherboard rather than wattle and daub and was built with some ironbark timbers which still survived into

³¹ I have drawn on some of the more relevant questions in PHALMS 2000 Figure 6.4, p. 167-175.

³² This question was updated to reflect 2020 questions on Thomas Ball rather than ones from 2013.

2016, highly unusual. Obviously 10 or more convicts were not easily squeezed into two rooms.

This question is addressed below (Section 5.6) and will be considered further in the 8PS archaeological report.

5.5.2 LOCALLY-MADE POTTERY

- **Local-pottery manufacturing, is typically found on early Parramatta sites where it is both glazed and unglazed. Was the pottery of Thomas Ball found? What does this pottery suggest about the use of his pottery and the condition in which it was sold?**³³

The ceramic assemblage from 3PS included a small component of locally-made pottery: lead glazed, slipped and self-slipped vessels (419 fragments, 163 MIC), (Table 4.2 in Ceramics Report, Vol. 3, Sec. 8.1). The majority of local items are coarse unglazed red earthenwares identified as terracotta garden pots (69 MIC, 43% of the potential local items). These cannot be attributed to any specific manufacturer either in Australia or overseas although it is possible, they were made in Sydney in association with local brick production from the early days of the settlement.

Many of the lead glazed and slipped ceramics, however, have been identified as the products of Thomas Ball's Pottery in operation from c.1801–1823 in the Brickfields area of Sydney (49 MIC, 30% of these vessels). A few items can be attributed to Jonathon Leak, another former convict potter, dating from c.1821–1829 (3 MIC), with a further 14 per cent of the vessels most likely made by Ball, Leak, or other early potters yet to be identified with certainty, such as John Moreton or David Hayes (23 MIC). Also included with this group are potentially early glazed earthenwares where provenance could not be determined with certainty (19 MIC, 11.6%). They are either new locally-made glazed wares that are yet to be identified in the repertoire of early local potters or late 18th century UK imports that are noteworthy as they are not commonly found in Australian contexts.³⁴

Key findings for this category are:

- A near-complete milk pan, identified as a product of Thomas Ball (Figure 5.9). The large, low-sided vessel has a brown-glazed interior and shows signs of various manufacturing faults (17568/#47676, 50–75% preserved; Figure 5.10, Figure 5.11).
- A partial brown lead-glazed chamber pot, possibly made by Thomas Ball or another local potter which also shows faults in the glaze (16286/#48296, 10–25% preserved).
- A yellow lead-glazed cup/bowl that would have been used for tea or tableware, that may have been made by either Thomas Ball or Jonathon Leak (16416/#49095, 10–25%).
- A mottled dark brown glazed chamber pot/bowl of unknown manufacture, either UK or Australia (16458/#49034, 10–25%; same as 16408/#48852 and 16248/#46839).
- An unglazed dish with decorative banding around the exterior rim, also of unknown provenance (16737/#50219, 25–50%; same as 16931/#50419).
- A complete unglazed small condiment or salt dish, crudely made, which is unlikely to have been imported (16936/#50426).
- A near-complete brown lead-glazed red earthenware lid made locally or imported (17219/#47203, 50–75%).

³³ This question was updated to reflect 2020 questions on Thomas Ball rather than ones from 2013.

³⁴ Taken from Ceramics Report, Vol 3: Section 8.1: tion 4.2.



Figure 5.9: Milk pan 18568/#47676. Gallery2, scale 100mm.



Figure 5.10: Detail of manufacturing fault of remaining kiln furniture and pooling glaze on underside of base, on milk pan 17568/#47676. B McCall.



Figure 5.11: Detail of manufacturing fault of iron spots in the glaze, on milk pan 17568/#47676. B McCall.

The locally-made earthenwares at this site provide some insight into the early use of ceramics in the colony. In addition to the vessel fragments made by convict potter Thomas Ball (c.1801-1823), we were able to identify examples of Jonathon Leak's pottery including food preparation and tableware vessels that are less common than the commercial stoneware bottles for which he is better known.

The presence of other yellow/green speckled glazed local wares that do not appear among Ball's repertoire indicates other early potters were making very similar items. Although the black glazed and mottled wares form a small component of the ceramic assemblage their presence is noteworthy as early wares such as these are not commonly identified on

Australian archaeological sites.³⁵ The vessels indicate the potential for these items to be found elsewhere and highlight the possible eclectic nature of ceramic assemblages from the early decades of settlement presumably driven by the demand for household goods and their availability.

The potential long period of use of the milk pan dating from c.1801-1823 and the range of faults found on this and other Thomas Ball pottery demonstrate the value of functioning utilitarian items. Regardless of the faults – such as glaze discolouration, spots from poorly mixed ingredients, vessel distortion, pooled glaze with remnants of kiln furniture still adhering – the vessel must have been a valuable item of household equipment which appears to have been in use for a considerable period.

Locally-made ceramics provided the residents of Sydney and Parramatta with an alternative supply of ceramic items which were used alongside better quality imported serving and tablewares during the early stages of settlement. These vessels must have been valued for their utility and availability but appear to have become obsolete once more reliable imports became available from the 1830s onwards.

5.5.3 CONSUMPTION & COMMERCE

- Evidence associated with the occupation of this site by known individuals may reveal interesting insights into family patterns and behaviour.
- Consumption and commerce in colonial Parramatta:
 - How does it link into issues associated with local, regional and global economies?
 - What does it tell us about cultural and social practices in colonial Parramatta, relating to lifeways, diet and other issues associated with consumption?
 - How do patterns of consumption further our understanding of how early residents of Parramatta used material culture in the construction of personal and group identity, including ethnic identity?

Some of the evidence for evolving patterns of consumption and commerce from early colonial period into the early 20th century are discussed below.

5.5.3.1 BANQUET PATTERN & HARRIET HOLLAND

One of the most commonly reoccurring patterns was ‘Banquet’ pattern in brown transfer print on cream coloured glaze (Figure 5.12). It was made by Wedgwood from 1877 onwards and features a series of different food or animal-themed central scenes with corresponding moralising phrases, and a border of cherubs, scrolls and animals. Phrases included maxims such as ‘EAT TO LIVE / NOT LIVE TO EAT’. Sixteen items decorated in ‘Banquet’ pattern were identified, including three bowls with rims of around 160mm in diameter, one bowl 240mm in diameter, a coffee can, four tea cups, two saucers of different sizes, two plates, and three objects of unidentified shape. The pattern therefore formed part of a tea and coffee set, with matching elements of tableware. ‘Banquet’ pattern was also produced as a dinner service set, so it is possible that the tableware was part of a full dinner service.

This is the first site in 28 years of excavation that we are aware of anyone finding a matching set of Wedgwood ceramics. Wedgwood marks are relatively rare, and when they occur are typically on early creamware or pearlware. Therefore, having a labelled known pattern is quite surprising let alone a matching set. It is the eighth most common pattern found across the site but the only one of the ceramics patterns we have never come across before (Figure 5.12).

³⁵ Brooks 2005:28.

The majority of the 'Banquet' fragments were recovered from Lot 30 (MIC 14). Areas A and A South contained 11 items, while Area B contained four. One other example was present in Area C in a rubbish pit on the boundary of Lot 30 and Lot 32 (this boundary shifted during the 19th century). The distribution of the deposits with 'Banquet' sherds was across all of Lot 30 including within the backfill (16196) of the House 2 cesspit and within levelling fills and bottle dumps, as well as the backfill (16737) of a rubbish pit in Lot 32, close to the boundary fence (Table 5.3).

Apart from historic topsoil (16318) which was present from Phase 3 but constantly modified up to the 1880s, the earliest phase containing 'Banquet' pattern was Phase 4.3 (16198) a post-machining clean-up below the 1880s bulk levelling fill. The artefacts from this type of cleaning layer could as easily have been disturbed from the above Phase 5.1 strata. Otherwise, the majority of sherds were found within Phase 5.1 levelling fills (16198, 16127, 16192) and a rubbish pit fill (16205) close to the rear of House 1. These fills are all to do with raising and levelling the land before the construction of Cranbrook (House 1) between 1884 and 1888, indicating that the set was in use and some pieces broken before this time. The latest deposition of a fragment was in the backfill of a cesspit associated with House 2 (16915) which probably has an end date of c.1907 when the sewer was introduced to Parramatta and the cesspit backfilled. As the Banquet pattern was deposited in the intermediary period of raising the ground level, after the demolition of House 4 and prior to the construction of House 1 it is unlikely to have been associated with the occupation of either house (Table 5.3)

The manufacturing dates of this pattern also indicates the disposal of these expensive and high-end ceramics within four to years of the commencement of manufacture (1877 and 1879) of this pattern and the deposition c.1884, a very short period of seven to eight years before they were broken and then disposed of in the levelling fills. It is possible the different vessels were not all broken at the same time, certainly some of them may have been disposed of at later stages in the house. This is unusual and may suggest an accident or event which led to the breakage of the Banquet items, perhaps the dropping of a tray or the collapse of a shelf or the knocking over of a table.

Although the deposition pattern suggests that the 'Banquet' pattern set was associated with Cranbrook (House 1), it could also have belonged to tenants of House 4, rather than the Holland family, who did not live at the site until after the construction of Cranbrook in 1888. Henry Burton is the only tenant known to have occupied House 4 between the introduction of 'Banquet' pattern in 1877, and the demolition of the House in 1884.

However, as other items in the levelling fills, introduced to raise the site prior to the construction of Cranbrook, such as the large quantity of glass and stoneware bottles from the bottle dump and the cup marked 'Sarah', probably originated from the Star Inn and the Holland family, the 'Banquet' pattern set may also have been part of a set owned by Harriet Holland. This relationship is supported by the presence of 17 fragments or 4 MIC items found in association with two separate rubbish dumps and two areas of levelling fill. We have a high level of confidence that the bottles came from the Star Inn due to the sheer quantity of bottles, of which there were 519, of which 426 were identified as containing beverages. These are thought to be dumped after being used at the Star Inn to provide aerated soft drinks and water to customers, as well as alcohol. Dump contexts 16353 and 16354 had 453 bottles of which 382 held beverages and levelling fill 16127 had 66 bottles of which 44 were for beverages, making a total of 519 bottles.

The main dumps relevant to Banquet-pattern ceramics were 16353 and 16354 (Table 5.3). The bottle dump deposit (16353) contained 453 MIC, of which 405 are glass bottles,

predominantly (90%) commercial beverage container (348MIC). More than half of the beverage bottles are for aerated water (56%) and a majority of these bottles are from Parramatta aerated water firms, including Newling & Walker (110MIC), Hume & Pegrum (5MIC) and C & J Summons (9MIC). Other beverage bottles are alcohol bottles (136MIC), cordial (1MIC) and unspecified beverage (17MIC). There are also 38 bottle stoppers that are mostly hard rubber (ebonite) Lamont patent type stoppers (32). These findings are consistent with the dumping of broken/cracked bottles from an inn which could not be reused or recycled.³⁶

The presence of a matching set of Wedgwood pattern on the site reveals a considerable level of affluence, such as that of the owner of this and other properties and hotelier (Holland) rather than the tenant of an old and modest cottage (Burton). Also, the fill was being dumped onto the site during the ownership of Harriet Holland following the demolition of House 4, and it is most likely that the artefacts thrown into the fills, during opportunistic dumping, are associated with the Holland family than any other occupants.

The Banquet pattern was quite different to the main sets teawares wares found in association with Houses 2, 3 and 4.



Figure 5.12: 'Banquet' pattern, by Wedgwood. Multiple vessels from Area A. Top row, left to right: coffee can 16205/#46591 (four fragments), teacup 16127/#45939 (two fragments). Second row on the left: coffee can 16198/#46519 (two fragments). Bottom row, left to right: plate 16192/#46441 (1 fragment); saucer 16198/#46521 (1 fragment), bowl 16205/#46592 (5 fragments). Right: bowl (16205/#46593 & 16198/#46520).

³⁶ Harris 2019, Vol. 3, Section 8.2: Glass Report.

Table 5.3: Banquet pattern distribution. Ochre indicates fragments with conjoins and levelling fills with rubbish dumps are shaded in grey

Context #	Catalogue #	Area	Description	Phase	MIC	# Sherds
16101	45802	A	General clean-up	5.1	1	1 x cup, rim, body sherd
16127	45939	A	Bulk clay levelling fill for Cranbrook	5.1	1	11 x cup, rim, body, handle, base sherd -
16192	46441	A	Sandy levelling fill for Cranbrook	5.1	1	1 x plate, rim sherd
16198	46519	A	Clean-up after machining off Cranbrook levelling fills.	5.1 or 4.3	1	2 x coffee can, rim, body, base sherds. (conjoin #46591) 2 x rim, body sherds bowl 1 x saucer, rim sherd
	46520					
	46521					
16205	46591	A	Fill of oval pit in rear yard of Cranbrook.	5.1	1	12 frags coffee can, rim, body, handle 7 frags x rim of bowl, body, base sherds 13 frags x bowl rim, body, base sherds bowl (conjoin 16198/#46520)
	46592				1	
	46593				1	
16318	48332	A south	Modified historic topsoil in rear yard of Cranbrook	5.1 or 4.3	1	1 x body sherd
16349	48487 48488	A south	Cleaning after machining around laundry (16342)	5.1	2	1 frag, cup, body 2 frags, saucer, rim, body
16353	48560	A south	Bottle dump under laundry (16342)	5.1	1	3 frags, cup, rim (conjoin #48819)
16354	48819	A south	Bottle dump under laundry (16342)	5.1	1	2 x cup body, base sherds (conjoin #48560)
16595	49184 49185	B	On top of ironstone surface abutting back wall of House 3	5.1	2	1 x body sherd (unid) 1 x body sherd (unid)
16916	49299	B	Cesspit backfill (House 2)	5.1	1	1 x plate, body base sherd
16652	49231	B	Posthole removal fill of northwest corner of Structure 5	5.1	1	3 x bowl, rim & body sherds
16737	50117	C	Fill of oval pit on boundary of Lot 30 and Lot 32	5.1	1	2 x bowl, rim, body, base sherds

5.5.3.2 HARRIET HOLLAND'S WILL

Harriet Holland wrote her will in October 1897 and unusually it identified the distribution of her personal possessions to her two daughters specifically mentioning individual items which were clearly of personal value to her. These personal items were distributed to her daughter Edith Emma Withers:

All my jewellery, weaving, apparel, household, furniture, plate, china, glass, linen, pictures, prints, books, silver, and other household effects excepting the Organ and Piano belonging to me at my death for her own use absolutely. I Bequeath the Organ and Piano to my said daughter during her life and after her decease to her daughter Nell or if she is deceased to her next living daughter.³⁷

Her estate was shared between her son and two daughters and their heirs. The mention of specific items in the will represents what she considered to be important objects in her life and presumably provided her with considerable pleasure. Further, her ability to transfer them to her daughter Edith was clearly an important aspect of her wishes. The items in the will augment the artefacts thought to be associated and the archaeology of House 1 recovered during the archaeological program and discussed in Section 5.6. The presence of most of these named items speak to the middle-class nature of Harriet's life and the gentrification of her and her daughters. The probate schedule valued the furniture at £159. This is reportedly the equivalent of \$24,770 in today calculating for inflation.³⁸ This is not a minor amount of valuation for her personal possessions. All of the items, other than the organ and piano, are listed with general descriptions, e.g. 'china, glass etc', suggest the presence of a quantity of objects, although this is hypothetical.

Edith who inherited the piano and organ had composed the 'The Brassey Waltz', also called the 'Sunbeam waltz' for the Governor of Victoria Lord Brassey and his wife Lady Brassey, in 1895 (Section 2.3.2.1).³⁹ The waltz was made available for sale at the Music Warehouse in the Strand. Edith won the Gavotte Prize in July 1895 She was clearly a talented musician. The cover for the music sheet (Figure 2.24) indicates that Edith published it under her maiden name rather than her married name. Her music publishers advertised it as

The Greatest Success of the season. The Prettiest Dance yet Published in Australia.⁴⁰

It was also being sold in Parramatta and Edith was recognised as a 'Parramatta Musician'.⁴¹ The Brassey Waltz was to be played in a program at Alfred Square, Parramatta on 20th December 1895.⁴² Edith is also probably the 'Miss Holland' who played a duet 'The Heavens are telling' at the Wesleyan Church (Leigh Memorial Church) for a public meeting in September 1888. She along with Miss Barker continued to play the organ and piano during the evening meeting to raise money to pay for the new church building:

We forget now who played which, but there is a remark right opposite their names in our notes to the effect that they drew out magically the sweetest sentiments of these two instruments – an operation which reflected the highest credit on their talented instructress, Mrs Barker and their own genius.⁴³

They also played a duet of piano and organ at other nearby events to raise money for funding new church buildings.⁴⁴

³⁷ Harriet Holland's will 21(?) October 1897. Punctuation has been added to the quote which did not include commas.

³⁸ RBA calculator: <https://www.rba.gov.au/calculator/annualPreDecimal.html>

³⁹ *The Daily Telegraph* 20 July 1895, p.2.

⁴⁰ *The Daily Telegraph* 14 September 1895, p. 2.

⁴¹ *The Cumberland Argus and Fruitgrowers Advocate* 12 October 1895, p.8.

⁴² *The Cumberland Free Press* 14 December 1895, p.4.

⁴³ *The Cumberland Argus and Fruitgrowers Advocate* 22 September 1888, p.4.

⁴⁴ *The Cumberland Argus and Fruitgrowers Advocate* 16 February 1889, p.2.

Harriet was also a skilled weaver of tapestries and exhibited them at least one Horticultural Fete, which in this case was attended by the Royal Highness Prince Alfred, Duke of Edinburgh, and at which Harriet won a silver medal (there did not appear to be any 'gold' medals presented).⁴⁵ She also left her 'weaving' to Edith, probably meaning the tapestries themselves. We also know Harriet had elegant copperplate handwriting⁴⁶

This information adds substantially to the representation of Harriet and her daughters as being educated, skilled needle women, and musically talented. This is added to the houses Harriet built, the ceramics she owned and the real estate, possessions and money she left in her will to her children.

5.6 THE DEVELOPING MIDDLE CLASS IN PARRAMATTA

A new theme Casey & Lowe have advanced with Parramatta Square, where we investigated three substantial sites throughout the 19th century, is how people, emancipated convicts and their families refashioned their lives to be successful free people and provided for their future generations. This idea started to develop with Hugh Taylor on 15 Macquarie Street and Samuel Larken at the Parramatta Children's Court site.⁴⁷ To this group is now added successful emancipists John Holland, and his wife Harriet who arrived free in the colony. Further, this is the first site in Parramatta we have had a clear story to tell about the lives of women, with Harriet and her daughters. The nature of understanding of the development of middle-class lives will be expanded on Casey & Lowe projects on Parramatta Square and will be discussed further in each of the reports: 4&6 and 8 Parramatta Square. This theme is closely linked to previous theme/question Convict and Free Life in Parramatta. As 3PS has no convict occupation, considerable discussion relating to the transformation of convict to free and middle class is included in this section.

This archaeological analysis is aimed to progress a profile of housing and artefacts to identify the nature of middle-class lives within 3PS. This includes the following specific aspects of the site:

- Size and number of rooms within houses.
- Where phases of housing are present how did the houses change?
- Are the occupants, owners/builders or tenants on a lease?
- Location of the house within the streetscape and nearby facilities, nature of the environment in terms of nearby commercial and semi-industrial activities.
- Evidence from the various documents, including wills, probate, rates and other items.
- Remains of interior building fabric, such as tessellated tiles and fittings.
- Quantity and range of artefacts from the house and cesspits.

To assist with comparing dimensions of the houses within all the Parramatta Square projects a comparison of all known dimensions of houses in phases has been compiled (Table 5.5, Table 5.6, Table 5.4). The early phased houses are in Table 5.5 with the post-1880 houses in Table 5.6. A further table compares Harriet Holland's house Cranbrook (House 1) with an extant house to compare the dimensions of House 1. Where dimensions of some of the rooms are unknown, due to impacts from later phases, we have indicated this in the table.

⁴⁵ *Sydney Morning Herald*, 30 January 1868, p 5c; *Sydney Mail* 1 February 1868, p. 15.

⁴⁶ St John's Parramatta, Marriage Register, vol 4, p. 86, no. 149. Harriet Watson was the only member of the wedding party who signed her own name.

⁴⁷ Casey & Lowe 2006a, 2021.

5.6.1 CONFIGURATION OF ROOMS IN CRANBROOK

Cranbrook was a large single-storey villa with twelve rooms: a central hall, three verandahs, four bedrooms and seven fireplaces covering an area approximately 308sqm. This was a vast home for a widowed woman in her sixties who did not remarry and whose children were now grown up. From the sale of the Star Inn and an ongoing income from her numerous rental properties, Harriet had the means to display her new found wealth through the grandeur of her new home. The structural remains of Cranbrook combined with an auction advertisement from 1926 made it possible to speculate on the use of each room. The advertisement described Cranbrook as:

a spacious and well-built brick cottage (cement plastered) with slate roof, containing a tiled verandah on three sides, wide through hall, sitting room, dining room, 4 bedrooms (all large rooms with marble mantles), pantry, kitchen, storeroom, breakfast room, bathroom, detached laundry, and brick lumber room. gas and sewer connected. Electric light available. The land has a frontage of 73 feet (22.25m) by a depth of 223 feet (c.68m) on the east side and 242 feet (74m) on the west side, and a rear of 76 feet (c.23m).⁴⁸

It is possible that the original configuration of the rooms was different to the advertisement, however no evidence was found during excavation to suggest this was the case.

5.6.2 HOUSE & ROOM DIMENSIONS

The dimensions of the house and their square metres are included in Table 5.4. Comparison is provided with a substantial but smaller double-fronted late Victorian-style house in the suburb of Marrickville which was built around 20 years after 3PS (1884) House 1. The square metreage of Cranbrook (excluding verandahs/hallway) is 165.4sqm and if the hallways/verandahs are included it was 274.8sqm. The Marrickville house, is double fronted, three bedrooms, sitting room, dining room, bathroom, kitchen, laundry, pantry, wide hallways and front and back verandahs. The square meterage excluding the hallway and verandah is 103sqm and if hallways/verandahs (54.1sqm) are included it is 157.2sqm. Cranbrook based on room size is 45.9 per cent larger than the Marrickville house and if hallways/verandahs are included it is 42.8 per cent larger. Therefore, the villa home built by Harriet Holland was a substantial house, much larger and more imposing than the Star Inn where she lived upstairs for many years with her husband, children and father. It was certainly much larger than the House 4, c.1822 (Table 5.5).

Table 5.4: Summary of the rooms and their functions within Cranbrook. The location of each room is shown on Figure 3.254.⁴⁹ This table also includes comparison with a standard extant late-Victorian double-fronted house.

Room	Function	Dimensions (m) (N-S by E-W)	420 Marrickville Road	Other Elements	Impacts from 1960s Post Office
1	Sitting room (Parlour)	6.47 x 5.24 33.9sqm	3.9 x 5.2m 20.28 sqm	Fireplace, bay window	High
2	Bedroom (1)	4.0 x 5.24 21sqm	3.9 x 5m 19.5sqm	Fireplace, brick pads/floor supports for timber floor	Moderate
3	Bedroom (2)	4.98 x 4.65 23.2sqm	3.9 x 3.9m 15.21qm	Fireplace, brick pads/floor supports (350 x 350mm)	Minor

⁴⁸ *The Cumberland Argus and Fruitgrowers Advocate*, 11 June 1926.

⁴⁹ Detailed descriptions of each of the rooms can be found in the Area A, Trench Report, Volume 2, Section 7.

Room	Function	Dimensions (m) (N-S by E-W)	420 Marrickville Road	Other Elements	Impacts from 1960s Post Office
4A	Breakfast room	1.53 x 2.36 3.6sqm	-	Mentioned in 1926 advertisement	Minor
4B	Pantry	1.43 x 1.4 2 sqm	1.5x2.14 3.2sqm	Mentioned in 1926 advertisement	Minor
5	Kitchen	3.72 x 4 14.9sqm	3.35x3.4m 11.4sqm	Fireplace, service pipes, brick pads/floor supports, occupation deposit (16136, 16140)	Minor
6	Bathroom/ Scullery	2.44 x 4 9.8sqm	1.5mx2.2m 3.3sqm	Service pipes, brick pads	Minor
7	Dining room	c.3.9 x c.4.64 18.1sqm	4x4.5m 18sqm	-	High
8	Bedroom (3)	3.69 x 4.64 18.1sqm	3.35x3.65m 12.22sqm	Fireplace	High
9	Bedroom (4)	4.15 x 4.64 19.3sqm	-	Fireplace, brick pads	Moderate
10	Store room /possible breakfast room	1.35 x c.2 2.7sqm		Brick pad for back step, Mentioned in 1926 advertisement	Moderate
11	Hall	c.15m x 1.58 23.7sqmsqm	1.5x8.9m 2.5x4m 1.5x6m 1.5x2.45m 36sqm	-	High
12	Back verandah (& verandah extension)	7.68 x 3.8 (interior width 1.48) 33.8sqm	2.4x5.85m 14sqm	Extension to verandah shown on plan, no evidence of extension found during excavation	Minor
13	Front verandah (L shaped)	14.4m (n-s), 8.7m (e-w) x 1.48m wide 34.7	1.5x6.3m 9.4sqm	-	High
	Western verandah	c.7.84 x 2.21 17.2 sqm	-	-	High
Outbuilding	2 rooms: Laundry/Lumber room	8.8 x 4.4m 38.7sqm	-	2 fireplaces	Minor

5.6.2.1 SITTING AND DINING ROOMS

The sitting room (Room 1), was the largest room in the house (6.47 x 5.24m), located in the northwest corner fronting Macquarie Street with a large bay window (Figure 3.260). The front room on the eastern side was interpreted to be the dining room (Room 7). All the front rooms of the house were accessed by a central hall (1.58m/5 feet 2 inches wide). These rooms were the most formal rooms in the house and each had a fireplace along the southern wall. Neither of the main public rooms (Rooms 1 and 7) connected into the adjoining rooms. This meant the public spaces were maintained as separate to the private rooms of the house.

Comparison between Cranbrook (H1) and the Marrickville house public rooms notes:

- The Cranbrook sitting room was 13sqm larger.
- The Cranbrook dining room was the same size as the Marrickville house while the sitting room of this house was larger than the dining room of H1.

5.6.2.2 BEDROOMS

South of the sitting and dining rooms were four bedrooms, two on each side of the central hall (Rooms 2, 3, 8 and 9). These rooms were interpreted as bedrooms because of their central location, lack of service pipes and each contained a fireplace. The fireplaces were located back-to-back along the common wall, allowing two fireplaces to share a chimney flue. The bedrooms were of good size (Table 5.4) with Room 2 the largest (4 x 5.24m). The bedrooms on the western side of the house were slightly larger than those on the east. Remains for brick pads to support timber floors survived in each room (Figure 3.261). Comparison of bedrooms with the Marrickville house indicated:

- Bedroom 1, the master bedroom, in both was of similar size.
- Bedroom 2 in Cranbrook was 8sqm larger.
- Bedroom 3 in Cranbrook was 6sqm larger.

There was no Bedroom 4 in the Marrickville house, providing a clear mark of difference between the houses.

5.6.2.3 KITCHEN, BREAKFAST ROOM AND PANTRY

The kitchen (Room 5) was located in the southwest of the house, behind Rooms 4A and 4B. It is interpreted as the kitchen due to its location at the back of the house, a fireplace and it was one of only two rooms found to contain service pipes (Figure 3.261) which were a later addition to the house. The auction advertisement from 1926 mentions a breakfast room and a pantry. Room 4A was interpreted to be the breakfast room and Room 4B a pantry due to their closeness to the kitchen. Both of these rooms are quite small with no fireplaces. The post office building had minimal impacts on these three rooms therefore the subsurface archaeology survived. If there was a breakfast room the small room on the east side of the house (Room 10) at the end of the verandah is also a possibility (Figure 3.252). The location of a breakfast room would be more desirable on the eastern side of the house as it was warmer rather than on the west with no fireplace and no morning sunlight. Comparison with the Marrickville kitchen indicates Cranbrook is 3.5sqm larger.

5.6.2.4 BATHROOM/SCULLERY AND STOREROOM

Behind the kitchen was a small room (Room 6) which measured 2.44 x 4m. It did not contain a fireplace but had service pipes, including metal water pipes (Figure 3.265). No evidence for an external toilet or cesspit was found during excavation although a double cesspit was indicated on the 1895 plan in the western half of the back yard (Figure 3.235).

The last room in the house (Room 10) was interpreted to be a small store room in the southeast corner and was also mentioned in the 1926 advertisement. Its proximity to the kitchen and location on the east side of the house could also suggest it functioned as the breakfast room. No archaeological remains were found to confirm this speculation.

Comparison with the Marrickville house has the bathroom at 6.5sqm larger, a substantially bigger room. It is part of the original construction and represents the changing nature of suburban houses with the inclusion of the bathroom within the original footprint. Cranbrook's bathroom was at the rear of the house. The Marrickville house had a bathroom off the hallway in the centre of the house, between bedrooms 2 and 3 (relocated in the

1980s). Cranbrook was built prior to reticulated water and sewerage being available in Parramatta.

5.6.2.5 VERANDAHS AND PATHS

Three verandahs surrounded the house. An L-shaped verandah to the north and east, a second L-shaped verandah to the southeast (recorded as Room 12) off the kitchen and a western verandah coming off the main sitting room (Figure 3.252, Figure 3.254). The 1895 plan and 1943 aerial photograph (Figure 3.253, Figure 2.33) both show the south eastern verandah extended further to the east.

A set of large sandstone blocks (16107) formed the front path to Cranbrook from Macquarie Street (Figure 3.268). The path was 2.92m wide with the large stone blocks embedded in garden soil. The level of the top of the path (RL 9.95m) was slightly higher than current street level. The garden soil probably extended across the entire front yard but was removed by modern disturbance.

5.6.2.6 INTERNAL ELEMENTS

Cranbrook appears to have had tongue-and-groove timber floors. The use of tongue-and-groove was common by the 1880s and saw the decrease in underfloor deposits due to their tight-fitting joints and lack of holes and cracks for objects to fall through or be swept through (see Vol. 3, Sec 8.7). Floor coverings such as carpet or linoleum also contributed to the lack of underfloor deposits throughout the house. The only underfloor deposit within Cranbrook was near the fireplace in the kitchen (Room 5) a room which was probably not carpeted.

There were fireplaces in many rooms with most being placed off centre within the rooms, to allow space for a door to open inwards. The size of the fireplaces varied from 1.07m (n-s) x 600mm (e-w) to 1.95m (n-s) x 970mm (e-w), the latter being in the sitting room.

A large number of glazed finish tiles from the aesthetic movement and art nouveau dated c.1880-1920s were found in the demolition fills of the rooms of Cranbrook (Figure 3.270). The tiles were mostly border tiles for a fireplace surround along with a number of geometric floor tiles as well as remnant white marble from fireplace mantles. The 1926 auction advertisement for Cranbrook mentions that all the fireplaces in the bedrooms had marble mantles. Samples of render and painted plaster were recovered from the demolition fills showing the finishes within the rooms and the range of paint colours. The range of tiles and other house finishes are discussed in detail in Section 4 of the Organics, Metal and Building Materials Report (Vol. 3, Section 8.7).

5.6.3 COMPARISON OF 3PS HOUSES

House 4 is the earliest house on the site, c.1822 and demolished by c.1884. It was a weatherboard house initially built with four main rooms, and front and back verandahs (Figure 3.104, Figure 3.106, Figure 3.149; Section 3.7.2, Section 3.7.3.6). There may have been a central hallway but due to 1960s impacts evidence for this did not survive. The original kitchen was in the rear right room (SE corner) of the house. A new kitchen was eventually added external to the house, but surprisingly was attached to the house rather than being detached and at the rear which was common in early houses due to fear of fire emanating from a kitchen. Aspects of the house footings were built with ironbark which survived in the ground from c.1822 until we removed it in 2016, nearly 200 years. The survival of timbers in the ground is quite uncommon in early buildings in Parramatta where the timber, notably in post holes, rarely survives as little more than decayed organic dust.

House 4 also contained a well in the front garden, had pathways at the front and back and garden beds at the front (Figure 3.6, Figure 3.149, Figure 3.179, Figure 3.180). This rather small brick well (diameter 800mm) was oddly placed at the front of the site and the water table was encountered at RL 6.38m which was approximately 3m below the surrounding ground level. The well was cut through the red and grey impermeable clays which means the only way to obtain ground water in a well was to locate it in the best place to find the ground water (Figure 3.181). This probably indicates the Pleistocene(?) clays were shallower in this area and it may have been the most opportune place to reach the water table rather than on higher ground at the back of the site which may have required an extra further 1m or so of excavation around the depth of the 10m contours (Figure 3.6). While the water table would normally be at the same depth on a site the presence of the impermeable clays would not allow it to naturally rise and fall in the same way.⁵⁰

Cranbrook, House 1 (H1), was built in 1888 and demolished in 1962 to build the post office (Section 3.11.3). It was built by Harriet Holland as her private home. It was a double-fronted villa home with 12-rooms and verandahs on three sides (Figure 2.23, Figure 2.25, Figure 3.238, Figure 3.252, Figure 3.254, Figure 3.255). It was built with well-made clay bricks. The bricks were the same throughout the house, indicating the builder bought a new lot of bricks for this project. Limited surviving evidence from the demolition indicated quite fine tiles for internal fireplaces (Figure 3.270). There was also an external laundry at the rear.

House 4 was 67.9sqm, including the kitchen extension and verandahs, and was only 24 per cent the size of Cranbrook (House 1), which was 274.8sqm (Figure 3.28, Table 5.5, Table 5.6). The largest room in House 4 (H4) is (20.2sqm) was 60 per cent the size of the largest room (Rm 1) in House 1 (33.9sqm). Room 1, House 4, the second largest room was 18.2sqm, similar to Room 7 in H1. The two front rooms in House 4 are the largest two rooms in the house, the western room and possibly both were public rooms but this is uncertain, partly due to the disturbance by the 1960s footings.

While House 4 appears to be quite small when compared with the size of House 1 it was considerably larger than convict huts built after July 1790 and occupied on and off until c.1809 (Table 5.7). They were 12 feet by 24 feet (3.7 x 7.4m), totalling 27.4sqm to accommodate 10 convicts.⁵¹ This was 40 per cent the size of House 4 and 10 per cent the size of House 1.

Prior to building HOUSE 4 Harriet built two, two-storey terraces, House 2 and House 3 in 1884 to the east (Figure 2.26, Figure 3.238, Figure 3.277, Figure 3.282, Figure 3.284). These were built to be leased out, and provide Harriet with a source of income. Dimensions for these two houses are given in Table 5.6. Houses 2 and 3 are the same size, 130.9sqm, but as there was only a single level of a two-storey house uncovered during excavation the full dimension would be approximately double at 261.8sqm for each house. This is very close in size to H1, 274sqm, a minor difference of 12sqm. The construction of a large single level villa was clearly the personal preference of Harriet and may have reflected a choice based on her age and not wanting to walk up and down stairs. She would have been familiar with running up and down stairs within the Star Inn, a two-storey with attic, inn and house where she lived with her family until she moved into House 1. She would have been 60 when she moved into Cranbrook. Harriett lived there for only 10 years prior to her death in 1898, aged 70 (Section 2.3.12)

⁵⁰ Douglas Partners 2017:32, cross-section B. The first to northern boreholes are along the western boundary of 3PS. It shows 'stiff and very stiff alluvial clays' underlying the site.

⁵¹ Collins 1975:103, July 1790; Tench 1979:196-197; Casey 2009.

Only with some 8PS houses were we able to collect all dimensions of the houses, whereas we were able to collect most dimensions from several terrace houses on 4&6PS (Table 5.6):

- House A (140) was 70.3sqm (8PS)
- House 22 was 77.60sqm (4&6PS)
- House 16 was 67.6sqm (4&6PS)
- House 18 was 67.2sqm (4&6PS)
- House 24 was 65.47sqm (4&6PS)
- House 14 was 61.3sqm (4&6PS)
- House D (144) was 58.45sqm (8PS)
- House 26 was 54.45sqm (4&6PS)
- House 138 was 56.3sqm (8PS)
- House C (142) was 40.6sqm (8PS)

The larger 8PS and 4&6PS houses were approximately half the size of Houses 2 and 3 and a quarter of the size of House 1. The lower ground plan of the 8PS, 1880s houses, mainly two-storey shops and residence, were similar to the size of the ground plan of House 4 (Table 5.5, Table 5.6). A consistent difference between the Macquarie and Church Street frontages was the commercial nature of Church Street in contrast with the residential nature of Macquarie Street. As will be discussed in 8PS excavation report the houses and residences on Church Street, built from c.1880, were much smaller than the contemporary 1880s houses on 3PS.

5.6.3.1 STREETScape

The streetscape for 3PS and this part of Macquarie Street is a well-to-do location near the Wesleyan church (Figure 2.23, Figure 2.26, Figure 2.27). These houses had significant plantings, such as the Norfolk Island pines beside Harleyville (House 3). A large terrace was to the west of the church (Figure 5.13), there was a large house across the road from Cranbrook (House 1), further large houses to the east along Macquarie Street, to the corner with Smith Street and Wyverne next door to Cranbrook was of a similar size (Figure 2.22, Figure 2.27, Figure 2.39). Indicating at least this block of Macquarie Street had most of the early housing replaced by substantial middle-class houses. All transitioning from the smaller houses standing in 1823, such as House 4 (Table 5.2).



Figure 5.13: View to southeast, showing the buildings on Macquarie Street, west of Leigh Memorial Church, the parsonage, and Macquarie Hall. While none of the houses from Lot 30 or 32 are visible they do show the nearby streetscape to compare with Figure 2.23, Figure 2.26. McClymont 2003:20.

Table 5.5: Cottage/House Comparison at 3 and 8 Parramatta Square, c.1822s-1870s houses.

3 PARRAMATTA SQUARE (All measurements N-S x E-W unless otherwise specified)							
Area	Structure Dimensions	Room Dimensions					
		Room 1 (Front West)	Room 2 (Rear West)	Room 3 (Front East)	Room 4 (Rear East)	Room 5 (Extension)	Verandahs
A	House 4 7.18m x 9.45m (23' 7" x 31') 10.52m incl. verandahs (34' 6") (N-S)	~4.23m x 4.3m (~13' 11" x 14' 1")	2.8m x 4.3m (9' 2" x 14' 1")	4.23m x 4.77m (13' 11" x 15' 8")	2.8m x 4.77m (9' 2" x 15' 8") 5.15m (16' 11") (E-W) including fireplace	2.78m x 4.25m (9' 2" x 13' 11")	Front: 1.67m x 9.45m (5' 6" x 31' 0") Rear: ~1.6m x 9m (~15' 1" x 29' 6")
	SQM: 67.9 (111.3 incl extension and verandahs)	18.2	12.0	20.2	13.4	11.8	Front: 15.8 Rear: 14.4
8 PARRAMATTA SQUARE							
Area	Structure Dimensions	Room Dimensions					
		Front Room	Rear Room				
P	Cottage A 3.5+m x ~5.8m (11' 6" x 19' 0")	Front of building truncated but at least 1.5m (E-W) (4' 11")	3m (SW-NE) (9' 11")				
	Total SQM: 15.8-18.0						
Q	Cottage C 3.5m x 6.5+m (11' 6" x 21' 4"+)	No internal room divisions survived.					
	Total SQM: 22.75+						
		Room 1B (Front South)	Room 2C (Rear South)	Room 1 (Front North)	Room 2A (Rear North)	Room 2B (Rear centre)	Extension
R	House 4 Impacted by later footings and L.O.E.		2.5+m x 3.6m (8' 2" x 11' 10")	5.7+m x 3+m (18' 8"+ x 9' 10"+)	3+m x 3.6m (~14' 9"+ x 11' 10")	4.5m x 3.6m (14' 9" x 11' 10")	1.8 x 1.3m (may have extended further) (5' 11" x 4' 3")
	SQM:	12.0+	9.0+	17.7+	10.8+	16.2	2.3

Table 5.6: Comparison of dimensions of 1880s buildings across Parramatta Square.

1880S BUILDINGS ACROSS PARRAMATTA SQUARE					
3 PARRAMATTA SQUARE (ALL MEASUREMENTS N-S X E-W UNLESS OTHERWISE SPECIFIED)					
CRANBROOK (HOUSE 1)					
Room #	West side of house	SQM	Room #	East side of House	SQM
Room 1	Sitting room 6.47m x 5.24m (21' 3" x 17' 3")	33.9	Room 7	Dining room 3.9m x 4.64m (-12' 10" x 15' 3")	18.1
Room 2	Bedroom 4m x 5.24m (13' 1" x 17' 3")	21.0	Room 8	Bedroom 3.69m x 4.64m (12' 1" x 15' 3")	18.1
Room 3	Bedroom 4.98m x 4.65m (16' 4" x 15' 3")	23.2	Room 9	Bedroom 4.15m x 4.64m (13' 7" x 15' 3")	19.3
Room 4A	West: Breakfast room 1.53m x 2.36m (5' x 7' 9")	3.6	Room 10	Storeroom 1.35m x ~2m (4' 5" x ~6' 7")	2.7
Room 4B	East: Pantry 1.43m x 1.4m (4' 8" x 4' 7")	2.0	Hallway (11)	Central Hallway~15m x 1.58m (~49' x 5' 2")	23.7
Room 5	Kitchen 3.72m x 4m (12' 2" x 13' 1")	14.9	Verandah (12)	Rear verandah 7.6m x 3.8m (24' 11" x 12' 6")	14
Room 6	Bathroom 2.44m x 4m (8' x 13' 1")	9.8	Verandah (13)	Front & side verandah (L-shaped) 14.4m (n-s), 8.7m (e-w) x 1.48m wide (47' 3in, 28' 7" x 10")	34.7
Verandah	Western verandah 7.84m x 2.21m (~25' 9" x 7' 3")	17.2	TOTAL SQM FOR CRANBROOK		274.8
TERRACES NORTHIAM AND HARLEYVILLE					
Room #	West Terrace House Northiam	SQM	Room #	East Terrace House Harleyville	SQM
Room 1	Sitting Room 4.4m x 4.45m (14' 5" x 14' 7")	19.6	Room 1	Sitting Room 4.4 x 4.5m (14' 5" x 14' 9")	19.6
Room 2	Dining Room 3.1m x 4.6m (10' 2" x 15' 1")	14.3	Room 2	Dining Room 3.1m x 4.6m (10' 2" x 15' 1")	14.3
Room 3	Kitchen 3.47m x 5.74m (11' 5" x 18' 10")	19.9	Room 3	Kitchen 3.47m x 5.74m (11' 5" x 18' 10")	19.9
Room 4	Laundry Right: 4.15m x 3m (13' 7" x 9' 10")	12.5	Room 4	Laundry 4.15m x 3m (13' 7" x 9' 10")	12.5
Room 5	Bathroom: 4.15m x 2.27(13' 7" x 7' 5")	9.4	Room 5	Bathroom: 4.1m x 2.3m (13' 5" x 7' 7")	9.4
Hallway	Hallway 11.78+m x 1.1-2.5m (38' 7in+ x 3' 7in- 8' 2")	29.5	Hallway	Hallway 11.78+m x 1.1-2.5m (38' 7in+ x 3' 7in- 8' 2")	29.5

1880S BUILDINGS ACROSS PARRAMATTA SQUARE								
3 PARRAMATTA SQUARE (ALL MEASUREMENTS N-S X E-W UNLESS OTHERWISE SPECIFIED)								
Verandah	L-shaped verandah: 9.8m (n-s), 8m (e-w) x 1.45m wide (32' 2", 26' 3" x 4' 9")	25.8	Verandah	L-shaped verandah: 9.8m (n-s), 8m (e-w) x 1.45m wide (32' 2", 26' 3" x 4' 9")	25.8			
TOTAL OF SQM			130.9	TOTAL OF SQM			130.9	

1880S BUILDINGS ACROSS PARRAMATTA SQUARE								
4 & 6 PARRAMATTA SQUARE								
Area	Structure & Dimensions	Room Dimensions (Front to back)						
		Room 1	Room 2	Room 3	Room 4	Room 5	Hallway	Verandah
K	House 14	2.9m x 3.45m (9' 6" x 11' 4")	2.9m x 3.5m (9' 6" x 11' 6")	3.8m x 4.9m (12' 6" x 16' 1")	3.45m x 2.75m (11' 4" x 9ft)		~7m x 0.9-1m (22' x 3ft-3' 3")	1.5m x 4.0m (4' 11" x 13' 1")
	SQM: 61.3	10.0	10.2	18.6	9.5		7.0	6.0
	House 16	3.7m x 3.42m (12' 2" x 11' 3")	2.8m x 3.42m (9' 2" x 11' 3")	3.6m x 4.9m (11' 10" x 16' 1")	Rear West: 3.4m x 2.8m (11' 2" x 9' 2")	Rear East: 3.5m x 1.6m (11' 6" x 5' 3")	7.5m x 0.85m (24' 7" x 2' 9")	1.3m x 4.82m (4' 3" x 15' 10")
	SQM: 67.6	12.7	9.6	17.6	9.5	5.6	6.4	6.3
	House 18	3.7m x 3.42m (12' 2" x 11' 3")	2.8m x 3.42m (9' 2" x 11' 3")	3.6m x 4.9m (11' 10" x 16' 1")	Rear East: 3.3m x 2.5m (10' 10" x 8' 2")	Rear West: 3.58m x 1.8m (11' 9" x 5' 11")	7.5m x 0.85m (24' 7" x 2' 9")	1.3m x 4.82m (4' 3" x 15' 10")
SQM: 67.2	12.7	9.6	17.6	8.3	6.4	6.4	6.3	
J	House 20 Impacted by concrete piles							
	House 22	3.7m x 3.4m (12' 2" x 11' 2")	3.7m x 4.85m (12' 2" x 15' 11")	3.7m x ~2.5m (12' 2" x 8' 2")	3.2m x 2.55m (10' 6" x 8' 45")	<u>Rear Extensions</u> Western room: 3.2m (N-S) (10' 6") Eastern room: 3.15m x 2.55m (10' 4" x 8' 4") Northern room? 0.65m x 3m (2' 2" x 9' 11")	3.7m x 1.15m (12' 2" x 3' 9")	
	SQM:77.60	12.6	17.95	9.25	8.20m	25.30	4.3	
	House 24	3.6m x 4.6m (11' 10" x 15' 1")	3.7m x 4.65m (12' 2" x 15' 3")	3.25-3.5m x 2.5m (11' 6" x 8' 2")	3.7 x ~2.65m (10'6" x 8')	2m-3.05m x ~4.3m (10' x 14' max.)		
	SQM: 65.47	16.6	17.2	8.75	9.8	13.12		

1880S BUILDINGS ACROSS PARRAMATTA SQUARE								
	House 26	3.6m x 4.65m (11' 10" x 15' 3")	3.75m x 4.6m (12' 4" x 15' 1")	3.8m x 2.75m (12' 6" x 9')	3.7 x 2.5-2.7m (10' 6" x 8' 10")			
	SQM: 54.45	16.7	17.3	10.45	10.0			
8 PARRAMATTA SQUARE								
Area	Structure & Dimensions	Room Dimensions (Front to Back)						
		Room 1	Room 2	Room 3	Room 4	Extension	Hallway	Verandah
P	House 138 ~3.95m x ~14.25m (~13' x ~46' 9")	3.5m x ~6m (11' 6" x ~19' 8")	3.5m x 3.5m (11' 6" x 11' 6")	Detached kitchen: 2.5m x 3m (8' 2" x 9' 10")				Porch between 2nd & 3rd rooms: 3.75m x 1.5m (12' 4" x 4' 11")
	SQM: 56.3	21.0	12.3	7.5				5.6
	House 136 Impacted by Darcy St buildings construction							
Q	House A (140) 3.8 x 18.5m (12' 6" x 60' 8") Extended to 30m (E-W) (98' 5")	Combined dimensions: 3.6m x 10m (11' 10" x 32' 10")		3.6m x 4.8m (11' 10" x 15' 9")	2.6 x 2.6m (8' 6" x 8' 6")	Rear: 2.2m x 10.5m (7' 3" x 34' 5")		
	SQM: 70.3	36		17.3	6.8	23.1		
	House B (142) 2m x 8.5m (6' 7" x 27' 11")	No internal room divisions evident.						
	SQM: 17.0							
	House C (142) 3.2 x 12.7m (10' 6" x 41' 8") (extended to 18m then 20m)	3.2m x 3.9m (10' 6" x 12' 10")	3.2m x 4.5m (10' 6" x 14' 9")	3.2m x 3.5 m (10' 6" x 11' 6")		Ext. 1 at rear: 2m x 5m (6' 7" x 16' 5") Ext. 2 replacing Ext. 1: 2.5m x 7.5m (36' 1" x 8' 2")		
	SQM: 40.64	9.3	14.4	11.2		62.5		
House D (144) 3.5m x 16.7m (11' 6" x 54' 9") Impacted by arcade construction	3.5m x 2.4m (11' 6" x 7' 10")	6m (E-W) (19' 8")	3.4m x ~7.54m (11' 2" x ~24' 7")			0.8m (N-S) (2' 7")		
SQM: 58.45	8.4		25.6					

1880S BUILDINGS ACROSS PARRAMATTA SQUARE								
	House E (144) Impacted by arcade construction	~10.6m x ~5.3m (~34' 9" x 17' 5")	~1.4m x ~5.6m (4' 7" x 18' 4")					
	SQM:	56.2	7.8					
	House F (146) Not exposed, outside L.O.E.							
R	Terrace 150 Majority outside L.O.E.							
	Terrace 152 Street front outside L.O.E.	4.5m x 5.5m (14' 9" x 18ft)	3.5m x 1.75m (11' 6" x 5' 9")	~3m x 2.5m (~9' 10" x 8' 2")				
	SQM: 38.4+	24.8	6.1	7.5				
	Terrace 154 Street fronts outside L.O.E.	3.5m x 6.5+m (11' 6" x 21' 4in+) Triangular room: ~3m x 6.5m (~11' 6" x 21' 4in+)	~3m x 2m (9' 10" x 6' 7")	3m x 3m (9' 10" x 9' 10")				
	SQM: 36.8+	22.8	6.0	9.0				

5.6.4 DISCUSSION

5.6.4.1 BACKGROUND

The new railway line into Parramatta Station, immediately to the south of Darcy Street and Parramatta Square, opened in April 1860 creating a new environment for expansion of commercial activities and job opportunities for skilled and unskilled workers in Parramatta. Due to high cost of train fares, it was not used for commuting between nearby locations, rather most trips were between Sydney and Parramatta.⁵² Areas of new construction was focussed close to the railway line and the new station became the centre of trade and goods transportation with a shift away from the river transportation and coach traffic on the Parramatta Road. The railway developments stimulated the subdivision and sale of allotments in the Wentworth Estate in 1873 as the railway and station was built through land resumed from that estate. Given the proximity of Catherine Hilt's property (Lot 32) to the railway station it is likely that the development of the building of the White Horse coaching inn in 1874 into the two or three-storey terraces can be seen as part of this building boom.⁵³

The construction of new housing from the 1870s to 1880s along Macquarie Street speaks to the changing profile of Parramatta into middle-class suburbia when the population of Parramatta grew by 38 per cent, rising to 8,432, although many of these residents were in institutions. 'Commentators suggested that the new residents of Parramatta were of the middling classes – tradesmen with some financial independence seeking homes away from the grime of industry'. This increase in population saw the construction of around 300 new homes between 1871 and 1881 mostly in brick and stone. The closeness to the railway made land such as Wentworth's Estate more valuable and therefore quite desirable. Sections of the Wentworth Estate were subdivided and offered for sale near the railway station in 1873. This subdivision created Darcy Street running parallel with the railway, just to the north of the railway tracks and delineating the south edge of Parramatta Square.⁵⁴

Parramatta Square was within the Council's Anderson Ward, which commenced starting along the eastern side of Church Street and extended eastwards to Clay Cliff Creek. This ward was the main commercial and residential district of Parramatta. The number of rateable properties in this ward doubled between 1872 and 1879 (Figure 5.14). Although as discussed above (Section 5.2.3) this area was the least developed part of the township in 1823. There were a few additional buildings by 1844 although the Harris Estate had been subdivided by this time but not sold off or built upon. A new subdivision plan in 1882 appears to have formed the final layout of new properties and the basis of the modern street grid within this area. The development of the Harris Estate alone added 20 per cent to the rates collected by Council by 1890. The Macarthur Estate, further to the east and southeast, was sold by the family in 1880 and subdivided and auctioned in 1883. The Hassell Estate, a block to the northeast of 3PS, bounded by George, Charles and Macquarie Streets was subdivided and auctioned in 1882.⁵⁵

The decision to build a new Town Hall (7PS) where the Market Place stood on Church Street further contributed to a shift of commercial activity and prestige towards this part of Church Street. The first stage was built between 1879 and 1881. It was a two-storey stuccoed brick structure, which was referred to as the Council Chambers and originally

⁵² Kass, Liston & McClymont 1996: 156-157.

⁵³ See Section 2 for references throughout this section.

⁵⁴ Kass Liston McClymont 1996:185-186, 213-214.

⁵⁵ Kass Liston McClymont 1996:186, 213-214; Brownrigg's *Plan of the town Parramatta*, M4 811.1301/1844/1, digital order no. a3705001, SLNSW; *Harris Park Parramatta: to be sold on the grounds...* 1882, MAP LFSP 1026, Folder 68 (Copy 1), Bowden & Mills., auctioneers, NLA

housed a number of offices and meeting rooms. At the same time a single-storey residence for the Council Clerk was built at the rear of the former market place allotment. The two buildings formed part of the same initial tender invitation. The second stage was the construction of the Town Hall itself, which opened in 1883. The third stage was a smaller hall, known as the Jubilee Hall, which was built between 1911 and 1913. It was named to commemorate the jubilee of the incorporation of Parramatta Council.⁵⁶

In 1877 Parramatta was described as:

Altogether, Parramatta has about it an air of progress, and of late years the district seems to have become more and more the resort of the Sydney trades-man, who here builds his suburban home, plants his orange and lemon trees, and literally "sits under his own vine and fig-tree".⁵⁷

By January 1885 another newspaper supplement noted:

The visitor to Parramatta at the present time finds plenty of evidences of the antiquity of the town; old-fashioned houses, strongly-built, but with quaint, and in some cases inconvenient, nooks; corners and staircases abound. Traces of a bygone age are to be found in some of, the hotels, where prim, stiff portraits of men and women adorn the walls. ... Fancy work in netting or knitting, done before crochet and tatting were invented, show the taste of the ladies of two generations ago. Numbers of large buildings are to be seen, and most of these are now used for charitable purposes. Besides the hospital there are orphanages, lunatic and benevolent asylums in profusion; in fact, it has been remarked that the residents in these institutions would make a very fair population in point of numbers for an up-country township. It must not be thought, however, that Parramatta consists of all old houses. The wave of prosperity, which set in some five or six years ago, has benefited the ancient capital as it has other towns, and **a number of rows of pretty detached cottages, with their garden plots, have sprung up in all directions. Among these may be seen houses of a more pretentious character.** In the main street the old-fashioned shops with small windows are giving way to handsomely-designed business places with plate glass fronts, affording room for display awhile, the proprietors of the older ones make up for their narrow windows by hanging their goods outside. Church-street (the continuation of the Windsor branch of the Parramatta-road from Sydney) is the only crooked street in the borough. Near the railway it is rather lopsided, all the business places being on one side, while the other is occupied by the English and Presbyterian churches, the post-office, and the court-house and police station. The business places are for the most part new, and form what Mr. Poole, M.L.A., calls "a magnificent fakade." St. John's Church of England is said to be the oldest in the colony; but as only the two towers of the original building are standing, and the remainder has been re-built...⁵⁸

These two descriptions make similar observations about the changing nature of Parramatta and the contrasts presented within the township to an observer, perhaps unfamiliar with Parramatta, who was wandering around to write this story. It highlights the changes in appearance from the old town, the remains of the convict town and its large former convict institutions, orphanages, hospital, barracks; now rebranded as houses for the poor, weak and insane. By 1885 the convict town was juxtaposed against the burgeoning middle-class some of who were direct relations of former convicts, such as Harriet and her children. As with the houses and institutions the former convicts and their descendants were reformed and repurposed as no longer convict but successful entrepreneurs who now formed the successful middle class of Parramatta.

⁵⁶ McClymont 2003:10-11; *Sydney Morning Herald* 15 July 1879, p 3a; *Evening News* 30 August 1883, p 2g; Kass et al. 1996:292-293; Casey & Lowe 2016:38-39, 44-45.

⁵⁷ *Illustrated Sydney News*, supplement, 10 November, 1877

⁵⁸ *Australian Town and Country Journal* (Sydney, NSW: 1870 - 1907), Saturday 10 January 1885:7; author emphasis.

The 'gentrification' of the Parramatta Square area was part of a property development boom that took place between the 1870s and 1880s. The advent of the extension of the railway to Penrith in the early 1860s shifted the transport hub from the waterways and Parramatta River at the end of George Street and the Parramatta Road, to the new Parramatta Railway Station, immediately to the south of the study area.



Figure 5.14: Parramatta in 1877, Parramatta Square, red arrows indicate buildings along Macquarie, Smith and Church Streets. *Town and district of Parramatta. New South Wales, Bird's eye view*, engraved by Gibbs, Shallard & Co. ML, XV1B / Parr / 1, IE3263664, SLNSW.

5.6.4.2 TRANSITIONING TO GENTRIFICATION

Harriet Holland, Catherine Hilt and William Fullager, the main purchaser of the Wentworth Estate subdivision north of Darcy Street (within Parramatta Square), began to develop their properties from the mid-1870s. The 1880s saw increased building activity close to the railway line, especially along Darcy and Church Streets, with a combination of residences and retail premises. Fullager built a row of five semi-detached two-storey terraces along Darcy Street by 1883 (4&6PS), two-storey shops and residences were built along Church Street by another widow, Brigitte Scheggia, Samuel Purnell, Robert Lacey and George Ralph by 1884 (8PS), and on Macquarie Street with the introduction of Harriet's large and ornate late Victorian terraces Northiam and Harleyville (1884) and villa Cranbrook (1888) (3PS).

The transition in housing at 3PS from a weatherboard 4-roomed cottage (House 4) to a large 12-roomed villa (House 1) suggests a change in Harriet's circumstances or a decision to retire and change how she would spend the latter period of her life. A decision to build the two two-storey terraces, followed by the demolition of the original house and replacing it with a house 75 percent larger, suggests access to considerable liquid financial resources and Harriet's personal aspirations and expectations. With the building of these three houses begins the transformation of a woman who worked for more than 30 years (1850s to 1887) at the Star Inn with her husband, an emancipated convict who had a 15-year sentence. With John's death in 1874 Harriet took full ownership of their various properties, although she had already owned Lot 30 from 17 February 1864 when John placed it in trust

for her.⁵⁹ He had owned the lot since 1860 when he purchased it for as a mere £10, but the sale came with a rent charge of £40 per annum payable by Holland to George Cavill.⁶⁰

The sale of the Star Inn in April 1887, for £4050 (equivalent to \$448,800 in modern money) for the building and business only (Figure 2.21).⁶¹ The land was still held by the Wentworth Estate.⁶² In 1888, Harriet built Cranbrook, probably with the proceeds of the sale of the inn. We do not know how much she spent on building the three houses but they testify to the availability of funds and there is no indication she took out a mortgage to be able to afford to build the houses. She had acquired other property, two houses on Church Street and another on Wentworth Street (Section 2.3.1). All this indicates the financial success of the Hollands. This is further exemplified by the value of Harriet's estate, it was valued at £3315/1/4, 25 May 1898 (RBA evaluation of \$516,461.71 in 2019).⁶³ Real estate was valued at £2400, furniture £160 and money in bank and interest almost £755. Indicating the estate she left to her three children was of substantial value.⁶⁴

Comparison of the dimensions of the Parramatta Square houses, shops and residences, reveals similarities in this new phase of development across the study area (Table 5.6). This comparison shows that the new houses were much larger than the original cottages built in the 1820s and 1830s (Table 3.10, House 4, Phase 4.1, Table 5.5 Section 5). It also highlights the differences between the houses built in the 1880s comparing room sizes and numbers across the Parramatta Square study area.

For example, Northiam and Harleyville had smaller rooms than Cranbrook, but as they were two-storey they would have had a comparable number of rooms. In turn, Fullager's terraces on Darcy Street (4&6 PS) were smaller than Northiam and Harleyville and were on smaller parcels of land. The Northiam and Harleyville square meters for the ground floor were 130.9sqm while the ones for 4&6 PS varied between 55.3 and 77.6sqm. These measurements are for the ground floor and all of the 4&6 PS terraces were two-storey. These buildings were exploited as shops relatively quickly after being built, rather than functioning solely as residences, taking advantage of the passing trade from the nearby railway traffic heading from the railway station to Church Street.

Within the 1880s rebuilding there are also differences of function and decorative finishes. Demolition material from the three houses on Lot 30 showed that the decorative finishes in Cranbrook were more elaborate and expensive than those from Northiam and Harleyville. This may have been a conscious choice on the part of Harriet Holland who did not ever live in the terrace houses but rented them out for income, whereas she built Cranbrook for her personal use and chose a large single-storey villa configuration and expensive decorative finishes in her own house. The choice of finishes and size of the villa may also reflect her middle-class aspirations and was probably a reflection of her success and business acumen. Holland's sale of the Star Inn in 1887, for £4050 (equivalent to \$448,800 in 2020 money), would have facilitated her building program.

Further evidence of gentrification is the Banquet pattern discussed above (Section 5.5.3.1) made by one of the major British manufacturers of fine ceramics, Wedgwood. While a

⁵⁹ LTOD, No 195 Bk 87.

⁶⁰ LTOD Book 66 No 905.

⁶¹ *The Sydney Mail and New South Wales Advertiser*, 16 April 1887, p.795.

⁶² LTOD, No 781 Bk 386.

⁶³ Reserve Bank of Australia inflation calculator: <https://www.rba.gov.au/calculator/annualPreDecimal.html>

⁶⁴ NSW State Archives & Records, Deceased Estates Index 1880-1939: 14857 [20/7051]; Probate documents and Harriet Holland's will.

single piece of Wedgewood, Spode or Davenport is not unusual a matching set of 17 pieces (those that broke) is extremely rare.

Table 5.7: Percentage comparison of House 1 dimensions.

	Rooms	Sqm	Comparison with H1
House 1	12	274.8	
Houses 2/3	ground floor: 5 rooms and hallway along the party wall. All up probably 10 rooms upstairs and downstairs	130.9 (ground) 261.8 (2-storey)	50% the size of H1 on grd floor but only 12sqm smaller for 2-storeys 95.3% the size of H1
House 4	5 (inc. kitchen extension)	67.9sqm	24% size of H1
Marrickville House	9	157.2	57.2% of H1
Convict hut	2	27.4	10% size of H1 40% size of H4

During the assessment stage in 2013 the potential archaeology of the three later houses appeared not to be an important part of the story of the archaeology of the site. There are a number of reasons why this turned out not to be the case:

1. The presence of considerable archaeological stratigraphy meant that even though there were considerable impacts from the 1960s post office and potentially from the 1880s houses; the depth of the archaeology meant more strata and therefore more archaeology of all phases survived within the site. This is extremely rare in Parramatta where archaeology is typically all cut through into the natural and it can be difficult to determine what phases archaeological evidence belongs to. This was typically a minor concern at 3PS due to the c.1884-1887 filling of the site to raise the ground levels. This created a *terminus post quem* (point after which) for the later occupation and a *terminus anti quem* (point before which) for the early occupation of which some areas were relatively undisturbed by the post-1880s houses but more so by construction in the 1960s.
2. The relationship between the ownership of House 4 and its demolition and redevelopment by Harriet Holland. This allows for considerable interpretation about her personal choices and her success as the widow of an emancipated convict.
3. The construction of Houses 2 and 3 is also a key part of the story, even though generally limited archaeology of this occupation survived due to its late date. But the significance of the archaeology of these two houses lies on their association with Harriet, and her occupation of House 1 and her redevelopment of House 4.

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