

Household Narratives from a Colonial Frontier

Naomi Woods

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Abstract

This research uses an archaeological assemblage collected during the redevelopment of a central Whanganui carpark into the Victoria Retail Centre to highlight the potential of this type of material to provide rich and meaningful information about New Zealand's colonial past. In order to do this a methodology was created to suit archaeological investigations without pre-determined research questions and allow for the material culture itself to direct the research. This approach incorporates traditional archaeological recording, artefact analysis and historical research with the slightly less orthodox presentation of the data as three narratives which each focus on a particular individual or household. These narratives portray the past as a set of individual experiences as interpreted through particular artefacts or types of artefacts and enable archaeological data to be presented in a way which is accessible and meaningful to a non-archaeological audience while at the same time maintaining academic integrity. The stories themselves reveal three unique vignettes of life in late-nineteenth and early-twentieth century Whanganui in considerable more depth than traditional archaeological interpretations. When considered together these stories also provide insights into the past at a local, national and even global scale.

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Chapter 1: Introduction

In early 2010 archaeologists descended on an unassuming open air carpark in central Whanganui to undertake required investigations prior to the site being redeveloped as the Victoria Retail Centre (VRC). The excavations and monitoring which followed over the course of the next four years resulted in a material culture assemblage weighing over 2.5 tonnes, around half of which was collected from discrete, largely undisturbed features. Processing and analysis of the artefacts was too great an undertaking for any of the contractors involved so the assemblage was earmarked by Heritage New Zealand as a potential thesis project and eventually shipped down to the University of Otago where it formed the basis for the following research. Assemblages created during development driven excavations are increasingly the main product of New Zealand archaeological activity and risk becoming severely neglected since in depth interpretation is impractical, or even impossible, for many consultants. In addition, most are recovered prior to the formulation of structured research questions, therefore creating problems for the traditional research methodologies relied upon in academia. The approach taken here combines traditional archaeological recording and analysis of the historical artefacts with a slightly less orthodox presentation style. The data collected from the assemblage was combined with information from the historical record to construct a set of cohesive household level narratives with the intention of exploring the ways in which individual experiences can be interpreted through material culture and best communicated to not just an academic audience but the general public.

Looking Back

When describing ourselves or our memories we often use items of material culture as both focal points for our stories and, consciously or not, as metaphors or representations of the themes that give meaning and structure to life events. This concept has been explored in archaeology for the past three decades and, at its most basic level, is at the heart of interpretive archaeology (Leone 1984; Hodder 1985; 1991; Shanks 1998; Praetzellis and Praetzellis 2001; Wilkie 2009). The memoirs of pioneer Whanganui settler Ellen Hewett (1914) contain many colourful examples of

this phenomenon: a camp oven reflects the hardships faced by pioneer settlers in the 1850s, the ghosts of potential Maori attackers could be found in ginger beer bottles and a revolver allows the spirit of Mr Hewett to live on after his tragic death. Hewett's memoirs provided inspiration for the work presented here and so it is fitting that we should start with her words.

Trials and Tribulations of the Camp Oven

Mrs Ellen Hewett left Liverpool, England for New Zealand with her family in December 1854 when she was in her early teens. They initially settled in Nelson, where they were faced with many challenges in setting up a home. Their "large iron house" they had shipped over with them was missing pieces and no one had the necessary knowledge to construct what remained of it, forcing them to live in a house so small the family barely fit (Hewett 1914: 9). Even the simplest daily tasks required significant amounts of effort, as this account details:

'My mother tried to cook in an open fire-place on logs of wood in a camp oven (an iron pot with three short legs), under which was placed embers from the burning wood. The meat was placed in a tin dish in the iron pot with a flat iron lid; embers were also laid on the lid, and these had constantly to be renewed in order to cook a joint of meat. There were no ovens then, nor ranges such as we have now, and until we learned how to manage the wood fires the pan of potatoes was always tumbling over, and, alas! the kettle for tea also, very often scalding us.

But at last we profited by our experiences and became better managers, and soon we got an American stove, which was a great comfort when we could get the wood chopped small enough to go into it.' (Hewett 1914: 9-10)

This vivid description of their struggles cooking with an open fire and camp oven not only acts as a useful account of how these artefacts were used but also gives an idea of the difficulties involved in undertaking even simple tasks, such as feeding the family, that were encountered by the pioneer settlers of New Zealand. One can imagine the frustration of coming home from a long day clearing bush to make way for usable farmland, looking forward to a hot cup of tea and dinner, only to see the potatoes and tea kettle topple over and spill their contents on the ground. It would be time such as this, perhaps, that would have some settlers longing to swap the

'paradise' of New Zealand for the dirty, overcrowded streets of the homeland they had been desperate to leave behind.

The situation did improve over time, however. Ellen's mother mastered the camp oven and eventually upgraded to a far more civilised 'American stove.' At the same time, they were "mastering" the land and creating a civilised space in which to live. They moved into a substantial house and probably had some form of garden which provided a structured contrast to a backdrop of native New Zealand bush. Even with the modern stove, they could only use it when the wood could be chopped into small enough pieces, suggesting that at times they had to fall back on the rough frontier camp oven to prepare meals. The iron camp oven acted as a physical reminder of these early hardships, strong enough for Ellen Hewett to use it as a central part of this section of her memoirs, written fifty years later.

Ghosts in the Ginger Beer

After her marriage at just fifteen to Mr Hewett, Ellen moved to her husband's farm on the outskirts of the "little garrison town" of Whanganui (Hewett 1914: 13). The following extract tells of a night spent in town at a friend's house:

'On one amusing occasion, however, when, with her usual kindness, she [Mrs Jones] had persuaded me to stay the night as I was not feeling up to the long ride out to our farm, and as Mr Jones was away, I occupied a small bed in her room. I was nervous, having heard that the house was haunted by a Maori murdered there some years before.

The story was, that sometimes in the dead of night gun-shots could be distinctly heard. Of course, the thoughts this story suggested were not conducive to sleep. I tried to follow Mrs Jones' example, but could not. Soon I heard a loud 'bang,' which made me spring up, but as it had not awakened my kind hostess, I sat up trembling in the dark, when 'bang' went another shot. I could bear no more, and I remorselessly awoke my good friend, and said in terror, 'I have distinctly heard two shots fired!' Instead of being annoyed at my disturbing her, she said, calmly, 'Poor Mrs Hewett, it is purely imaginary.' I exclaimed, 'No, indeed, indeed it is not!' and as I spoke 'bang!' went another shot.

She hastily lighted her candle, and bravely went down the little staircase, I following pale and trembling. We found the 'ghosts,' but- 'Oh, what a mess!' exclaimed Mrs Jones; 'I must have made my ginger-beer extra strong.' The ghosts were the corks that had

escaped from the bottles with a bang, hitting the low wooden ceiling, and the frothy liquid was flowing freely over the floor.

This little incident caused a great deal of chaff for Mrs Jones and myself; and we little knew then, as we laughed merrily over it, how soon there would be real shots and no laughing.’ (Hewett 1914: 13-14)

Whanganui in the 1860s was a dangerous place. The strong military presence provided a little reassurance but the threat of attack from various Maori groups was always present and must have played heavily on the minds of all the inhabitants. The revenge hungry Maori ghost plaguing the mind of Ellen Hewett and the other guests of Mrs Jones was a personification of this constant danger. When the gunshots are revealed to be ginger beer bottles firing out their corks the two ladies laugh at their over-reaction, but the last sentence in this excerpt reveals that the threat was, in fact, no laughing matter.

Stoneware ginger beer bottles were familiar to most nineteenth and early twentieth century people, as was the process of brewing the beverage. It would have been easy for someone reading this narrative when it was first published to relate to the story and understand perfectly what Ellen Hewett was trying to describe.

Down the Barrel of a Gun

As the tensions over land ownership rose in Whanganui, the threat hinted at in the last extract became more and more real. In Hewett’s narrative she is eventually forced to retreat from her farm into the centre of town where she can be closer to the protection offered by the York and Rutland stockades. Mr Hewett returns to the farm only to be ambushed and killed by a band of militant Hauhau raiders. During the attack and subsequent be-heading he manages to save his trusty revolver from being taken, something which brings a degree of comfort to Ellen and helps her to cope with his death.

‘My husband [Mr Hewett] often used to say, ‘If I am ever attacked by the Maoris, I will try never to let them take my revolver’- and it was not until I mentioned this fact to an officer that search was made for it, and it was found not far from where he had fallen, pushed into the long grass.’ (Hewett 1914: 62)

'This revolver was sent at my request to Major Turner of the 65th Regiment, as my husband thought so highly of him as a good and brave officer.' (Hewett 1914: 93)

Throughout her memoirs, Ellen Hewett portrays her husband as a hero with strong principles, particularly during her account of his death. During the attack he sacrificed himself to allow his friend to escape, at the same time managing to stick to his word and not let his revolver fall into Maori hands. When this was proven to be the case, the gun itself was embodied with some of his heroic spirit, and by passing it onto Major Turner, a man who Mr Hewett himself greatly admired, Ellen Hewett allowed her husband to live on. The fact that the gun remained undamaged is also significant, as it contrasts with the treatment Mr Hewett's remains received (he was beheaded) and can perhaps be thought of as a metaphor for his unbreakable spirit. In the hands of Major Turner, the revolver could continue to protect the residents of Whanganui, including his widow and children, a thought which brought great comfort to Ellen Hewett and presumably to Mr Hewett had he been aware of it.

This extract in particular highlights just how much more there can be to an artefact than the material object. When thought of as merely a vessel for bullets, this revolver is rather mundane. It is only when it is understood as an extension of Mr Hewett himself that the true picture emerges.

These extracts from an early settler's memoirs show just how integral material culture items were and are in everyday life. Accounts like these help us to understand exactly what part the artefacts we find in archaeological deposits played in the lives of past people and by creating a similar narrative around archaeological objects we can show that they are more than just the material they are made of.

Describing archaeological artefacts based on their form, decoration and the material/s they are composed of gives a limited understanding of what the objects actually meant to people in the past. Placing the objects within a narrative allows for a more complete depiction of the part they played in everyday life and therefore paints a more accurate picture of the past.

Research aims and questions

For many cultural resource management (CRM) projects there is a delay between the excavation and the analysis of the material culture assemblage, and this analysis is

often undertaken by someone who was not involved in the collection of the artefacts. This means that CRM artefact analysis and interpretation is almost always conducted without specific research questions in mind and any interpretations that result are largely data-driven. As a result, the traditional positivist approach does not necessarily work for research in this area and a new method needs to be devised. An interpretive, or hermeneutic approach suits this problem well as it is more concerned with the *intent* behind human behaviour and the resultant material rather than the traditional scientific method which is more focused on recording and explaining the *results* of these intentions and is thus more reliant on stringent hypotheses and control over the entire research process. This method needs to allow for the direction of the research to be guided by the data rather than overly restrictive research questions and testing such an approach forms the basis for this research.

The other overarching aim of this research is to explore the multiple and entangled role material culture played in the past and how constructing narratives can help to bring this to the foreground. This is investigated in the nineteenth century colonial context of Whanganui, and tangentially examines the extent to which the lifestyles of households in Whanganui were impacted by the transformation of their town from its foundation as a planned 'Wakefield' settlement to a base for colonial warfare and then a hub for intensive farming settlement of the hinterland. To do this, material culture recovered from recent excavations will be used alongside evidence of household composition, wealth, occupation and family histories from documentary records to construct 'micro-histories' of individual households, and then compare these with broader site and region level narratives to provide a more nuanced understanding of how individuals experienced the past.

Two research questions (one methodological and the other more site specific) were devised to provide structure for the subsequent work, although as mentioned above they are deliberately broad:

- Can archaeological material collected from New Zealand CRM contexts be used to construct narratives about the past that are academically sound?

- What do household level narratives/micro-histories tell us about the experiences of individuals in nineteenth century Whanganui, and how do these experiences relate to the wider colonial world during that period?

Conducting this research using material collected from a CRM context will also showcase the information value and significance of these types of investigations and encourage archaeologists (and ideally also policy makers and the public) to push for more work of this kind to occur.

A third, ancillary aim of this work is for it to be used as reference material and/or raw data for future urban archaeological work in Whanganui and other New Zealand cities. This will be achieved by presenting a thorough description of the artefacts found during the excavation with a particular emphasis on chronological information, some of which may not be explicitly referred to in later chapters. This data can, however, be used by both academic and CRM archaeologists in the future to aid with assemblage, feature and site interpretations. The raw data in the appendices has also been organised with this purpose in mind.

Theoretical background

Answering these questions requires a strong theoretical and methodological framework to compensate for the broad research questions. This helps provide direction for the investigation in lieu of control over how the assemblage was excavated and sampled, while also ensuring that the interpretations presented as part of the narratives are justified and sound. Integral to this is to understand the theoretical underpinnings of constructing narratives using archaeological artefacts and the historical record, an approach which draws upon multiple areas of influence including history, interpretive archaeology and literary theory.

The use of a narrative structure as an explanatory tool has a long history in archaeology. Nineteenth and early twentieth century archaeologists such as Flinders Petrie with his seriation of Egyptian pottery (Petrie 1899), Gordon Childe (eg. Childe 1936), Thomsen and the “three-age system” (Heizer 1962) and Roger Duff (1950) here in New Zealand were preoccupied with the idea of periodization and cultural sequences. These sequences, as Hodder (1993: 268) argues, all follow a “classical narrative plot” with beginning, middle and end periods. Each period is constructed

entirely by the archaeologist, the people living through these times were not aware that they were living in the late Stone Age or early Classic period. The fact that they did not technically exist does not detract from their usefulness as an organisational tool (albeit a very simplistic one), even if we just keep them in the back of our minds as we come up with a more nuanced interpretation of a particular moment in the past and its cultural context.

Interpretive Archaeology

Interpretive archaeology had its beginnings in the 1980s, largely with the work of Hodder, Deetz, Leone and others (Leone 1984, Deetz 1988; Hodder 1985). It was partly driven by the recognition that the archaeologist is an active agent in the interpretation of a site; that instead of “discovering” a site or artefact’s intrinsic story, the researcher is, in fact, constructing it (Praetzellis 1998). The particular conclusions reached by any archaeologist or other researcher are constantly influenced by their own prejudices and background (Joyce 2006). As David Lowenthal (1988) states, “the past is a foreign country” and it is impossible to form a completely subjective picture of it that is not clouded by our own cultural (and temporal) norms and experiences. Recognising this fact does not necessarily detract from the relevance or accuracy of archaeological interpretations, it can instead reveal changes in what aspects of the past are seen as most important and, in some ways, act as a reflection of the archaeologist themselves (Wilkie 2009).

The term “interpretive” has made many archaeologists and scholars wary about the quality of the end results produced by this type of research. This is at least partially due to the penchant of several of its proponents to present their results in new and experimental ways. Many (for example Kohl 1993; Fleming 2006) argue that there is not enough reliance on quantitative, testable data and too much emphasis on “feelings” and conjecture. It is almost always the case, however, that the quantitative data is present in other parts of the research (for example Praetzellis’ (1994) “technical reports”), allowing the synthesis of those findings to take centre stage.

Some of the more extreme examples of this unorthodox presentation include results presented as stories, fabricated diary entries and even plays. The journal *Historical Archaeology* devoted an issue in the late 1990s to different ways of discussing archaeological results. Yamin (1998) creates narrative “vignettes” with which she

connects artefacts recovered during excavations in New York's Five Points to their potential owners. To do this, she borrows techniques and language from contemporary fiction, including the work of Charles Dickens. She argues that this approach encourages a greater understanding of the events that happened at a particular site by forcing the writer to organise these events into a logical plot. Beaudry (1998) tries a different method. She pulls together evidence from the archaeological and historical record to fill in gaps in the diaries of four occupants of a farm in Massachusetts. While Beaudry's entries are entirely imagined, she only references artefacts, features and events that she knows to be accurate. She also makes sure to differentiate between the actual entries and the constructed examples. Praetzellis and Praetzellis (1998) take it to perhaps the most extreme by presenting their contribution to this issue as a theatrical script. The scene is a late-twentieth century archaeological conference at which a female archaeologist is presenting her research about a nineteenth century merchant, who just so happens to enter the room and proceeds to interrupt her with his own thoughts on the subject. More recently, Caitlin DeSilvey presented an alternative narrative of Mullion Harbour, a National Trust protected area in Cornwall, England (DeSilvey 2012). She begins her narrative 300 million years in the past with an account of how the landscape was formed, before jumping to the present and continuing in reverse chronological order for three centuries, roughly a decade at a time. Each temporal section includes a mix of contemporary accounts, photographs, and, for the later entries, the author's own experiences of the site.

On the surface these approaches may be varied but they are all attempting to do the same thing(s). Behind all of these creative syntheses lies the desire to inject 'heteroglossia' into their results. The concept of heteroglossia is one of historical archaeology's founding principles (Schuyler 1978; 1988; Deetz 1998: 94) and, in Rosemary Joyce's view (2006), borrowed heavily from the work of twentieth century literary theorist Mikhail Bakhtin. Literally translated as 'many tongues', the basis of this idea is that the language of a particular cultural group or moment in time is based upon and contains a complicated web of words and meanings taken from a variety of other groups, places or periods. His book on the subject: *The Dialogic Imagination*, while principally aimed at fiction writers, contains several key points that are

important to consider when undertaking archaeological research and writing. He recognises that archaeologists and 'artistic prose' writers face similar problems when encountering and attempting to describe an object:

'... the object reveals first of all precisely the socially heteroglot multiplicity of its names, definitions and value judgments. Instead of the virginal fullness and inexhaustibility of the object itself, the prose writer confronts a multitude of routes, roads and paths that have been laid down in the object by social consciousness' (Bakhtin 1981: 278).

Bakhtin suggests objects be thought of as more than just a physical entity but as a focal point for the different terms and connotations that they are associated with. Writers (of fiction or archaeological interpretation) must endeavour to make their particular 'voice' heard over all of this background noise, but at the same time recognise that it is this heteroglossia that enables them to create descriptions of the object that provoke the desired responses from the reader.

There are many ways this heteroglossia can be introduced into archaeological writing, several of which are illustrated by the narratives described above. The contrast between the dry, technical language used by the archaeologist and the often colloquial nineteenth century language of the merchant in Praetzellis and Praetzellis' paper/performance is a very literal way of incorporating heteroglossia, but this can also be done on a much subtler level. Sticking with Mary Praetzellis, she approaches this issue by incorporating a section titled "Voices Describe West Oakland" in her comprehensive research design for the Cypress I-880 Replacement Project in California (1994). This section is situated right at the beginning of the background chapter, before the site itself is even described, and has the effect of bringing the plethora of meanings and stories embedded in the very fabric of this working class neighbourhood to the fore and making it clear that, as archaeologists, it is these human experiences which should be our focus. Yamin and Beaudry's works show how heteroglossia can be achieved by including passages from contemporary writings. Both papers include sections written in more formal archaeological style, sections from contemporary sources, and sections where the archaeologist combines the two, whether as imagined diary entries or anecdotes. DeSilvey's Mullion Harbour

narrative uses heteroglossia to emphasise several themes she feels are important and that would potentially be lost within a more conventional telling, in particular the unstable nature of the landscape and the uncertain future it faces with coastal erosion and sea level rise (2012: 52).

While these examples are not necessarily focused on material culture, the basic concept can easily be applied to artefacts. Using this type of approach allows for the inclusion of qualitative data that can often be overlooked in a more quantitative or functional analysis and for the focus of the research to shift from the often incredibly dry questions of manufacture methods, materials and where the items were coming from to a deeper understanding of what the artefacts might have meant to the people using them.

The methods used for introducing this heteroglossia are, of course, heavily dependent on what source material is available for a particular site. Journals and letters written by people living at the site in question are one of the best sources for this, but often they are not available. The more general language, and therefore hopefully ways of thinking, of the time can be gleaned for other sources, such as newspapers, contemporary literature, even recipe books (Scott 1997).

Micro-histories and household archaeology

One main intention of this research is to use the household as the basic analytical unit for a study similar to that undertaken in West Oakland, California, by Adrian and Mary Praetzellis and others (Praetzellis and Praetzellis 2004; Stewart and Praetzellis 1997), although on a smaller scale. Their approach focused on using a combination of qualitative and quantitative archaeological methods and the incorporation of historical information with the end goal of creating a cohesive narrative of the households and the ways in which they interacted.

This combination of several individual households' "micro-histories" to create a bigger picture of the community residing in a particular area or site is an approach that was developed by social historians (for example Stone 1979; Giovanni 1991; Ginzburg *et al* 1993; Lepore 2001) and has been developing gradually in historical archaeology since the 1980s (Mayne 2008: 107) and is especially popular amongst North American researchers (e.g. Johnson 2006; King 2006; Orser 2008, 2009;

Praetzellis and Praetzellis 2004). Similar work has also been undertaken in Australia under the guise of the Exploring the Archaeology of the Modern City (EAMC) project (for example Mayne *et al* 2000; Karskens 2001; Murray and Mayne 2003; Murray 2001; 2006; 2013; Crook *et al* 2005) in which inner city sites in Sydney and Melbourne were analysed at neighbourhood or household scale but with the intention of incorporation into national and international comparative studies (Murray 2013: 851). Its basis is the proposition that we cannot properly understand broader social processes and transformations without considering the role of the individual agents existing and acting within this social environment (King 2006: 299; Mayne 2008: 104). This approach lends itself particularly well to sites such as the VRC site in Whanganui, where the scale of the excavation allows for the examination of several households at the same time.

Johnson (2006) argues that the biggest problem facing historical archaeology (in particular colonial archaeology) today is understanding this connection between small-scale households and larger global networks, something which Orser (2008) feels the micro-histories approach is perfectly suited to. Orser's argument rests on the concept that to fully grasp how one household or individual lived we must develop an understanding of the larger context in which they existed, so in effect these localised studies are also out of necessity global network studies. Whanganui was at one time a hub for trade between New Zealand and the rest of the world. Locally manufactured products such as ships and flax rope were exported from the port and in exchange a wide variety of foodstuffs, household goods and luxury items were brought into the settlement. These global trade networks are manifested in the material culture assemblages which are now the focus of archaeological research.

A common critique of creating household scale narratives such as these is that the end result is almost always heavily influenced by the archaeologist's own voice, which in turn is influenced by their cultural background and, whether consciously or not, can be driven by any number of personal agendas (Horning 2011, 66). This is, indeed, a potential concern, but one that is quickly diminished once acknowledged and addressed. Martin Hall (2011: 296) suggests three main ways to address this issue: 1) a deep grounding in evidence, 2) a strong understanding and engagement

with modern archaeological theory and 3) not shying away from the inevitable entanglement of the past and present.

Hall's first point reflects the need for reliable datasets which have been recorded and analysed in a way which allows for comparisons and meaningful interpretations. It could also be extended to support the concept of data-led narratives, where an initial broad research aim is gradually narrowed down as the data, assisted by the researcher's own analytical lens, leads in a particular direction. His second suggestion addresses the necessity of understanding the theoretical background of the approach being taken at each step of the research in order to recognise the contemporary influences which may be driving the interpretation, in other words to be self-reflective. The third point re-iterates that it is impossible to create a narrative at the household or individual scale which is not coloured in some way by the author's own experience of reality, but also that this is potentially one of interpretive archaeology's strengths. By creating such narratives, the archaeologist can suggest a plausible explanation for the archaeological record, and produce something which holds just as much meaning for people today as it might have had for those in the past if they had read it.

Artefacts as processes

In order to use artefacts to interpret the past it must be understood that they are not simply static objects but are the result (and sometimes the cause) of an entangled web of processes, decisions and interactions in the past which ultimately led to that artefact being deposited into the archaeological record. This idea is not new to archaeology; it has been at the core of French material culture studies since the 1980s in the form of the *chaîne opératoire* concept (Sellet 1993: 106), for example, but as yet has been barely touched upon in New Zealand archaeology. Recent exceptions include Findlater 2011, Cunliffe 2014 and some work done by New Zealand archaeologists on Papua New Guinea material (Gaffney et al. 2015), however these examples all deal with pre-European artefacts. Applying this concept to historical assemblages enables the interpretations to be taken further than in pre-European and prehistoric contexts due to the presence of written records, which allow some of the actual individuals and households taking part in these processes to be woven into the story. Of course, with these extra data sources there sometimes

comes the problem of conflicting information, whether from differing accounts or inconsistencies between the historical and archaeological records, but it has long been accepted in related fields of research such as social anthropology, history and museum studies to embrace these “multiple voices” as part of the dynamic nature of the past and the parts artefacts played in it (for example Appadurai 1986; Falk 1994; Funari, Hall and Jones 1999; Hooper-Greenhill 2000: 131; Dobson and Ziemann 2008; Donnelly and Norton 2012; Clark 2013: 280). Archaeologists presenting interpretations based upon material culture face the same dilemmas as museum curators in that the way the interpretations are presented has a huge effect on the story and how it is understood.

Artefacts as Active Agents

Material culture can also be thought of as an active agent in the past and its interpretation. As Bakhtin argued, an artefact’s pre-existing cultural associations have a huge impact on the way the archaeologist sees and describes it. In the same way, people’s interactions with these artefacts in the past were heavily influenced by whatever associations surrounded the object at the time. Furthermore, because of this complex web of associations, the artefacts themselves would have been inseparable from the human agents (Olsen 2003). This concept has been popular in other social sciences for decades (for example Appadurai 1986; Falk 1994; Corrigan 1997; Shove *et al* 2009) but has more recently been adopted by archaeologists (eg. Olsen 2003; Harrison *et al* 2004; Herva and Nurmi 2009).

Artefacts as Palimpsests

The part that certain artefacts play in everyday life, just like the language used to describe them, is not static. Throughout the life of an object, its meaning, function and social associations may change multiple times. To truly understand how an artefact fits into society requires more than just its use or meaning at a single point in its existence (Kopytoff 1986). Walter Benjamin touched on this idea in his early 20th century study of the arcades of Paris (subsequently published as Benjamin and Tiedemann (1999)). He described how material culture items that become outdated or lose their initial usefulness are ‘hollowed out and, as ciphers, they draw in [new] meaning’ (Benjamin and Tiedemann 1999: 466).

In this way, artefacts can be thought of as *palimpsests*. Originally, a *palimpsest* was a manuscript upon which writing had been written then wiped to allow new writing to take place. The result was a manuscript with multiple layers of text, some of which were still visible but some which had been completely obliterated by more recent markings (Bailey 2007: 203). The term was first used in archaeology by Binford (1981) and has since been commonly applied to landscapes and deposits as a whole (eg. Lucas 2005; Bailey 2007). The idea can also be applied to individual artefacts to conceptualise the multiple functions (both practical and social) they fulfil over the course of their life. This process continues post deposition, as when an object becomes an archaeological artefact or museum display piece its value and meaning can often change drastically from an everyday item to a treasured token of the past (Dawdy 2010).

The Use of Cultural Resource Management Material

One of the biggest problems facing archaeology not just in New Zealand but all over the world today is the notable deficit between excavated sites and material and completed and/or published research. The New Zealand heritage legislation (*Heritage New Zealand Pouhere Taonga Act 2014*) requires three reporting stages for most archaeological sites. An assessment of archaeological values is required before an authority to modify the site is granted and once work is completed an interim report on the findings should be filed with Heritage New Zealand within 21 days, followed by a full report within a year. As of 21/11/2016, Heritage New Zealand's CRM report catalogue contained 5,984 reports and yet publications using the data presented these documents rarely makes it any further. There are a number of contributing factors to the issue, including the time and funding constraints faced by most cultural resource management projects, lack of relevant expertise, and the tendency to lose interest in projects and put them aside, often never to be looked at again (something that almost every archaeologist is guilty of at some point). This problem can at least start to be alleviated by looking on material and sites investigated and described within a CRM context as sources of data for research based projects. Archaeologists (for example Fagan 1995; 2006; Lynott 1997; Binford 2001; Seymour 2010) have been strongly arguing for decades about grey literature as an untapped data source, describing it as an invaluable and ever increasing resource,

while Praetzellis and Praetzellis (2011; 2015) have recently reinforced this argument with specific reference to historical archaeology.

This arrangement can be mutually beneficial for universities and contract archaeologists as it provides a ready supply of research material for students and, on a more practical level, can reduce the cost of analysis to the contractor and developer/land owner. It would also benefit New Zealand archaeology as a whole, as it would allow the material and sites to be placed within a broader and more meaningful context, something which is often lacking in CRM reports. The use of CRM sites, assemblages and data has been increasing in New Zealand historical archaeology research in recent years, with important work in several areas including Otago (Lawrence 2014; Woods 2013a; Garland 2013; Ross 2014; Sanders 2014), Canterbury (Tremlett 2016), Waikato (Simmons 2013), Northland (Tremlett 2011) and on a national scale (Woods 2011). However, most of these projects are restricted to unpublished theses/dissertations, the notable exceptions being Smith and Garland (2012), and Woods (2013b).

Researchers in the field of urban historical archaeology, in New Zealand and overseas, very rarely, if ever, get the luxury enjoyed by many other archaeologists of identifying a site that they feel would fit perfectly into their research and being granted permission to excavate, often more or less on their own terms and to their own schedule. The nature of urban areas makes this nearly impossible. Changing section boundaries, sub-division, constant redevelopment and the simple fact that most urban areas have standing buildings mean that historical period sites usually have an inaccessible footprint. To combat this, the way in which the archaeological data is collected has to be modified. The most common approach is to target areas that are undergoing redevelopment, almost always in conjunction with, or even as, CRM archaeologists. In North America especially, this has proved to be a feasible and fruitful approach, for example the Praetzellis' (1994; 2004) work in Oakland and the vast amount of research which has come out of New York's Five Points neighbourhood (Brighton 2001; Bonasera and Raymer 2001; Yamin 1998). Australia has also produced some exceptional urban archaeological work on the back of development projects, particularly in Melbourne's "Little Lon" (Mayne and Lawrence 1998; Murray and Mayne 2003; Murray 2006) and Sydney's Rocks district (Lydon

1993; Karskens 2003; Crook and Murray 2004). In New Zealand this has yet to be attempted and the vast majority of urban archaeology happens in a purely CRM context with the results rarely making it further than the obligatory Heritage New Zealand reports.

Thesis Structure

The first two chapters of this thesis set the scene for the rest of the research. This includes the inspiration behind it, an introduction to the research aims and the theoretical framework in which this research takes place. Chapter 2 introduces the cultural, geographical and historical setting for the research in the form of a background history of Whanganui. As part of this, six chronological periods are defined in order to provide a sequence to slot the subsequent archaeological data into.

Chapters 3, 4 and 5 outline the archaeological data used for this research and how it was treated. Chapter 3 is a description of the VRC site and a summary of the excavations which resulted in the artefact assemblage. Chapter 4 describes the methodology which was applied to the archaeological material in order to construct the subsequent narratives. Some preliminary results, mostly relating to feature and/or deposit sampling, are included in this chapter in order to illustrate the process as clearly as possible. The following chapter (5) is a description of the overall artefact assemblage, organised by material type. This chapter is deliberately detailed and comprehensive as it is intended for future use as reference material. As a result, it contains descriptions of artefacts that were not used for the three main narratives, however all of the data was utilised to date and contextualise the selected deposits and as such is a vital component of this research.

Narrative analyses of assemblages associated with three households are presented in chapters 6, 7 and 8, each of which centres around one of the families and their material culture assemblage. In order to emphasise the equal roles that the archaeological and historical records played in the construction of these narratives, aspects of each are introduced as they are encountered in the household's story rather than teased out and discussed separately. This has resulted in a set of stories that flow roughly chronologically from the family's (or one member of that family)

arrival in New Zealand to their deaths, but which place an emphasis on the period during which that household occupied the VRC site. Some of the artefacts included in each household's assemblage are not explicitly mentioned in their narratives but a full description of each assemblage can be found in Appendices B and C.

Chapter 9 considers the three family narratives together and in terms of the research questions posed in the introduction. This involves evaluating the success of the narrative approach and its applicability to a New Zealand CRM setting and then reflecting on what the Williamson, Byrne and Chavannes narratives reveal about life in nineteenth century Whanganui. An attempt is also made to place the households and Whanganui itself into a broader global context and finally some potential future lines of inquiry are identified.

The Appendices contain the raw data collected during the artefact analysis. Owner timelines for each of the Town Sections are presented in Appendix A, Appendix B contains descriptions of each of the artefact assemblages associated with the families in the main narratives and Appendix C those assemblages which were analysed but did not directly relate to those households. Appendices D, E and F are on disc and contain the artefact databases, illustrated ceramic patterns used for dating and the complete set of reports for the VRC site.

Chapter 2: Setting the Scene

Whanganui is located on the west coast of the North Island (Figure 1), close to the mouth of the large river from which it takes its name. The city itself is situated on a number of prominent terraces that were created by the tectonic uplift of the surrounding coastal lowlands (Day 1968: 30).



Figure 1. Map showing location of Whanganui and other settlements mentioned in the text.

Environment

The Whanganui River has always played a vital role in the settlement of this area. For both Māori and Europeans, it has provided a crucial transport and communication link to the central North Island. At 290 kilometres it is New Zealand's third longest river (first longest navigable) and runs roughly southwest from its source at Mount Tongariro to the Tasman Sea. The average volume of water flowing past the city of Whanganui is about 8,000 cusecs, but has a huge range of variation (from 1,500 to 200,000 cusecs). The city is rarely affected by flooding, however, because nearby sections of the river are deeply entrenched (Krenek 1968: 49-50).

The coastal portion of the Whanganui region has a mild climate with moderate wind and reasonably consistent levels of rainfall throughout the year. This rain is usually sufficient for crop growth, and in only two or three years a decade do dry conditions persist for more than a month. The average temperatures range from a summer high of around 27°C to a winter low of 0°C (de Lisle 1968: 41-44). These conditions combine to make Whanganui's hinterland ideal for many types of agriculture and have greatly aided the development of settlement in the area both before and after the arrival of Europeans.

History

For the purpose of this research the history of the settlement of Whanganui has been divided into six periods, each formed around key events which herald distinct eras. This chapter introduces these periods, using information gathered from the historical record and previous archaeological research (where available) to outline the key characteristics of each segment of time and provide a background for the archaeological investigation that follows. Figure 2 shows the locations of Whanganui sites mentioned in the text. Aspects of particular interest are population dynamics, settlement patterns, activity types and major events occurring in and around what is now the city of Whanganui. How the settlement fits into a broader New Zealand context will be briefly touched upon but not explored in great depth as that is beyond the scope of this work.



Figure 2. Map of central Whanganui showing archaeological sites mentioned in the text with NZAA site numbers (map taken from Land Information New Zealand)

Pre-European: <1839

This period covers the time before Europeans began to permanently settle around Whanganui. It encompasses a huge amount of change but a detailed discussion of pre-European archaeology and activity in this area is not a main focus of this research. A brief overview of Māori settlement and subsistence patterns in the area will be discussed using previous historical, archaeological and ethnographical research before a more detailed description of the earliest interactions between local iwi and Europeans in the region.

According to Māori oral traditions the Whanganui river valley was created by Mt Taranaki. This mountain was originally located on the central plateau alongside Ruapehu, Tongariro and Ngāuruhoe. These four mountain gods lived together in harmony for centuries until a disagreement surfaced surrounding the beautiful female mountain Pihanga. Each of the mountain gods was madly in love with Pihanga but she was betrothed to Tongariro. Together Tongariro and Pihanga had four children: Huka (snow), Hukarere (hail), Ua (rain) and Hukupapa (sleet). Eventually Taranaki's feelings overcame him and he attempted to kidnap Pihanga. He was soon discovered by

Tongariro, however, and a battle ensued (Downes 1915: 1). Once the dust cleared Tongariro had moved closer to his wife and distraught Taranaki heaved himself from the ground and made his way to the coast where he now sits. The path that he left became the Whanganui River valley and the river itself was filled with water from a battle wound at Tongariro's side (Smart and Bates 1972: 18). This story projects a theme of conflict far back into the past and suggests that it was an integral part of the collective consciousness of the region's inhabitants.

The earliest evidence for human occupation of the Whanganui region goes back at least 700 years, although for much of the early pre-European period there is frustratingly little known about occupation of the region (Walton 2000: 6-8; Taylor and Sutton 2001: 3). The evidence that has been recorded consists of dispersed coastal or lowland sites, and most of the interpretations surrounding these sites do not go much further than identifying them as "early" or "late" in the Pre-European period.

Attempts have been made to undertake systematic surveys of pre-European archaeological sites surrounding the Whanganui River, however none have been completed and all are now well out of date. The first thorough investigation was undertaken in association with Wanganui Museum and the New Zealand Historic Places Trust (NZHPT) (now Heritage New Zealand) in the early 1960s and involved a combination of ground surveys and study of aerial photographs (Smart 1960; 1962). This survey recorded 176 sites in Whanganui but all were only briefly described. The following decade a more intensive site survey along the river itself was undertaken, again by the NZHPT, but this was recognised from the outset as being insufficient for broadening an understanding of the region's archaeology (Walton 1979). After this brief period of investigations, the identification, recording and interpretation of Whanganui pre-European sites slowed to a crawl. Only sites investigated as part of development projects have received any real attention (for example Jones 2009), and for most of those deemed significant the investigations only went so far so as not to negatively impact the sites. This approach is beneficial to protecting our pre-European heritage for the future but has the draw-back of limiting the pursuit of our knowledge about this period.

The Whanganui region, particularly surrounding the river, was one of the most densely populated areas in the period just prior to the arrival of Europeans thanks in part to its

fertile alluvial soils which could support a large population through intensive agriculture (Statistics New Zealand 1999: 9). Definitive evidence for two traditional Māori cultigens (kumara and taro) has been recorded in the Whanganui region (Furey 2006). Five types of garden sites have been recorded in the area, with borrow pits for soil improvement being the most common (ibid: Table 1).

After the arrival of Captain Cook Māori began to favour European introduced varieties of kumara over traditional ones due to their higher yield and tolerance for more variable conditions, so in the period just prior to the arrival of settlers in the area this was one of the dominant crops, along with potato (Best 1976: 114). The river and surrounding bush provided supplements to these crops, including eels and various types of birds (Krenek 1968: 53). These resources were incorporated into a seasonal subsistence cycle which required a fluid system of land access rights and “ownership.”

The large population able to be supported by these resources along the Whanganui River led to intermittent tensions and disputes between neighbouring iwi and resulted in the construction of defensive pa in numerous locations. Two large pa (Patupuhou and Pukenamu) were located within the area that is now the city of Whanganui on prominent sand hills with views up and down river (Smart and Bates 1972: 33).

The first recorded Europeans to visit the Whanganui River were a group of men in 1831 led by whaler turned human head trader Joseph Rowe, and this encounter is described in most histories of Whanganui (Smart and Bates 1972: 45; Clarke 1903: 93-94; Chapple and Vietch 1939). Preserved Māori tattooed heads (mokomokai) had become fashionable curiosities sought after by museums and foreign collectors, and traders such as Rowe made substantial profits selling them to visiting ships. When Rowe’s party arrived at the mouth of the river on the 14th of January they found a small group of Māori camped by the shore who invited them to rest and eat with them. It would later transpire, however, that this group had been waiting specifically for Rowe to exact revenge on him for taking the heads of some their relatives. Their retaliation entailed killing Rowe and two of his men and preserving their heads. The surviving group members (Andrew Powers and an “unnamed negro”) were taken to local chief Te Heuheu. When Te Heuheu, who was well known for his “exceptional ability in the diplomatic management” of his people (Clarke 1903: 94), heard what had transpired,

he was horrified and severely chastised the men. He had no desire to cultivate bad feelings between Māori and Europeans and felt the need to make this stance clear.

This initial encounter between Whanganui Māori and Europeans can be seen as a foreshadowing of the complicated relationship between the two parties that would affect the settlement for the first decades of its existence. For the rest of the 1830s a small number of traders and missionaries were the only Europeans to spend any time in the area. Flax grew in abundance on the swampy banks of the river and was in great demand for rope for ships (Smart and Bates 1972: 145), and the large population of Māori was seen by several missionaries and church societies as ripe for conversion. The missionaries received a mostly positive response from the local Māori, and although there were occasional misunderstandings the main disagreements and violence seems to have been amongst the missionaries themselves, often as a result of mismatched partnerships being thrust into frontier life together (Owens 2004: 77, 83). Tensions would begin to grow substantially, however, as more Europeans appeared in the district and the New Zealand Company chose the region for its next planned settlement.

Wakefield: 1839-December 1846

In the late 1830s Colonel Edward Wakefield, as principal agent of the New Zealand Company, commissioned the surveying of Wellington (then Port Nicholson) into individual plots that he would then allocate to settlers who were currently on their way from Britain. A problem arose in that the number of settlers with claims on land in the colony significantly outnumbered the available plots. His solution was to create a whole new settlement, and so set his sights on an area of fertile plains on the banks of the Whanganui, or Knowsley, River. At the end of 1839 he sent his nephew Edward Jerningham Wakefield up the coast to see this area for himself and arrange for its purchase. He met with three Māori chiefs at Waikanae (about 130km to the south of Whanganui) and convinced two to sign a document authorising the sale of a vast tract of land surrounding the Whanganui River. To finalise the deal he sent a shipment of goods worth around £500 to Kurukakanga, a chief who lived about 160 kilometres up the river.

This deal was problematic for a number of reasons. First and foremost, the chiefs with whom the Wakefields dealt lived a considerable distance from the site of the new

settlement. Although they may have had some ties to that area, the ways in which Māori used the area in question (with different groups using the same land at different times) also meant that a large number of other people who could lay at least partial claim to it, far more than just the three Wakefield consulted. This, when contrasted with European notions of land ownership, caused confusion between the two parties as to what they were agreeing to. To add to this, the site of the proposed township was in an area which was at the time at the centre of tribal disputes, in particular the recent re-settlement of the region by a group of iwi from the north (Ngāti Toa, Ngāti Tama, Ngāti Mutunga and Ngāti Awa) led by Te Rauparaha (Te Rūnanga o Toa Rangatira 2010). The repercussions of Wakefield's deal consequently had a major impact on life in the new town for the first few decades of its existence and are still felt in the present.

Once the land was "purchased", Jerningham Wakefield accompanied a team of surveyors to mark out the sections of land for the settlers. The streets were set out as a grid which was the favoured layout of the New Zealand Company. Colonel Wakefield saw this regular settlement layout as a physical expression of order and civilisation, drawing inspiration from classical civic architecture and urban planning (Forrest 1964: 10). The Company's other main New Zealand settlements were laid out in a similar grid, in some places (such as the hills around central Dunedin) regardless of the topography (Woods 2013: 137).

The first large contingent of European settlers arrived in Whanganui on board the *Clydeside* in November 1841, although prior to this a small number of people had been filtering into the area to set up home (Chapple and Veitch 1939: 38). By 1843 the European population of the new settlement was 209, and it continued to hover around 200 for the rest of the Wakefield period. Typically for a New Zealand Company settlement the early settlers were a mix of wealthy capitalists and labourers. Unlike other Company towns however these settlers did not come directly from Britain, but instead were filtered through Wellington. This is interesting as it means that the majority of the original Whanganui settlers did not explicitly choose to live there, they expected to stay in Wellington, a much larger and better provisioned town.

Several mission stations were also established around the time the first settlers arrived, providing permanent homes for those missionaries who had previously been transitory visitors to the area. The Church Missionary Society, Roman Catholics and

Wesleyans were the biggest providers of missionaries to the area and by 1843 Whanganui, under the watch of Rev. Richard Taylor, was one of the Church Mission Society's most important New Zealand stations (Owens 2004: 72-73). The focus for these missionaries was the conversion of the local iwi rather than provision of religious services to settlers, so the dominant denominations did not necessarily reflect those of the settlers. The 1848 census (Statistics New Zealand 2013a) (although conducted post-Wakefield period) gives an insight into the earliest settler population's religious persuasions, with Anglican being the most common (seventy-two people) closely followed by "Other Dissenting Protestants," of which most were probably Presbyterian (sixty-one). Seventeen Wesleyans and five Roman Catholics were also recorded, although some of these were the missionaries themselves.

Commercial activity during this period was minimal. Surveyors were one of the first professions to arrive in the area, followed by builders, carpenters and blacksmiths. Many of the earliest settlers constructed their own temporary shelters on their assigned sections and those with properties in the hinterland set up their land for crops and stock immediately in order to provide for their families. Trade with local and up-river Maori was regularly undertaken by most of the first European settlers. Pork and potatoes acquired from Maori made up the bulk of the early settler diet until they were able to establish their own crops and herds. A letter written home in 1842 by Jessie Campbell, a woman who arrived on the *Clydeside*, gives details of the process:

"We buy everything from the natives by barter, will get a basket of potatoes weighing 20lbs for a fig of tobacco or a tobacco and pipe. I have bought a basket for a needle and a small quantity of sewing thread. They will give a good pig for a single English blanket which costs in Wellington 11/-." (Drummond 1960: 60)

While many of the interactions between the earliest settlers and local Māori were positive, the tensions surrounding the Wakefield land deal were increasing. Small scale raids of settler properties began to occur with increasing regularity. The situation would eventually become serious enough for New Zealand Company to request British military support, which they were granted in the form of several regiments in late 1846.

No previously recorded or investigated archaeological sites are known to belong to this period of Whanganui's past.

Garrison: December 1846-January 1870

In December 1846 the first 200 imperial troops arrived in Whanganui aboard the *HMS Calliope* (Owens 2004: 127) and the following year saw the completion of two major fortifications in Whanganui: the Rutland and York Stockades (Figure 3, also see Figure 2 for locations). Each stockade was erected on one of the two prominent sand hills that overlooked the centre of the settlement which had both been used for a time as fortified pa in the pre-European period (Pukenamu and Patupuhuo respectively), thus being proven strategic defensive positions. The Rutland stockade was the first and largest of the two, housing the 18th and 58th regiments, while the smaller York Stockade was the home base for the 65th and later (1861) two companies of the 57th regiment (Young 1998: 35). These events were to mark the beginning of Whanganui's life as a garrison town.

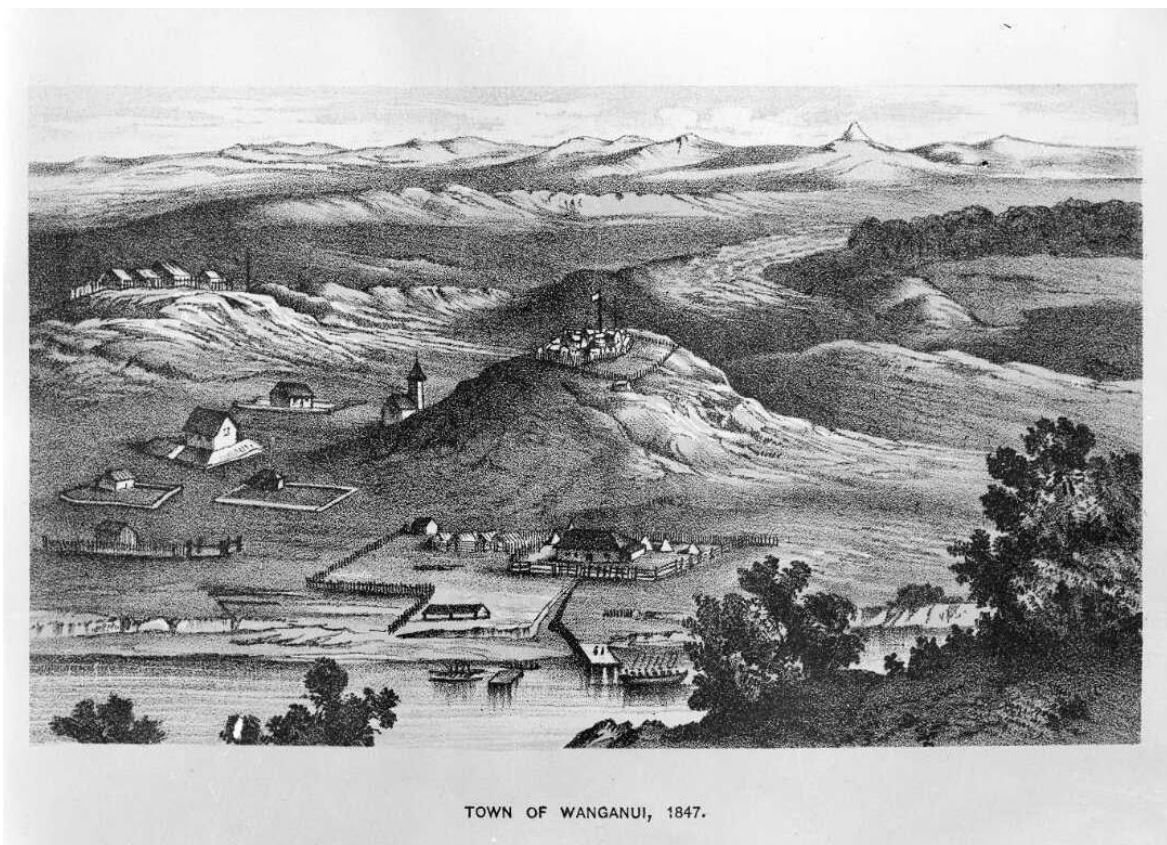


Figure 3. W Potts Lithograph of Whanganui in 1847. The Rutland stockade is visible in the centre and York stockade on the hill behind. (Alexander Turnbull Library, ref: 1/1-007187-G)

The 65th or Yorkshire regiment arrived in Whanganui on the 7th of June, 1847 after spending the previous eleven months stationed in Wellington (Austin 1866). Upon their arrival they constructed the York stockade and took up residence there until the

58th Regiment left the area at which time they took their place at the more substantial Rutland stockade (Lovegrove 1960). This regiment had a huge impact on the settlement, and not just in a military sense. In 1857 they set up one of Whanganui's first theatres where they put on regular shows to entertain the locals, and when they left the town for a new station in Auckland at the end of 1861 the settlers returned the favour by throwing them the biggest party the settlement had ever seen (Chapple and Veitch 1939: 82, 92).

The 57th regiment arrived in Whanganui on January 26th 1861 from their previous posting in India and were garrisoned in the York stockade (Caines 1955: 4). Their successes in numerous battles during the Peninsular and Crimean wars, as well as the conflicts in India, many of which were very much against the odds, earned them the nickname "The Diehards." They would not have quite the impact that the larger 65th regiment had on the settlement, but their contribution to its protection was just as appreciated. The Diehards left Whanganui for Auckland in 1866 aboard the *S.S. Ahuriri* (Smart and Bates 1972: 174).

These regiments had a huge effect on Whanganui, not least due to the fact that upon their arrival they more than doubled the European population (by 1847 it had slipped to 166 as some families abandoned the settlement). In a practical sense their biggest test would be the "Battle of St Johns Wood" which took place in July 1847. St John's Wood (now known as St John's Hill) was an area of dense bush and swampy land to the south-west of central Whanganui. On July 19th a contingent of troops from both York and Rutland stockades were met with an opposing force of Maori from up the river led by Te Mamuku. The fighting lasted for most of the day but ended indecisively with both sides retreating (Smart and Bates 1972: 74). While the number of casualties was reportedly low (three dead and ten wounded) (ibid), this was a distressing experience for those involved, including the civilian occupants of Whanganui, since at least part of the battle would have been visible, as well as audible, from the main settlement.

The dawn of the 1850s brought with it a welcome lull in the troubles that would last for most of the decade. This coincided with (or perhaps was a result of) the New Zealand Company losing its control over Whanganui in 1850 and the purchase of the area by the Crown being finalised. During this period the settlement enjoyed steady development and expansion without any of the "excitement" of the 1840s (Chapple and

Veitch 1939: 77). In 1861 the civilian population had risen to 1,960, more than ten times the number of residents at the beginning of the Garrison period, and by 1864 it reached 2,419.

This peace was not to last, however, and the 1860s brought with them a new threat to Whanganui. A syncretic Māori religious group or cult known as the Hau Hau, whose prophets promised deliverance from Pakeha domination, had been steadily growing in Taranaki and by 1864 was spreading to the inland Whanganui region (Smart and Bates 1972:101). Their grievances were not just with the nature and logistics of the colonisation of the area by Europeans but that it was happening at all, and they felt their divine purpose was to reclaim the land for Māori. This movement was typical of revitalisation religions which commonly emerged in colonial and post-colonial contexts throughout the nineteenth and twentieth centuries (Wallace 1956; Beckford 1986), such as the Native American Ghost Dance movements of the late nineteenth century (Kehoe 2006), Mau Mau in Africa during the 1950s (Kushner 1965) and Ajeg Bali Movement in Indonesia (Reuter 2009). Attempts at pre-emptive offensive measures by the British only served to heighten tensions and war soon broke out. It was not only the driving factors in this war that were different to the unrest of the 1840s but also the modes in which it was undertaken. The Hau Hau forces largely abandoned fortified defences in favour of guerrilla style attacks and raids, which were often brutal and indiscriminate compared to those that took place two decades before (Blake 1909: 25).

It was during the midst of these “Hau Hau wars” that Mr Hewett was murdered. The offenders were apprehended but never charged, leading to much outrage amongst the settlers (*Wanganui Herald* 29/6/1867, page 2). These raids continued for more than half of the 1860s, on more than one occasion reaching Whanganui itself, and the inhabitants once again relied heavily on the York and Rutland stockades for protection and sanctuary.

In July 1867 the Hau Hau descended on Whanganui a final time, but on this occasion it was to show that they wished to put an end to the violence. The town welcomed the group but no official agreement was signed as the Hau Hau refused to stop practising the religion that was the core of the movement (*Wanganui Herald* 3/7/1867, page 2; 11/7/1867, page 2). Eventually the violent raids stopped, tensions eased and the

inhabitants, both European and Maori, were able to shift their attention to establishing Whanganui as a viable and prosperous town. The stockades began to empty as the troops were dispatched to new areas where they were of more use. The York stockade was briefly called into service as a storage facility by the NZ Army (Ross 2004: 41) before being demolished in 1870 (Lovegrove 1960). On the 21st of January, 1870, the last imperial troops from the 18th regiment moved on from the Rutland stockade (Owens 2004: 281). This meant an official end of Whanganui's time as a garrison town, although this period would go on to define the settlement for many years to come. Even the population itself would retain its military character, with many of the soldiers stationed here either staying on or returning to Whanganui once their service ended (Austin 1866: 3; Ross 2004: 73).

An 1848 census (Statistics New Zealand 2013a) records the occupations of Whanganui's (or Petre as it was referred to at the time) non-military inhabitants and shows that commercial activity at the beginning of this turbulent period was limited mainly to sectors relating to the construction of homes and other buildings and the provision of food for the settlers and soldiers. The stockades themselves were the centre of the settlement, both physically and symbolically, and the regiments were a major source of potential income for the civilian residents. Not only did the soldiers require food and provisions but officers or those with families needed somewhere to live outside of the barracks, and due to the transitory nature of military life boarding houses or rental properties would have been preferable options to purchasing a section or house.

Another major industry during this period was timber milling which took advantage of the Whanganui region's vast swathes of forest. Deforestation also cleared the way (figuratively and literally) for sheep farmers (Statistics New Zealand 1999: 9). These two industries would continue to play a huge role in Whanganui's economy during the following decades, especially as the port grew and traffic increased.

In urban Whanganui two archaeological investigations have recorded deposits which are thought to date to the Garrison period. Excavations undertaken by Archaeology North at Queens Park in 2002 unearthed rubbish deposits which related to military activity, probably during that location's time as the Rutland stockade (Taylor 2002). The finds included regimental uniform components, food waste, broken ceramic and

glass vessels and a leather horse bridle. Investigations undertaken by CFG Heritage in 2006 at the UCOL site on Campbell Place recorded several postholes and rubbish deposits dating to the 1850s-70s. Some of these features were found within the first house built on the site by Thomas Bamber, an early settler who would later become the mayor of Whanganui, in the 1850s, and were interpreted as relating either to Bamber's initial use of the property or to pre-date it (Campbell, Gumbley, and Hudson 2009: 14). Features on another part of the site related to the earliest phases of the Wanganui Hotel buildings and were more commercial in nature, consisting of large numbers of glass bottles (ibid: 27).

Recovery: January 1870-1882

Whanganui's early years are intricately recorded in several written histories as well as the diaries and memoirs of local residents, but the period after the military left is relatively neglected. Saunders' (1968) edited book on the area *Introducing Wanganui* allocates a mere six pages to the ninety-five years from 1870 to 1965 compared to more than double that to the first thirty years of the settlement's existence. For the last thirty years of the nineteenth and into the early twentieth century contemporary newspapers such as the *Wanganui Herald* and *Chronicle* are an indispensable source of information about major local events.

The 1870s were a decade of recovery and progress. Whanganui would blossom from a small village into an established town at this time and cement its place as a distribution centre for the agricultural produce being grown and raised in its hinterland (Chapple and Veitch 1939: 129). In 1875 Whanganui was the second largest town in the Wellington province and had an estimated population of 2,600 occupying about 300 houses (Statistics New Zealand 2013). By the end of the Recovery period the urban Whanganui population had grown to 4,646.

Whanganui itself also expanded outwards with central residential areas being replaced with retail and commercial properties, particularly around Victoria Avenue, and people moving towards the suburbs to live. Shipping and trade were vital to the town's economy during this period, and shipbuilding began to emerge on a large scale. Outward trade of potatoes, preserved pork products and pigs had been important since the earliest days of the settlement and continued to be so for the rest of the century. The introduction of refrigeration in the 1880s allowed fresh meat to be added to this

list of exports. The town was also considered one of New Zealand's foremost winemaking centres (Smart and Bates 1972: 152).

The Recovery period was characterised by improvements in infrastructure both locally and nationally. The Vogel government borrowed millions of pounds from the Crown to spend on roads, bridges and railways (Reed 1955: 262), and Whanganui quickly bought into this enthusiasm. Roads in the centre of the settlement were steadily improved and the base of the Patupuhuo sand hill was cleared from where it covered part of St Hill Street. In the mid-1870s W G Bassett secured a contract to use the sand from this hill to reclaim a section of the foreshore. To do this he set up a small steam locomotive on a set of rails that ran from the wharf to the St Hill Street and Maria Place junction (Spurdle 1958: 25). This reclamation of the river bank would continue into the early 1880s (Sutton and Taylor 2011).



Figure 4. Whanganui ca. 1875 showing new bridge in foreground (Alexander Turnbull Library, ref: 1/1-000218-G)

One of the most important events of the 1870s, however, was the completion of the bridge across the river (Figure 4). Before this time the only way across the Whanganui

was on a small ferry, making the trip south by road a huge inconvenience, most visitors instead making the journey along the coast on ships. The installation of the bridge in 1871 allowed the small settlement to be accessed easily by road from the south (most importantly Wellington) and is almost certainly responsible for the rapid growth of Whanganui during the next few decades. The construction process, while initially estimated at £5,000 (Ross 1968: 165), ended up costing £32,000 (Statistics New Zealand 2013) and meant that a toll had to be imposed on anyone using the bridge for many years, much to the annoyance of locals who had reason to cross the river regularly.

The loss of the troops and fortifications did not mean the end of the Patupuhuo and Pukenamu sand hills' roles in the protection of Whanganui and its inhabitants. By the middle of the 1870s the York stockade had been converted into a signal station which relayed the signals made by stations closer to the harbour and allowed ships to pass safely up the river while at the same time alerting the population of incoming craft, tidal events or stormy weather (Statistics New Zealand 2013). During this period the location was also to undergo a name change. Locals began to refer to the Patupuhou ridge as Cooks Garden, in reference to the impressive kitchen garden that was established there to feed the troops, and this name is still used today. The Rutland stockade buildings on Pukenamu were used as the Whanganui prison from 1872 until the mid-twentieth century, protecting the population from criminals and sometimes the inmates from themselves, and would later become a public reserve (Queens Park).

The Recovery period drew to a close in 1882 when the last of the York stockade buildings were demolished (Chapple and Veitch 1939: 131) (some of the Rutland stockade remained in use as the jail after this time). This event, even though it was not overly publicised or formally marked, can be thought of as a physical symbol of the town moving on from its violent beginnings and moving towards a more peaceful future. The end of this period coincided with an economic downturn after the Vogel government "boom" years (Reed 1955: 264) and saw much of the country, including Whanganui, slip into a depression.

Archaeological remains dating to this period have been found in several urban Whanganui sites. These remains include domestic rubbish pits (Horwood 1994; Bruce 2013; Campbell, Gumbley, and Hudson 2009: 21), commercial dumps and structural

remains (Campbell, Gumbley, and Hudson 2009: 31–33), remains of the old prison fence (Taylor 2002) and material used to reclaim part of the river foreshore in the late 1870s (Sutton and Taylor 2011).

Depression: 1882-1895

The start of a national economic downturn did not halt the progress and expansion of Whanganui but did slow its pace considerably. The vast amounts of money poured into infrastructure during the previous decades allowed for the establishment and growth of residential suburbs and smaller satellite towns around the main centre, and this process continued throughout the 1880s (Smart and Bates 1972: 138). This allowed the population to become more dispersed and freed up central urban areas for commercial and industrial purposes. The 1886 census recorded the population of the town itself as 4,901 with another 2,056 residents living in the surrounding area. By 1891 the urban population had grown by less than 100 to 5,011 and the county population by around 200 to 2,281, a much smaller increase than was noted between previous censuses.

This slowing down was also visible in the commercial sector with bankruptcy notices becoming commonplace in the local newspapers. Many Whanganui business owners had taken out loans to grow their businesses during the “boom” but were now unable to sell enough goods or services to meet the repayments (e.g. *Wanganui Chronicle* 19/1/1882, page 2; *Wanganui Herald* 3/7/1889, page 2) while other residents had invested in new companies which did not survive the depression and were left severely out of pocket (e.g. *Wanganui Herald* 13/10/1885, page 2). Unemployment rates were also high. The *Wanganui Chronicle* (31/3/1880, page 2) reported with great concern that one local business listed an advertisement calling for a low level assistant to work in a wine and spirit store and received 43 applicants within a couple of days.

Although the worst of the violence around Whanganui was over by this time, disputes over land ownership were still causing some issues in the 1880s. Newspaper reports from October 1883 tell of armed parties led by local chief Taumata preventing the survey of land further up the Whanganui River for the installation of a railway. One particular newspaper account reveals the mood of at least some of the European population regarding such disruptions, refusing to recognise any rights to this land that Taumata claimed. The reporter demands that it is “the time to get rid of the power

that has from the earliest times defied the Government on the Whanganui River” (*Wanganui Herald* 10/10/1883). This attitude obviously hampered the progress of Whanganui as a peaceful and cohesive community, but eventually the apprehensions on either side were mostly overcome.

The buildings of the York Stockade were pulled down in 1882 but the signal station would remain until 1891 when it was replaced with a different type of safety mechanism. The fire department built a wooden watchtower (Figure 5) which held a large bell that would be rung in the event of a fire.



Figure 5. Cooks Garden fire bell tower on the site of the York Stockade, August 2014

Archaeological deposits and features dating to this period have been identified during several archaeological investigations around Whanganui, however little effort has been taken to interpret these assemblages other than to provide potential deposit date ranges and associations. Three domestic rubbish pits and various structural features were uncovered at a St Hill Street site (Bowers and Phillips 1998), more rubbish pits along the back of a Victoria Avenue property, some of which probably date to this period (Bruce 2013), and multiple features relating to the Bamber house, Wanganui

Hotel and other commercial properties at the UCOL site on Campbell Place (Campbell, Gumbley, and Hudson 2009).

Late Victorian/Edwardian: 1895-1914

Once the depression eased, Whanganui was quick to recover. The urban population growth rate increased, rising from 5,936 in 1896 to 7,329 in 1901, an increase more than ten times greater than that observed between the 1886 and 1891 censuses. At the turn of the twentieth century it was the largest town in the province (Ross 1968: 166), and would grow to become only the sixth settlement in the country to be classed as a city in 1924 (Schrader 2016, 102). It would continue to be one of New Zealand's major regional centres until overtaken by Palmerston North in the mid-twentieth century.

The port by this time was functioning as a national and international trade centre as well as a shipbuilding area. The main exports were still agricultural produce from the hinterland and timber from up-river. By the Late Victorian period the town was fiscally comfortable enough to establish several cultural institutions. The Opera House on St Hill Street, the first museum and an observatory were all opened during this period, and plans were put in place for an art gallery and several beautification projects, most significantly the area surrounding Virginia lakes, the town's main supply of water (Smart and Bates 1972: 267–271).

A perfect characterisation of the calmness which prevailed during this period comes in the form of one of the most pressing issues facing Whanganui residents at the turn of the twentieth century. Debate was rife over whether the new century started on 1st of January 1900 or 1901 (e.g. *Wanganui Herald* 3/10/1899, page 3; 7/10/1899, page 2; *Wanganui Chronicle* 2/3/1900, page 2), although eventually it was decided that 1901 was, in fact, the official beginning (*Wanganui Chronicle* 19/11/1900, page 2).

Cooks Garden would stay true to its role of protecting the city throughout the twentieth century and into the twenty-first, albeit in a more symbolic way. In 1896 the Wanganui Amateur Athletic and Cycling Club joined forces with the United Cricket Club and Rugby Union to transform the sand hill into a sports grounds (*Wanganui Herald* 22/5/1896), and it still fulfils this purpose today. The fire watchtower became the housing for the town clock bells and chiming mechanism in the 1930s.

An arbitrary date of 1914 has been chosen as the end of this period of Whanganui's history and also as an end to the time focused on for this research. The start of the First World War had a significant impact at a global, national, regional and individual scale so there would have been noticeable changes to life in Whanganui at this time. With regards to archaeology, however, features dating to the twentieth century are usually ignored or only noted in passing, often grouped together under a broad "modern" heading. Features containing material dating to the Late Victorian/Edwardian period have been found in urban Whanganui sites, but most receive little consideration and interpretation is kept to a minimum. An exception to this is the James Thain & Co bulk store site on Taupo Quay (Sutton and Taylor 2011) at which remains were found which related to the bulk store (built in 1895). These features and artefacts provided an insight into the types of items passing through the store, most of which were being brought into the town through the port.

Chapter 3: The Victoria Retail Centre Site

The Victoria Retail Centre (VRC) site (R22/523) is located in central Whanganui at the northern end of the town block bordered by Victoria Avenue, Maria Place, St Hill Street and Ridgway Street (Figure 6). The site covered five complete Town Sections (TS186, TS187, TS188, TS189, TS190 and TS191) and parts of another three (TS183, TS185 and TS192). Archaeology North Ltd. were initially contracted by the developer (C. J. Efstratiou) to conduct archaeological investigations at the site and undertook extensive excavations during February to April 2010 when a disagreement between the two parties resulted in work stopping. In order to complete the archaeological authority requirements (Authority 2010/121) Ivan Bruce, Kiri Sharpe (both in 2012) and then Kevin Jones and the author (2014) conducting further monitoring, although these investigations were not able to be conducted in as much detail as the 2010 excavations. An overview of the site is presented below followed by brief summaries of each of the excavation/monitoring phases. All of the following information is taken from the relevant Heritage New Zealand reports (Keith 2014; Bruce 2012; Jones and Woods 2014; Sharpe 2012) unless stated otherwise, and the reports can be found in Appendix E.

Prior to being redeveloped the portion of the site fronting St Hill Street to halfway up Maria Place was in use as a tar-sealed carpark while commercial and retail businesses covered the remaining areas (Figure 7). The redevelopment was completed in 2015 and a shopping mall now occupies the site, with a central uncovered carpark accessible from Maria Place (Figure 8).

Site Context

The broad context within which this site was situated throughout Whanganui's history has been covered in the previous chapter, however it is necessary here to provide some more specific background for this area. Each of the three streets which border the site (Victoria Avenue, Maria Place and St Hill Street) have their own distinct history and character which have influenced certain parts of the site differently and this section is organised by street frontage to highlight this.

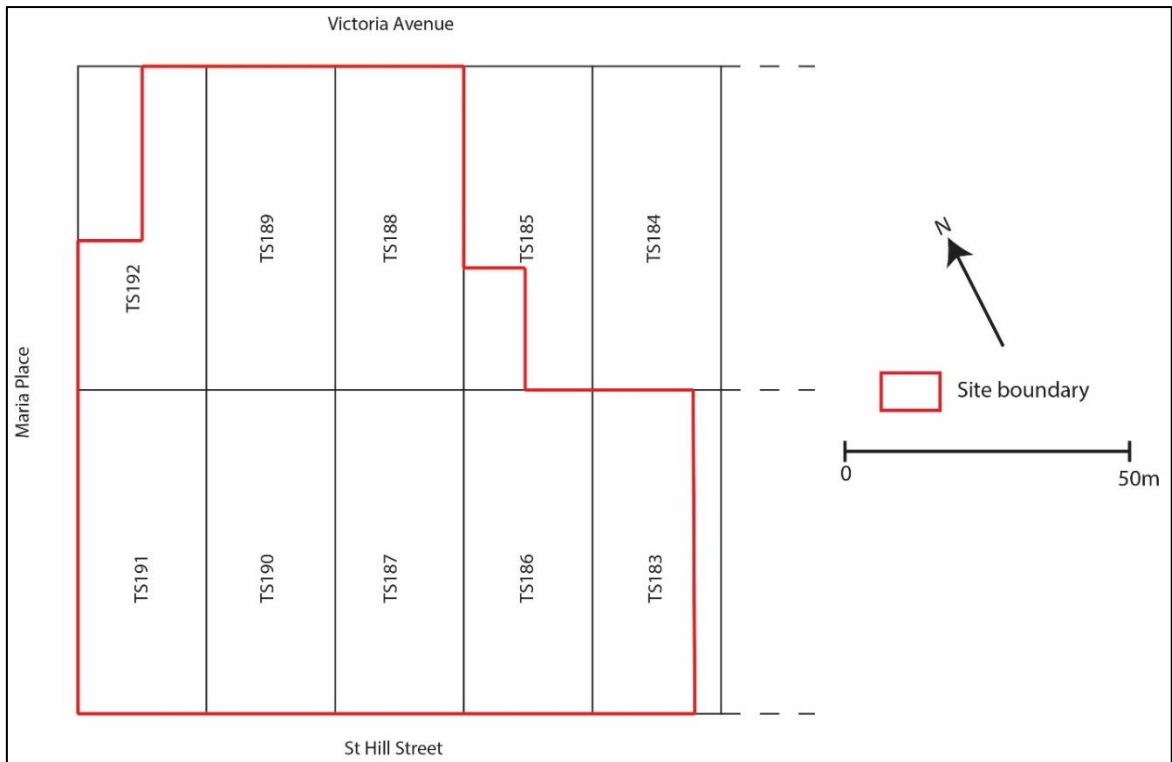


Figure 6. VRC site plan showing Town Section numbers and site boundary.



Figure 7. The VRC site in 2010 pre-excavation, taken from Maria Place (Sian Keith)



Figure 8. The completed Victoria Retail Centre, October 2016, taken from the Maria Place and St Hill Street corner

Victoria Avenue

Victoria Avenue begins at the Whanganui bridge and travels northwest until it intersects with Great North Road (now State Highway 3), the main route leading out of the town towards Taranaki. It lies roughly halfway between the Patupuhou and Pukenuamu sand hills and its central position has helped it to maintain its status as the town's main street.

An 1855 plan (Figure 9) shows that TS192 was the only VRC section fronting Victoria Avenue to be purchased by this date, in this case by A. G. Tollemache, although it is not possible to tell from this plan whether there were any structures here. Sometime in the late 1850s or early 1860s a photograph was taken of the town from across the river and seems to show a series of cottages in the general vicinity of the Maria Place and Victoria Avenue corner (Figure 10), suggesting that the earliest activity in this part of the site was residential. An 1866 plan of the town by Doyle & Co. (Figure 11) shows one cottage on each of the three Victoria Avenue town sections and the apparent subdivision of TS188 and TS189. Historical photographs and plans after this date show

rapid spread of retail and/or commercial premises up the Avenue, although it appears that many of these shops were accompanied by homes or living quarters for their owners/operators. Residential structures were gradually replaced with more retail spaces as the town expanded and people moved out into the suburbs. Victoria Avenue retains much of its nineteenth century character into the present day, particularly in the blocks closest to the river, and is still the heart of the CBD.

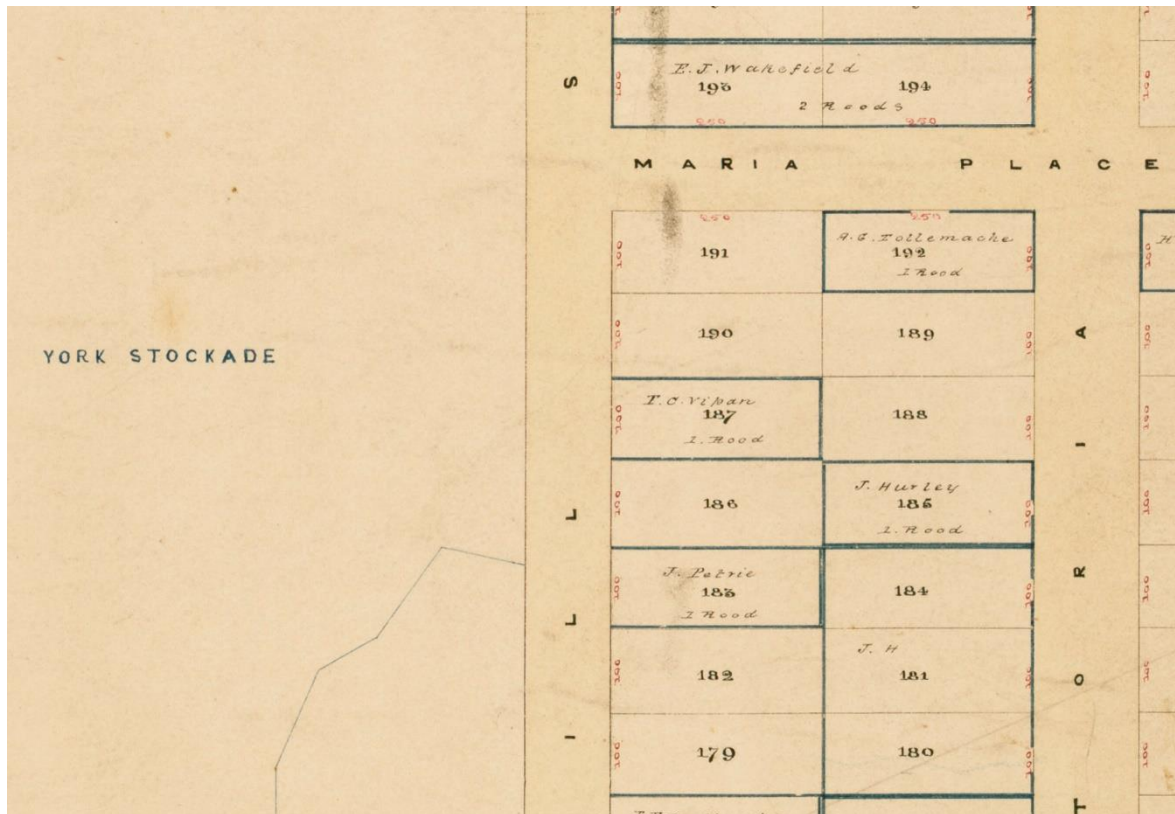


Figure 9. Detail from an 1855 plan of Whanganui showing purchased sections outlined in blue (Alexander Turnbull Library, ref: MapColl-os832.4199gbbd/[ca.1855]/Acc.16735)

Maria Place

Maria Place today runs from Victoria Avenue to Cooks Gardens and continues on the opposite side of the park until it reaches Hatrick Street (Figure 2). During the earliest years of Whanganui, however, it reached further north, terminating at the base of Pukenuamu/Queens Park, and did not extend as far on the southern side of Patupuhou/Cooks Garden. During the Garrison period it acted as the most direct route between the York and Rutland stockades but, as mentioned previously, the swampy conditions limited construction along this street until the late 1850s at the earliest.



Figure 10. Whanganui in the late 1850s or early 1860s. The large street on the right in Victoria Avenue and the VRC site sits in the centre of the image (Alexander Turnbull Library, ref: NZC2.1.188)

Once occupation did commence here it was largely residential. The late 1850s/early 1860s photograph taken from across the river (Figure 10) shows a solitary cottage about half way between Victoria Avenue and St Hill Street which appears to be the first structure on the VRC portion of Maria Place. By 1866 there were an additional five structures along the Maria Place frontage (Figure 11). Later photographs (Figures 12-14) show a steady increase in the development of this part of the site, although TS191 remains unchanged until the turn of the twentieth century. Outbuildings, including multiple stables, increase as the nineteenth century progresses and the houses are gradually replaced with retail premises, similar to Victoria Avenue.



Figure 11. Detail from Doyle & Co's 1866 map of Whanganui showing VRC site with structures in black (Alexander Turnbull Library, ref: MapColl-os832.4199a[186?]2819)

St Hill Street

This street runs parallel to Victoria Avenue but culminates three blocks before it at Dublin Street (Figure 2). While this street appears in all early survey plans of the settlement, for the first almost three decades of Whanganui's existence the portion of St Hill Street from just before Maria Place north was unformed and lay partly under the Patupuhou sand hill (Figure 10). The section between the river and Maria Place, however, began to be developed as early as the two other streets, again mostly with residential properties. Commercial premises quickly spread up this street as the port grew during the Recovery period and large warehouses can be seen alongside the villas in photographs dating to the 1870s and later (Figures 12-14).



Figure 12. The Maria Place and St Hill Street corner ca. 1870 taken from Patupuhou/Cooks Gardens looking north (Alexander Turnbull Library)

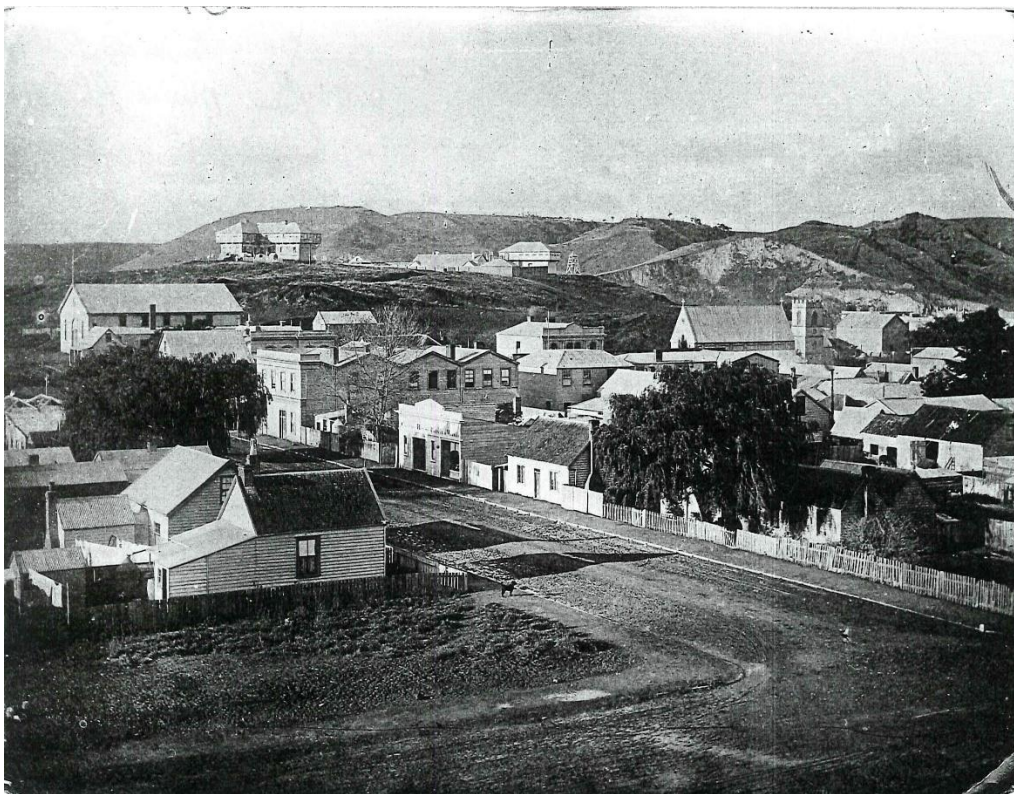


Figure 13. Maria Place, 1880s, taken from Patupuhou/Cooks Gardens looking east (Whanganui Museum, ref: B/ST/7)



Figure 14. Maria Place 1905 taken from Patupuhou/Cooks Gardens looking north (Te Papa, ref: C.012658)

2010 Excavation

The initial excavation phase was undertaken by a large team of archaeologists and volunteers under the supervision of Archaeology North Ltd and took place in early 2010. There was no explicit research design in place and the archaeologists began by recording every feature encountered in detail and collecting all artefactual material. This soon became impractical given the size of the assemblage and for some larger features non-diagnostic artefacts were briefly recorded on site before being discarded. To work around the development process, the site was divided into five zones/areas (Figure 15) which were investigated one at a time. Due to the abrupt cessation of archaeological work, however, not all of these areas were able to be completed. Areas 2 and 3 were fully investigated and Areas 1 and 4 were partially finished, but Area 5 was untouched as there were still buildings standing on this portion of the site (Keith 2014: 14). Initial clearing of the tar seal and overburden was undertaken by a mechanical excavator and the exposed surface was then cleaned by hand. In some areas this process was repeated until the natural sand substrate was encountered.



Figure 15. Area designations from the 2010 excavations at the VRC site (Image taken from Keith 2014)

TS186 and part of TS183 made up Area 1. Test pits here revealed that the iron pan present over much of the rest of the site was missing. In its place were large amounts of the clean grey sand interpreted as fill taken from Patupuhou, suggesting that this had been a particularly deep area of the swamp, with Keith (2014: 20) arguing that this could have been an early swimming hole prior to its reclamation in the 1860s. In TS183 57 post holes and four piles were recorded along with three rubbish deposits, a drainage trench and an unidentified circular feature (Figure 16). TS186 was not investigated as extensively but multiple building footings and a cellar were noted as present and nine rubbish deposits were recorded, most of which consisted almost entirely of broken glass.

TS187 (part of Area 4) was subject to minimal archaeological investigation during this phase of the excavation. Although a rough plan as sketched of the features visible once

a mechanical excavator had removed the top tar seal layer (Figure 17), only eight features were recorded in any detail. These include four rubbish pits, two postholes, an unidentified circular feature and a well (which was not referenced in Keith's report but was present in the original notes). Preliminary observations of this area suggested that twentieth century building and demolition activity had disturbed most of the underlying deposits as a mixed fill consisting of the loamy topsoil and various building materials sat directly on the iron pan (ibid.: 38).

Only a small portion of the rear of TS189 (part of Area 3) was investigated in 2010, and excavations which did take place occurred around a series of large concrete building footings thought to date to the early 20th century. Despite these constraints 109 postholes, nine discrete rubbish deposits, two drainage features and a well were recorded (Figure 18). Artefacts were also collected from an old topsoil layer which was encountered in the western and southern portion of this area. The postholes and other structural features were unable to be attributed to specific buildings with the information available.

TS190 (included in Areas 3 and 4) was also not completely investigated during the 2010 archaeological work. Most of the eastern half of this section was used for excavator and truck access and was intended to be excavated at a later time. Archaeological features were found in clusters with a group of rubbish deposits found along the back of the section and a series of post holes in the south-west corner fronting St Hill Street. In total 31 postholes, fifteen pit features (rubbish pits and potential latrines), two chimney bases and a well were recorded (Figure 19). A brick floor and brick path were also planned in but had no related finds. The identified structural features were interpreted as relating to two phases of buildings on the site (ibid: 66), although without the data from the artefacts it was not possible to draw any concrete conclusions about the ages or relationships of these structures.

TS191 (Area 2 and part of 3) was the section investigated to the greatest degree in 2010 and as a result contained the highest number of recorded features. Archaeological recording was conducted at two levels: directly under the tar seal (Figure 20) and then at approximately the level of the iron pan (Figure 21). In Keith's report these two levels were reported separately despite apparently belonging to the same stratigraphic context. In total, 174 postholes, 26 pits,

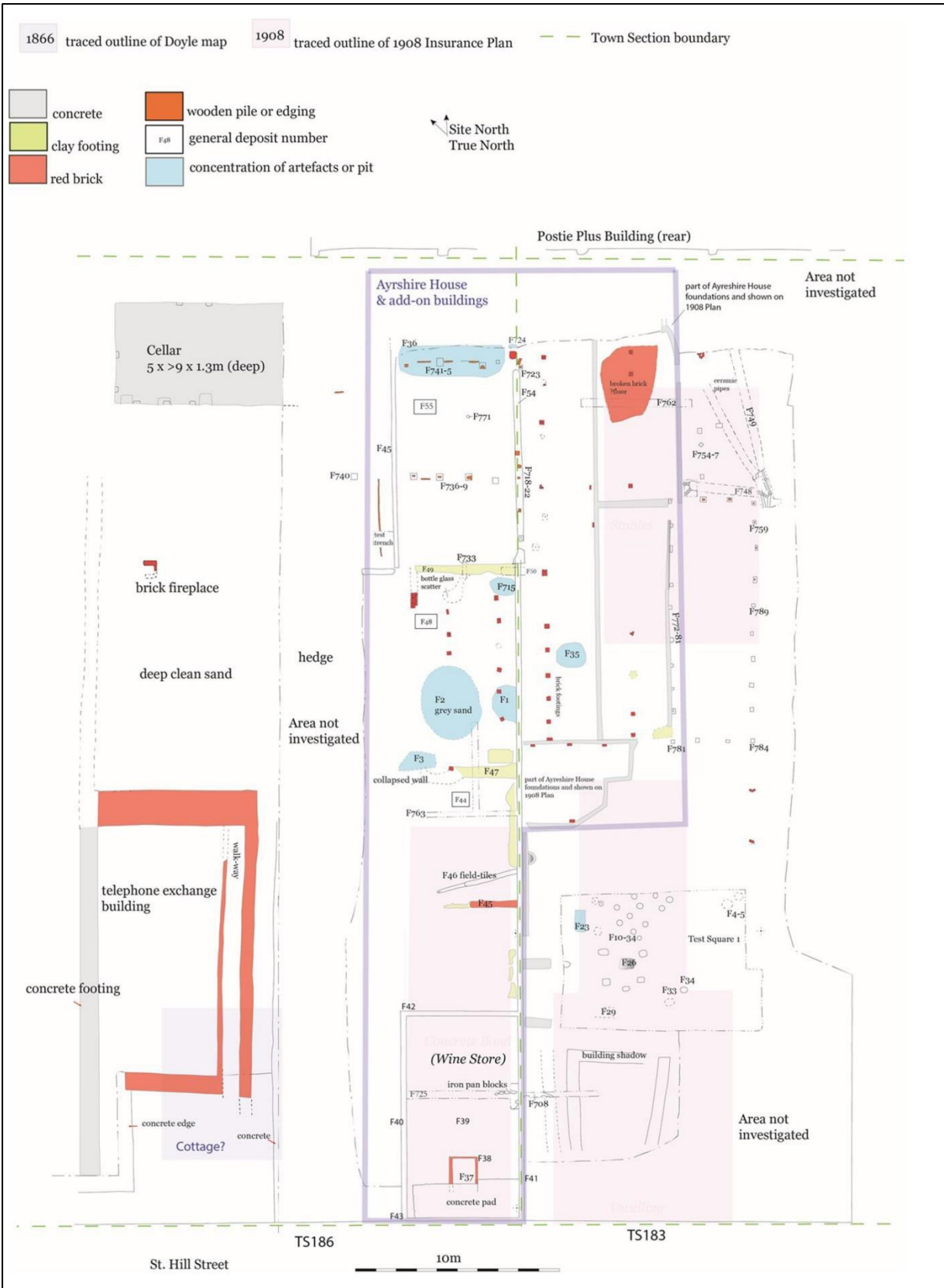


Figure 16. Excavation plan of TS183 and TS186, taken from Keith 2014

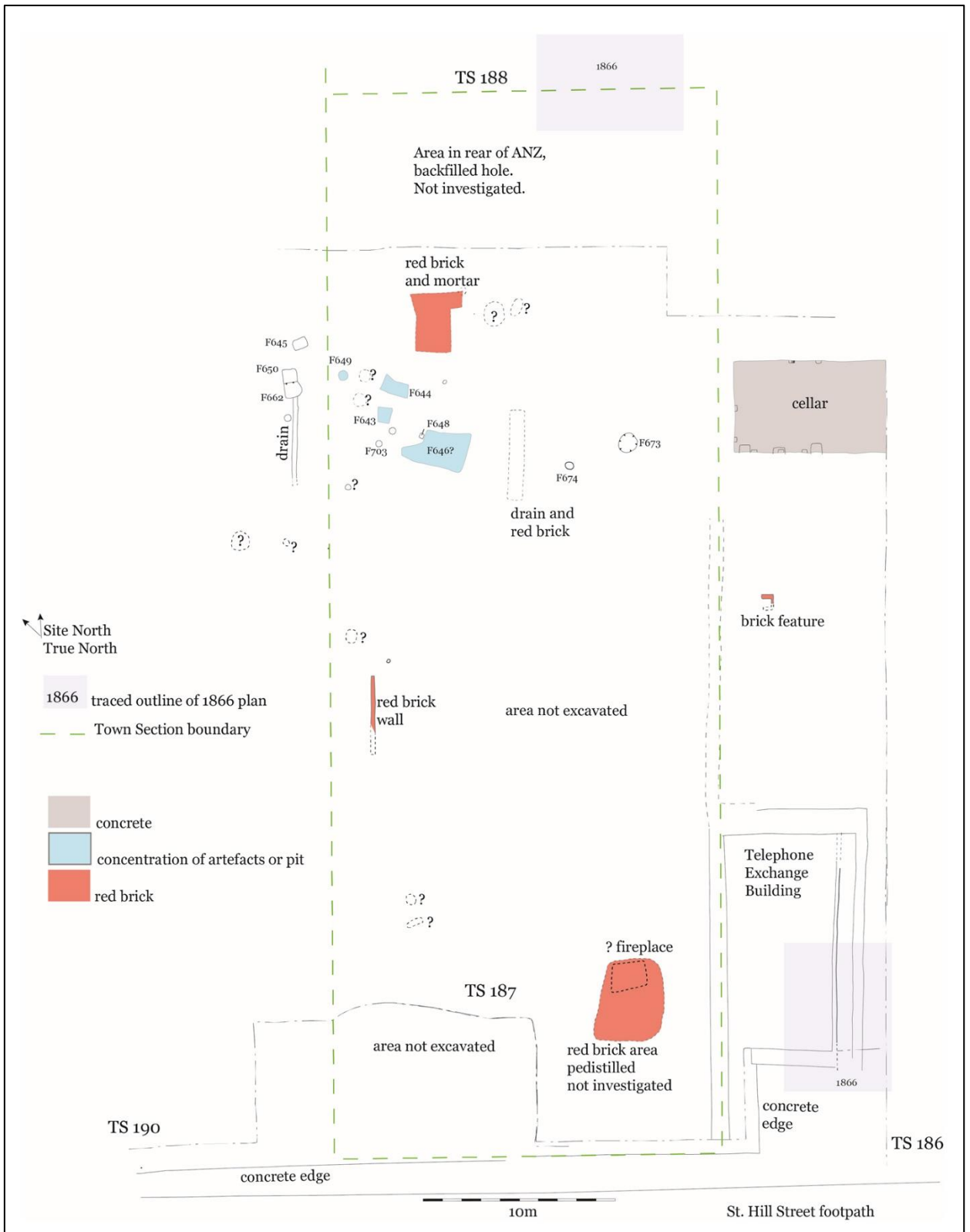


Figure 17. Excavation plan of TS187, taken from Keith 2014

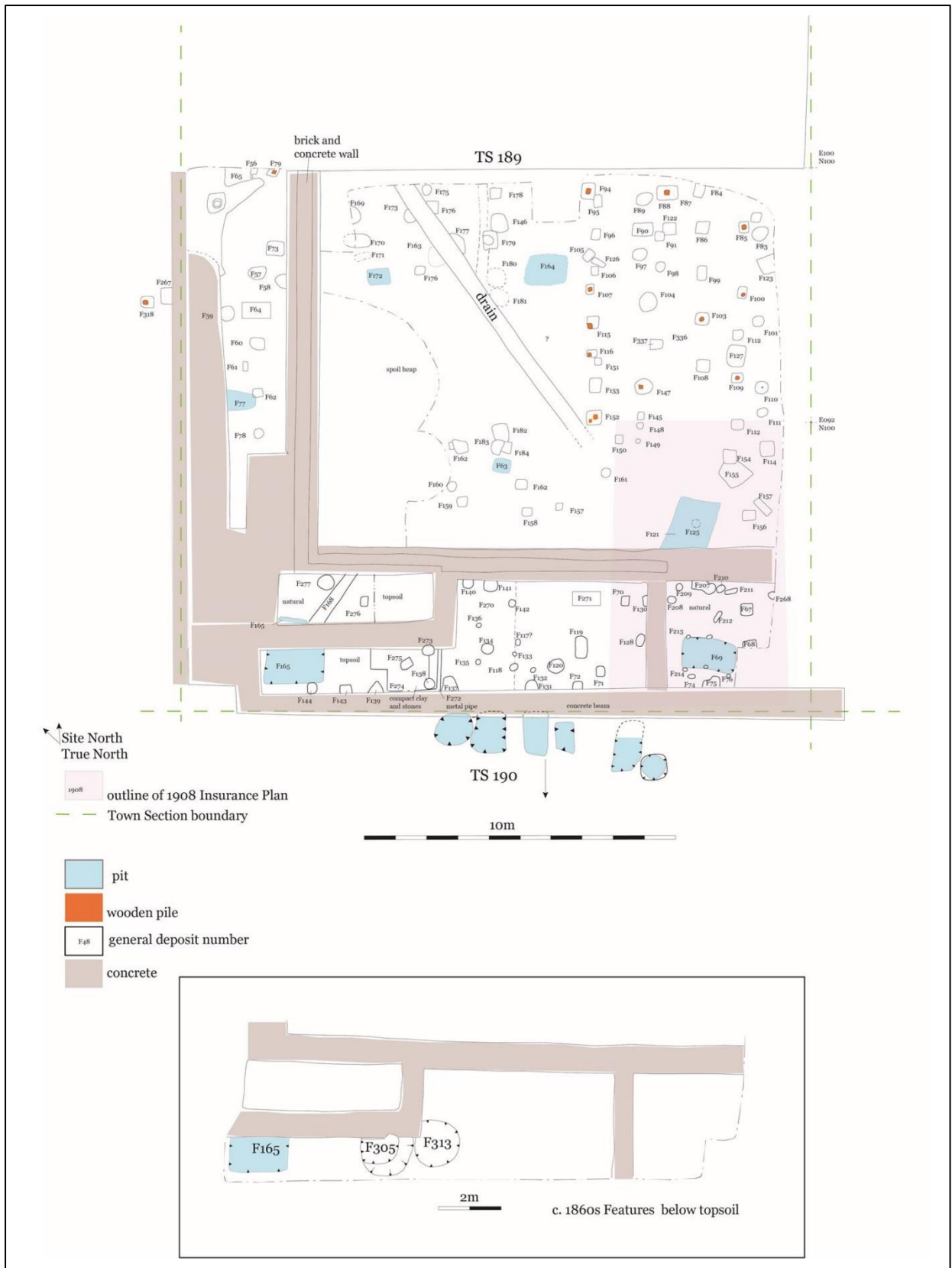


Figure 18. Excavation plan of TS189, taken from Keith 2014

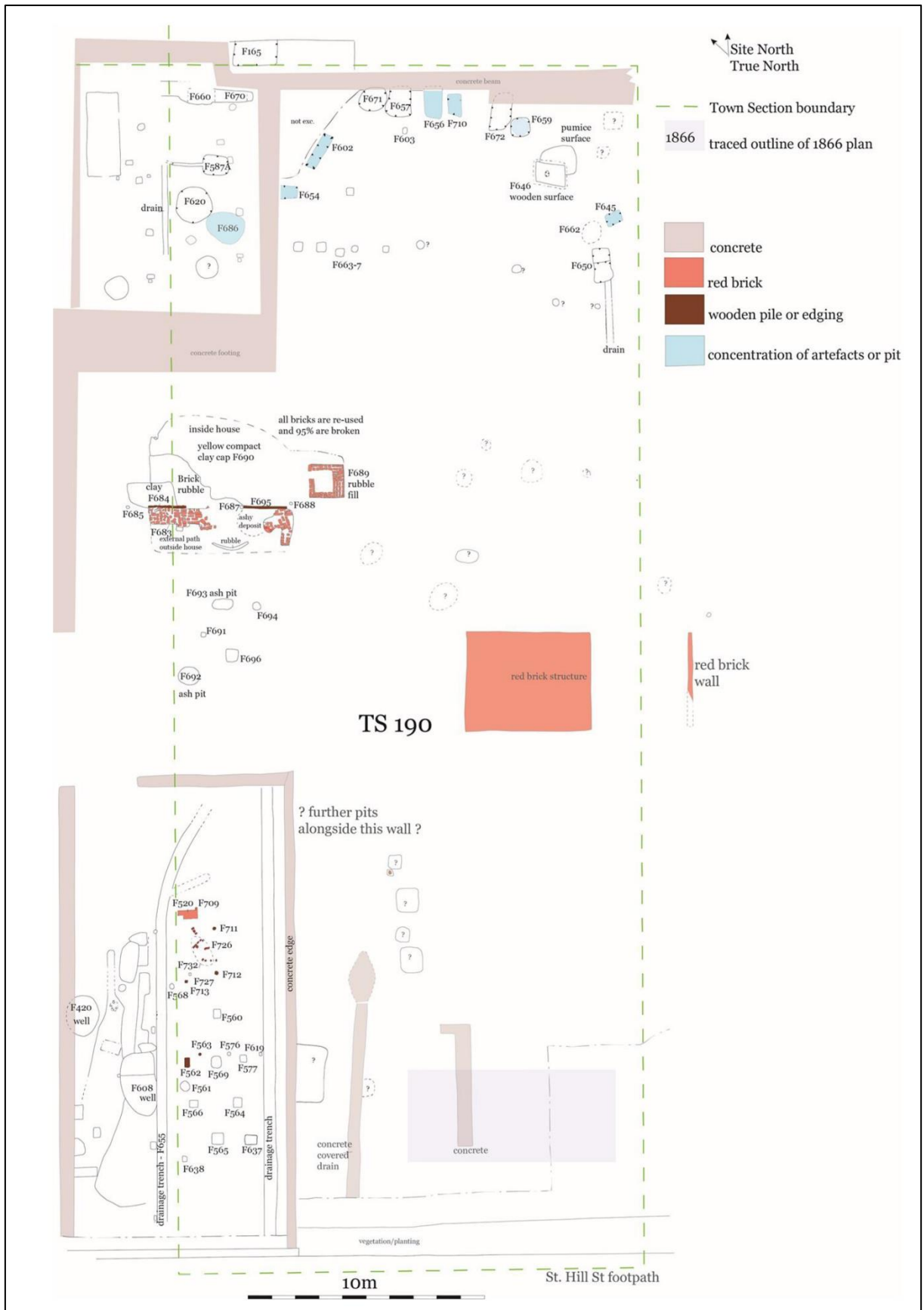


Figure 19. Excavation plan of TS190, taken from Keith 2014

six drainage features, three wells and seven miscellaneous features were recorded across TS191. Nine “layers” were also given context numbers and sampled for artefacts. The postholes were particularly concentrated in the Maria Place/St Hill Street corner of the section and around two chimney bases further up Maria Place, however the high degree of building modification which occurred in this area during the nineteenth and early twentieth century made it difficult to assign these features to individual building phases without further chronological data (Keith 2014: 97).

A similar approach to TS191 was taken with the south-western end of TS192 (part of Area 3) in that it was roughly separated into two arbitrary levels. Again, these were dictated by the depth to which the mechanical excavator reduced the surface, the first being material directly underneath the tar seal (Figure 22) and overburden and the second sitting atop the iron pan (Figure 23). Seventy-eight postholes, 40 pit features, seven drains, two wells and five miscellaneous features were recorded in TS192, and seven stratigraphic contexts were given feature numbers. The pit features were mostly concentrated along the back of the section and several appear to have been industrial in character, probably relating to a blacksmith’s workshop known to have been located here (Keith 2014: 115). As well as these recorded features and contexts, wooden and stone cobbles covered parts of the upper stratigraphic level, however this was interpreted as post-1900 and so not recorded in detail.

The abrupt interruption to the archaeological work in March 2010 meant that investigations were halted, leaving large areas of the site unrecorded or only partially completed. As a result, the interpretations presented in Keith’s report are limited.

2012 Monitoring

It was two years before archaeologists were able to return to the site, at which time their role was largely restricted to observing the clearing of the remaining areas of the site by a mechanical excavator. Ivan Bruce undertook archaeological monitoring at the portion of the site fronting Victoria Avenue, numbers 91-97, on the 27th and 28th June 2012. During this time Bruce oversaw the removal of any residual building materials on the surface as well as several concrete piles thought to have been installed in the late nineteenth century. He was instructed to “record exposed material and to recover surface artefacts” but not to excavate any features encountered as this was to be conducted at a later time (Bruce 2012: 1). This stage of the site clearing process was

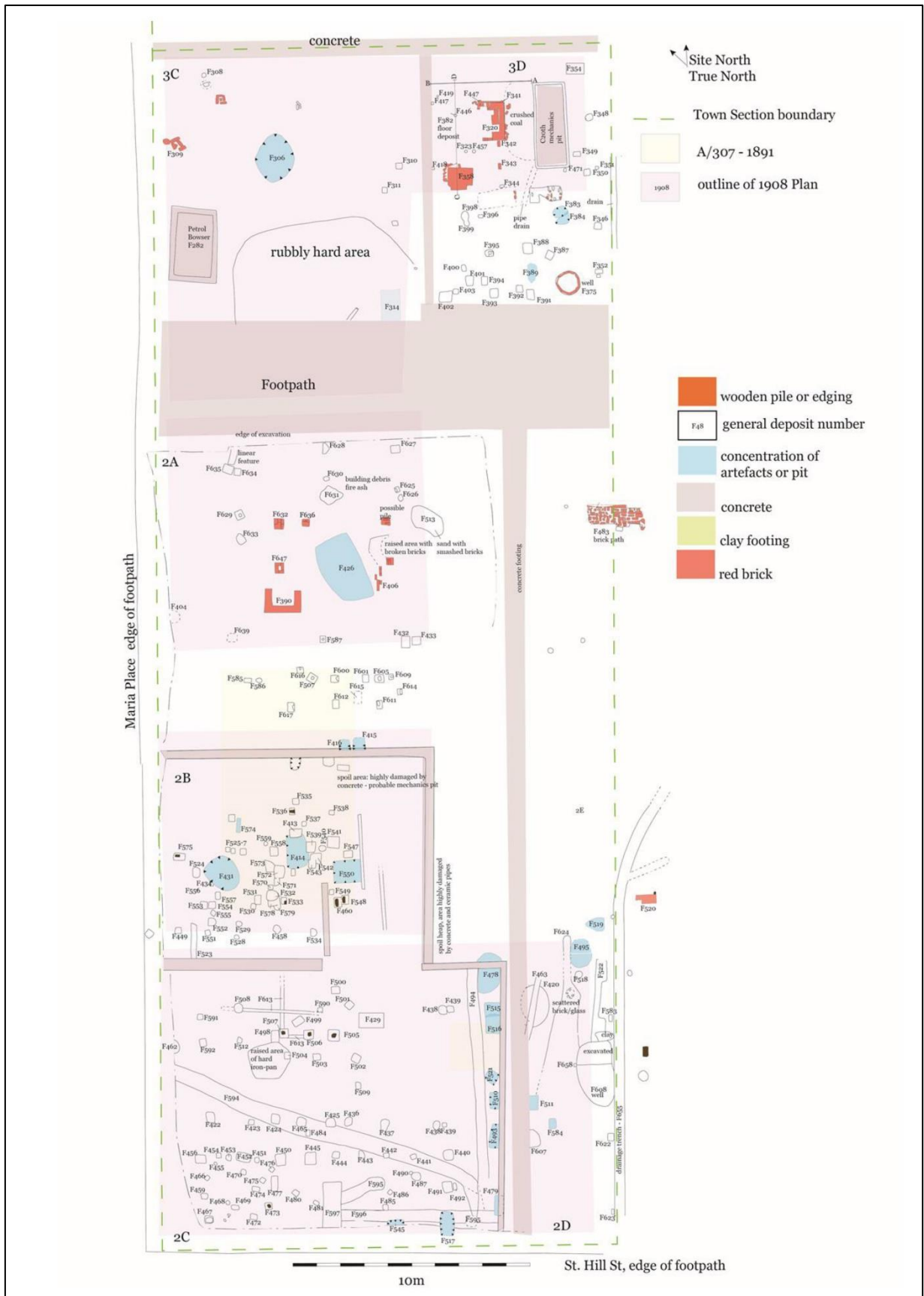


Figure 20. Excavation plan of TS191 (upper level), taken from Keith 2014

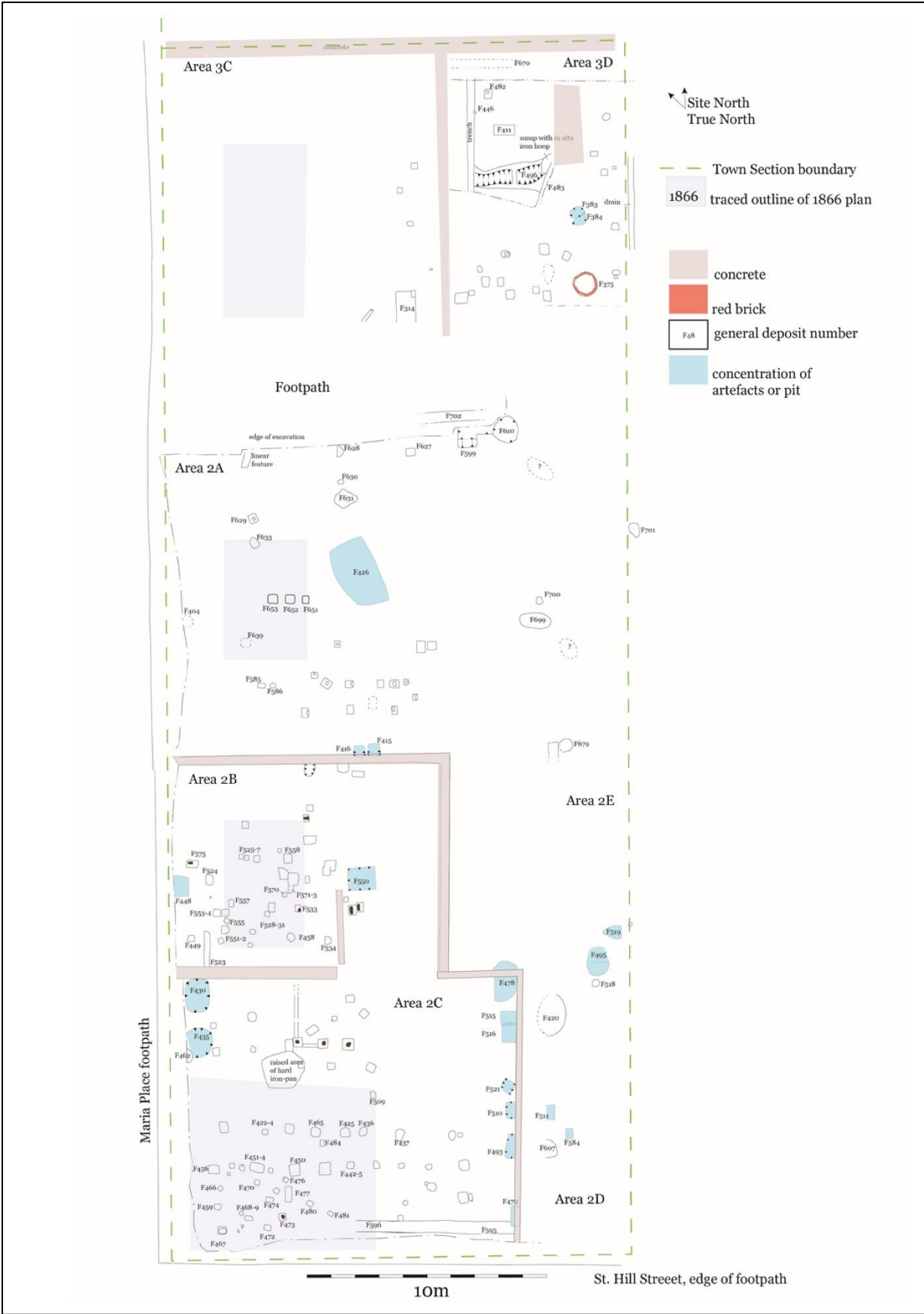


Figure 21. Excavation plan of TS191 (lower level), taken from Keith 2014

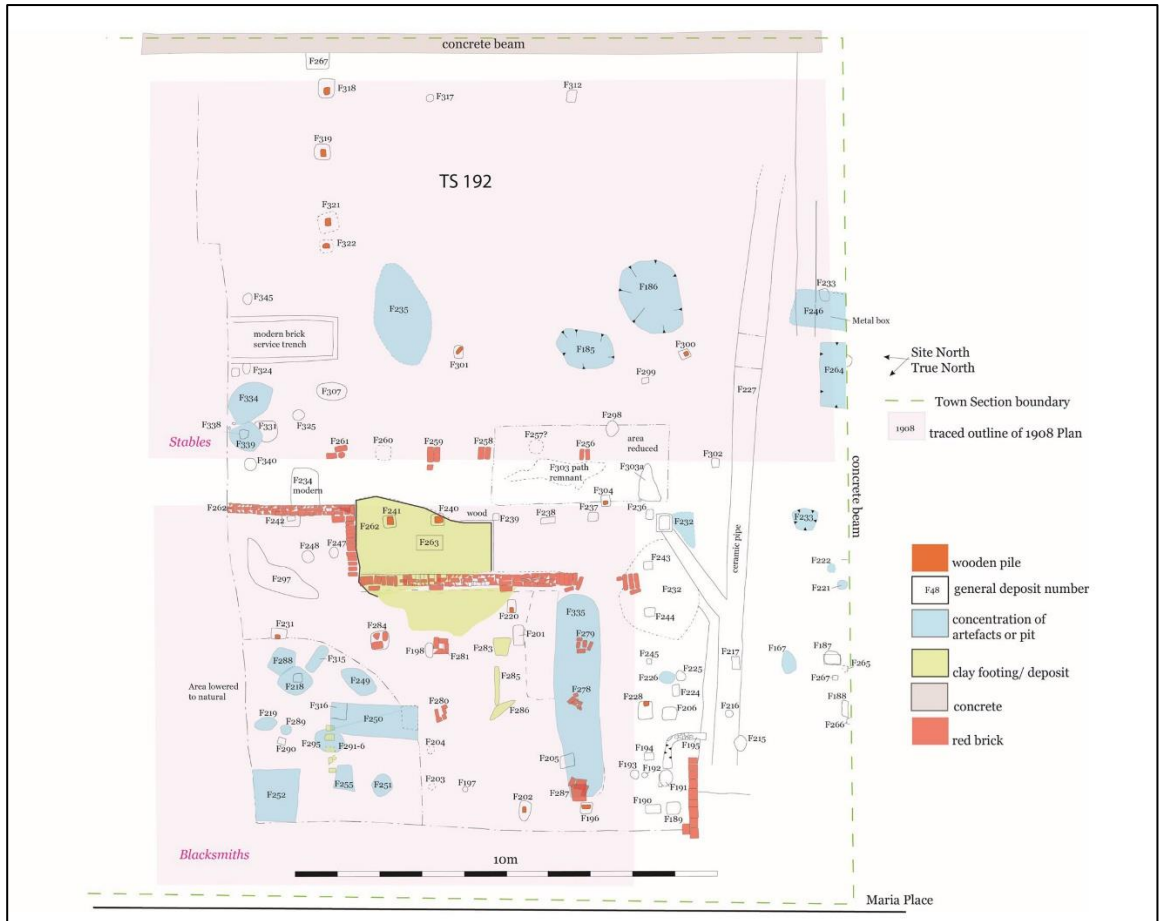


Figure 22. Excavation plan of TS192 (upper level), taken from Keith 2014

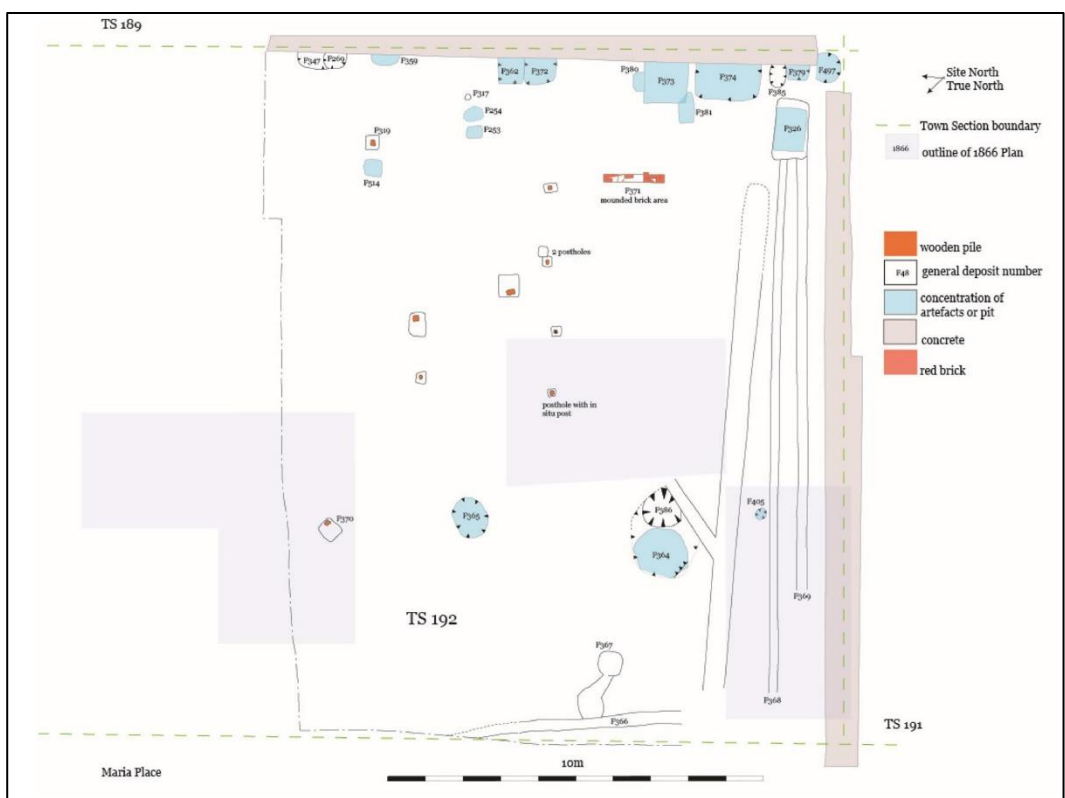


Figure 23. Excavation plan of TS192 (lower level), taken from Keith 2014

undertaken with a digger and as a result Bruce cautions that any remaining archaeological features would likely be truncated and any cultural material potentially redeposited across the area (ibid: 2). Some wooden piles thought to relate to earlier nineteenth century buildings were observed but not able to be recorded in detail.

In total eight potential artefact bearing features were recorded (Bruce 2012: Figure 2), including one well and seven rubbish deposits. A small collection of artefacts was recovered from some of these features and are listed at the end of Bruce's report, although they were not included in the material received for analysis. As this monitoring phase was intended as a preliminary one, it will not be relied upon heavily for the present research. Some of the recorded features were potentially re-identified during the March 2014 works when they were able to be recorded in more detail.

Kiri Sharpe (2012) undertook a brief period of monitoring in the centre of the site later the same year but does not go into detail about her findings.

2014 Monitoring

In January 2014 Kevin Jones and the author conducted further monitoring across various portions of the site and in March that year Jones completed the final archaeological investigations along the Victoria Avenue frontage. Features encountered during the January phase were given the code "KJ" while those found during the March works were coded "K." Excavations were initially undertaken with a mechanical excavator but any identified features were cleaned and recorded by hand.

The January monitoring focused on Keith's Areas 1, 2 and 4 with the intention of extending the excavation right to the site boundaries, complete excavation of remaining cultural layers down to the natural, and investigating areas previously covered by huts and spoil heaps associated with the construction work (Figure 24). Five features were recorded in TS191 (on the corner of St Hill Street and Maria Place), including four rubbish pits and a sump, however one of these (KJ5) is thought to be part of a rubbish deposit partially excavated in 2010 (F435). Some of the other pits may also relate to the lower levels of pits investigated in 2010 but it was not possible to conclusively link them together. In the neighbouring section (TS190) an area of brick paving (KJ1) was investigated but was not found to have any further structural features associated with it. This feature was interpreted as a yard floor or base for a heavy item

such as a water tank for one of the early cottages on the site (Jones and Woods 2014: 9).

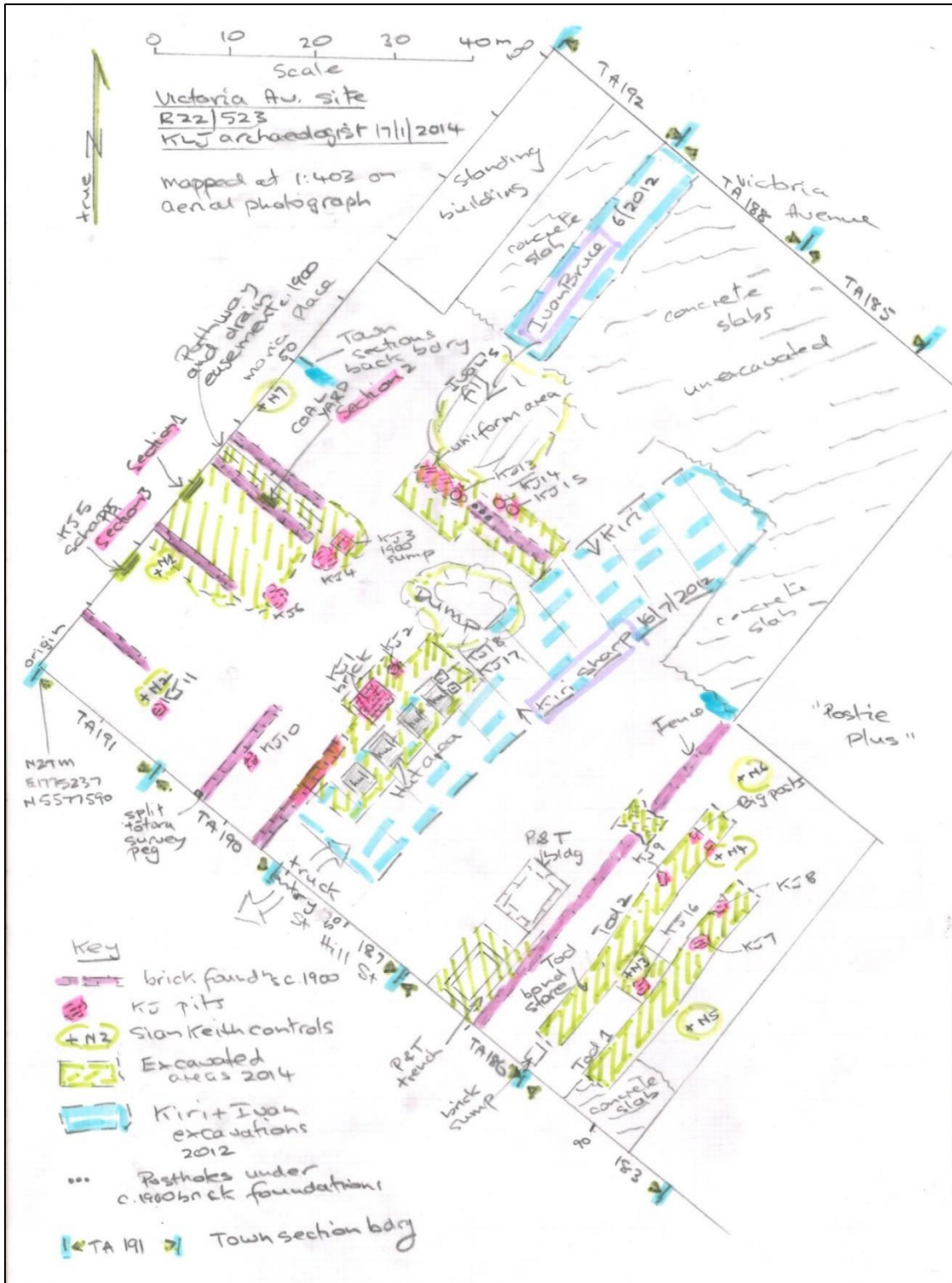


Figure 24. Plan of features recorded during 2014 monitoring phases (Kevin Jones)

Upon returning to the site in March, attention was shifted to Keith's Area 5- the area previously monitored by Bruce. This final phase of archaeological work at the VRC site initially involved digging two "trial holes" down to the water table, which was reached around 1.8 metres below the modern ground surface (Jones and Woods 2014: 11). A significant proportion of the Victoria Avenue frontage which lay under a modern concrete slab was found to be heavily disturbed but a total of sixteen intact or lightly disturbed features were recorded on other parts of the area. Some of these will be those previously identified by Bruce but it was not possible to confirm this. No wells were encountered, however feature K16 was a barrel lined pit or latrine which may have appeared to be a well on the surface (ibid: 13).

Site Stratigraphy

With the exception of discrete features, the basic stratigraphy was reasonably consistent across the site (Figure 25). The modern topsoil sat atop a variable sandy loam layer, directly below which was a distinct iron pan. This pan, found at roughly 700mm below the modern street surface (Jones and Woods 2014: 6), is typically produced by the accumulation of acidic fallen plant matter and is evidence that the area was heavily forested in the past (Dawson 1988, 112). Once this iron pan forms it has a significant impact on the drainage properties of the soil and often results in the formation of a swamp (Iversen 1964, 69). Below this iron pan was clean grey alluvial sand. Some areas of the site had more of this grey sand in the occupation layers which is thought to have been incorporated during the draining of the swamp and partial removal of the Patupuhou/Cooks Gardens sand hill (Keith 2014: 36). The only major exceptions to this stratigraphy were the area along the Victoria Avenue frontage and a section of Area 1. Bruce (2012: 2) noted that the loam layer above the iron pan was missing, although it was probably removed prior to his phase of the monitoring, and the southern corner of Area 1 in which there was no iron pan (Keith 2014: 7).

Artefact Sampling Strategies

The interruptions experienced during the archaeological investigations at the VRC site had serious implications for the artefact recovery strategies employed by the various archaeologists. In an ideal situation the entire site would have been sampled using the same method, however for a site this size which was excavated in multiple phases this

can be difficult and sometimes impractical as the sampling strategy initially set out may require altering as the investigation progresses.

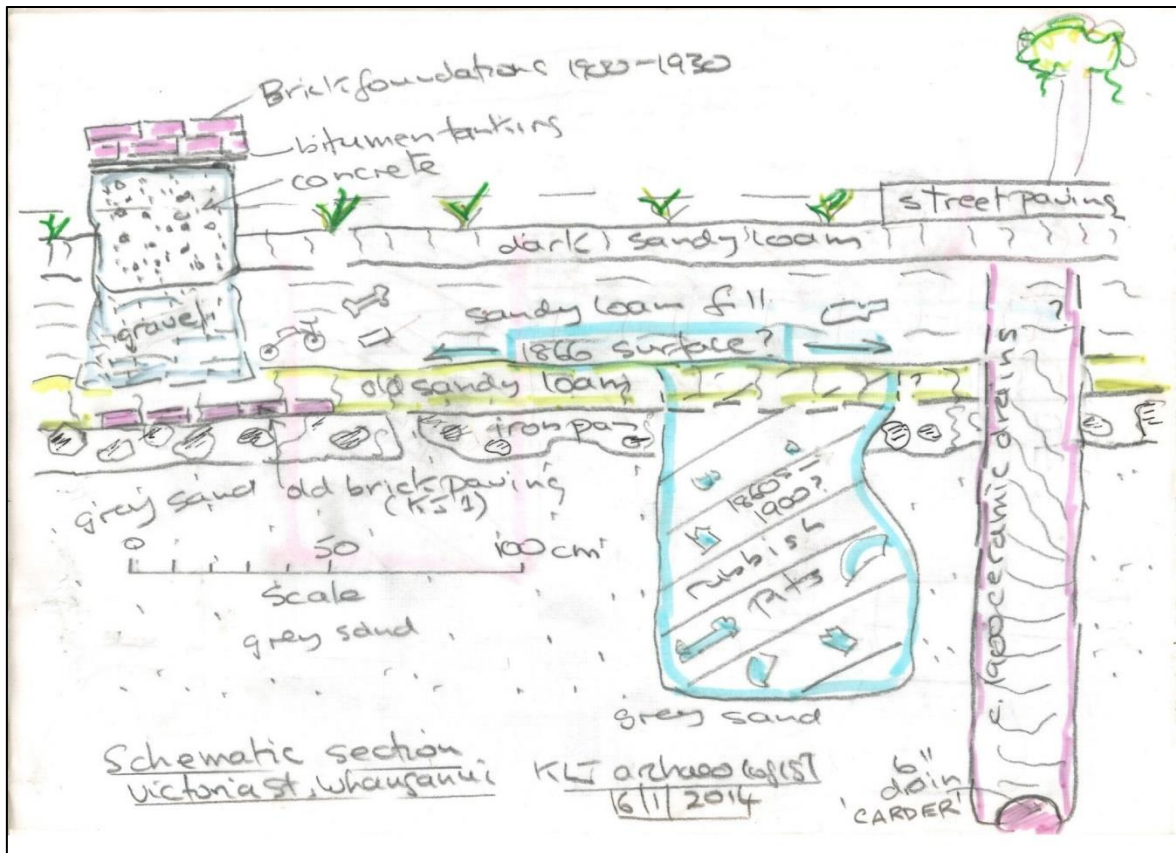


Figure 25. Schematic section drawing of VRC site stratigraphy (Kevin Jones)

An explicit sampling strategy was not set out for the 2010 excavations resulting in different strategies being applied to different areas and features, as mentioned previously. For the majority of deposits 100% of the material culture was at least initially recovered. In Area 1 (TS186 and part of TS183) a discard protocol was put in place, resulting in non-diagnostic glass and metal artefacts being recorded and then disposed of. The glass was weighed by colour while the metal artefacts were described and measured, although this practice was not undertaken for all deposits or even consistently within several features. There is evidence from the field notes that some features outside of Area 1 were also treated in this way but the process does not appear to have been recorded in detail. Several other features across the site were only half-sectioned due to time constraints or physical obstructions, and some were unable to be excavated to the base before excavations stopped.

A sample of material culture was recovered from all of the artefact bearing features identified during both the January and March 2014 works and were catalogued by Jones before being sent down to Otago University for analysis alongside the rest of the VRC material. The recovery strategy of this phase of investigations focused on diagnostic artefacts rather than taking bulk samples, however a record of the discarded material was kept in the form of photographs and field notes.

These factors have serious implications for the integration of data from the different excavation phases and areas of the site, and subsequently the interpretation of the artefact assemblages. This was taken into consideration on a feature-by-feature basis during the cataloguing and analysis process and helped to inform the quality and applicability of each deposit for this particular research, but do not appear to have had a significant impact on the integrity of the final interpretations presented in the following chapters.

Although the archaeological investigation of the VRC site occurred in a piecemeal fashion using a variety of approaches, the data collected can still provide a wealth of information. The detailed analysis of the material culture recovered during the excavation has helped to strengthen and/or reshape the limited interpretations presented in the excavation reports by providing contextual and chronological evidence. This is particularly evident with the association of particular features and deposits with activity and/or occupation phases which was often impossible using the excavation records alone. The combined evidence has allowed for the artefact assemblages to be placed into definitive enough contexts to construct meaningful and substantiated narratives as proposed under the research aims. This process does, however, require a methodical and critical approach which will be outlined in the following chapter.

Chapter 4: Building the Narratives

The process of transforming excavated archaeological material into something that could drive and be incorporated into a set of archaeological narratives required several distinct phases. Even though not all of the information gathered during each of these stages will make it into the final narratives, each step is vital to creating a reliable and comprehensive data-set. This not only adds to the credibility of the interpretations presented but also enables the data to be easily understood and accessed by future researchers who will be able to use parts of the raw data for a wide range of investigatory uses. Despite the fact that a large proportion of the data used here will be qualitative and therefore difficult to replicate in itself, it is just as important to ensure that the process is clear and able to be repeated by future researchers. Although realistically the process involved a high degree of tacking back and forth between stages, the creation of the household level narratives can be simplified into six steps:

1. The selection of suitable artefact deposits for household level analysis and interpretation.
2. The calculation of deposit dates for each of the assemblages based upon the material culture.
3. Using the historical record to create a timeline of owners and occupiers for each part of the site.
4. The association of each of the deposits with one of the households identified during the initial historical research (where possible).
5. Further historical research into some of the households associated with multiple deposits.
6. The incorporation of archaeological and historical data to create a narrative based around a pertinent issue identified during the analysis of either the archaeological material or the historical record for each household.

Each of these steps required its own methodological considerations and this chapter follows the creative process as it was undertaken.

1. Deposit Selection

During the course of the 2010-2014 archaeological investigations at the VRC site over 800 features were recorded and more than 2.5 tonnes of material recovered. A sampling strategy was adopted to reduce the assemblage to a manageable size and focus on material relevant to the research aims. In particular, it was necessary to pinpoint features and deposits that would be best suited to the production of household level narratives. This process involved placing limitations on the portions of the site, and the types of deposits, chosen for further investigation.

Area Selection

This study focused on particular areas within the larger VRC site. Whereas the excavation itself was carried out around five “areas” the analysis was structured by Town Sections (TS), as this is how most of the records relating to the site were organised. TS189, TS190, TS191 and TS192(part) were chosen as they contained evidence of multiple domestic residences and had a large number of discrete artefact bearing deposits. TS183(part), TS185(part), TS186 and TS187 were also excavated but they have been omitted from this study as they relate mainly to commercial rather than domestic occupation and activity.

Feature/Deposit Selection

Within the Town Sections identified above certain types of features were targeted for further investigation. Deposits recovered from purpose dug rubbish pits were preferred but other features commonly re-used for rubbish disposal were also considered, including latrines, wells, drainage features and some large structural features (for example chimney bases). For most features this functional classification was able to be taken directly from the excavation notes, however a few were revised once they began to be investigated in more detail. Artefacts recovered from most small structural features (e.g. postholes), amorphous deposits (e.g. floor and topsoil deposits) and surface finds were not used.

This process narrowed down the number of features from 807 to 45 which were then analysed in detail to get a more accurate idea of the relevance of each to the research aim. These 45 features included 28 rubbish pits, six latrines, five wells, two drainage features (a sump and a stable related drain), two structural features (a chimney base

and a support feature for a water barrel), a doorstep deposit and one feature with an unidentified purpose.

2. Deposit Dating

The next step in constructing the narratives involved cataloguing and analysing the material culture recovered from the 45 selected features and calculating an estimated deposit date (or dates) for each. Artefact assemblages that were unable to be assigned to a specific period based on this analysis were not used for the next stages of the research. This step reduced the deposit number once again, this time from 45 to 34.

The methods used to date the artefacts included in each deposit varied according to material type as explained below. Some selected features or deposits, once analysed, were unable to be precisely dated or related to a particular household. The data from these assemblages was, however, still used for the site level analysis.

Ceramic vessels

Ceramic vessels were dated using a combination of chronologically sensitive attributes in order to calculate two date ranges: the total potential manufacture range and the period of highest or peak popularity. This method is an adaptation of the approach used in Smith and Woods (2014) and Maxwell, Woods and Robinson (2016). Sets of diagnostic attributes were identified, including maker's marks, ware types and decoration techniques, colours, patterns and styles. These were recorded (when present) for each fragment or vessel. Only fragments or vessels that exhibited three or more diagnostic attributes were assigned date ranges. This enabled a refined potential manufacture period and a mean peak popularity period (following Adam and Gaw 1977) to be calculated, thereby giving a more accurate date range relating to the whole vessel rather than its individual attributes, and allowing for a more nuanced analysis than would be possible relying simply upon *terminus post quem* (tpq).

Manufacturer Marks

Two types of maker's marks were used for this analysis: manufacturer's marks and registration diamonds. Manufacturer's marks can be stamped into the vessel body, printed or painted under the glaze or painted over the glaze and usually appear on the exterior base of a vessel. Diagnostic features of these marks include factory or potter's names or initials, location, and the overall mark design. Various sources were

consulted to attribute the marks to companies including Macdonald-Taylor 1962, Godden (1988) and Kowalsky and Kowalsky (1999). The vessels with identifiable manufacturer's marks were able to be assigned a potential manufacture date range but this was only the case for a small proportion of the ceramic assemblage. Those vessels that lacked a maker's mark, or those with maker's marks used for a long period, however, required additional evidence from the other types of attributes.

Registration diamonds are a type of maker's mark that can provide an earliest possible date or *tpq* for the vessel's manufacture, but cannot on their own provide a date range. Diamonds printed in ink under the glaze refer to the date the *decoration* was registered, while stamped or moulded diamonds relate to the *vessel form*. These marks follow a particular formula that is recorded in most pottery mark references (for example Godden 1988: 527).

Ware Types

Some ware types encountered in New Zealand historical deposits can act as temporal markers. As with some maker's marks, however, many can only provide a *tpq* for the vessel as they continued to be produced well into the twentieth century. Some did enjoy brief periods of heightened popularity and these can be used when calculating the combined peak popularity period for the vessel in question. Relevant chronological information for each ware type recorded in the overall VRC assemblage can be found in Chapter 5.

Decoration

Various aspects of a vessel's decoration can provide temporal data. The type of decoration (e.g. Under-glaze transfer printed (UGTP), sponged or painted decoration) is often chronologically sensitive and although most decorative techniques were well established by the mid nineteenth century, their popularity and style changed enough throughout the nineteenth and early twentieth centuries to enable their presence or absence to act as temporal markers. These changing fashions influenced the subject matter depicted on the vessels, as well as its location and colour (Miller 1980; 1991; Samford 1997; Brooks 2005; Samford and Miller 2015). As with the ware types, chronological data relating to each type of decoration recorded at the site is described in Chapter 5.

Sometimes it is possible to assign more precise date ranges to the decoration on a ceramic vessel if the particular pattern can be identified. This is particularly the case with UGTP vessels but occasionally also for other decorative techniques such as some gilt and sponged designs. Coysh and Henrywood's two volumes (1982; 1989) and the Transferware Collectors Club online pattern database (2016) were the best overall sources of chronological data for identified patterns but some of those not included in these were able to be assigned date ranges after general literature searches. Those unable to be assigned definite date ranges were dated on the basis of their colour and style. An illustrated list of dated ceramic patterns can be found in Appendix D.

Once these individual attributes were recorded they were averaged to give manufacture and popularity periods for each vessel. The vessel manufacture range was calculated by using the latest of the start dates and earliest of the end dates from the individual attributes. This date range was most useful for providing a *tpq* for the artefact, especially since most of the ware types and decoration methods encountered in nineteenth century deposits are still in production today. In these cases, the year of the main excavation (2010) was used as the end of the manufacture range when an earlier date was unavailable.

The peak popularity period, on the other hand, gives more of an idea of the period during which the artefact was most likely to have been in use based on currently available resources and data. This was gauged for each vessel or fragment by calculating the mean start and end date from each of the attribute popularity periods. When this date range exceeded the potential manufacture range at either end (usually a result of a relatively late *tpq* from one of the attributes), the start or end was moved to be in line with the broader date range.

Ceramic Assemblage Date Ranges

A similar approach to the combination of individual vessel attribute date ranges was undertaken to estimate the overall deposit date ranges. The latest *tpq* was taken as the assemblage *tpq* and the popularity periods were once again averaged to produce an assemblage level range, following Adam and Gaw (1977). This approach created a date range that estimates the most likely period during which this combination of vessels would have been used together and therefore ended up in the same archaeological

deposit. The date ranges from ceramic vessels alone cannot be unconditionally applied to the entire assemblage or deposit, however, as ceramic vessels often have some degree of in-built age due to their durability and long use-lives. This issue can be combatted by comparing these date ranges with those calculated using the glass vessels and miscellaneous artefacts when possible.

Glass Vessels

The same basic approach to that outlined above was used to date the glass vessels. All vessels were dated individually and then mean manufacture and peak popularity periods were calculated to give two date ranges for the overall assemblage. The key diagnostic features used were manufacturer marks, product and/or brand embossing, manufacture method and bottle form. As with the ceramic vessels, multiple attributes were preferable for calculating date ranges, but, due to the rapid development of bottle manufacturing techniques that occurred during the nineteenth century, dates from glass vessels with less than three attributes were included in the analysis.

Manufacturer Marks

These marks relate to the factory that produced the bottle in question. For glass vessels these marks are almost always found on the base or heel and can include symbols, names or initials. Various sources were consulted to attribute these marks to the relevant manufacturer but Lindsey (2015) and Toulouse (1971) proved to be the most comprehensive. Some marks were able to provide precise date ranges for bottles, and in these cases were the basis for both their potential manufacture and peak popularity periods, but for others they were only able to provide a *tpq*. Identified manufacturer marks are included in each of the feature summaries for which they are present in Appendices B and C.

Product/Brand Embossing

Identifiable products and/or brands were able to be used in much the same way as manufacturer's marks, with the difference being that they relate to the contents of the bottle. These were usually identified through embossing on the body of a bottle, especially for soda, sauce and pharmaceutical products. Identification and dating of products or brands was done by undertaking a general literature search, although with local products Luff (2008) proved invaluable. Identified products and brands are

listed, along with relevant chronological information, in each of the feature summaries for which they are present in Appendices B and C.

Manufacture Method

The way in which a glass vessel was made proved to be the best chronological indicator for unmarked bottles as well as marked examples with broad date ranges. The development of bottle manufacture methods is well documented and most of the processes leave easily identifiable marks on vessels, making it relatively straightforward to assign date ranges. Specific temporal information and guides for identification of each of the main manufacture methods are presented in Chapter 5.

Bottle Form

Bottle form can also be used as chronological evidence when the dates of introduction and peak use are known for specific forms. Lindsey (2015) was once again an invaluable source of information on this topic and Tasker (1989) provided useful, New Zealand-specific, information. Those bottle forms able to provide this type of information are described, along with their chronological information, in Chapter 5.

Glass Vessel Assemblage Date Ranges

The individual glass vessel date ranges were treated in the same way as those from the ceramic vessels to calculate potential manufacture and peak popularity periods for each assemblage as a whole.

Other Artefacts

Several common artefact types can provide dating evidence when studied in detail, including clay tobacco pipes (Brassey 1991; Gojak and Stuart 1999), tin cans (Rock 1984), fasteners (Isaacs 2009) and wax vesta matchboxes (Anson 1983), however the data recovered from the glass and ceramic vessels was deemed sufficient and more reliable for the VRC site assemblage. Only artefacts that bore distinctive and identifiable marks were used for assigning assemblage dates, including coins, branded items and embossed clay tobacco pipes. These items were generally only useful for adding potential *tpq*'s for the deposit as a whole since many had unknown lifespans or were produced for long periods. Specific dating evidence gathered from these artefacts is outlined in the respective feature summaries in Appendices B and C.

Overall Assemblage Date Ranges

Once the sets of date ranges had been calculated for the ceramic and glass vessel assemblages the two were compared (along with any data from the other artefacts) to give an approximate deposition date. The latest *tpq* was applied to the whole deposit and overlaps in the peak popularity period were noted and used to inform the most likely deposition date. Where possible, each deposit was compared to structures and other features visible in the maps, plans and photographs in an attempt to refine the deposit date further, or at the very least placed within one of the periods discussed in Chapter 2.

3. Creating a timeline of site occupants

Any historical archaeological research relies on data gathered from the historical record as well as archaeological evidence. Engagement with historical sources is especially vital when undertaking an interpretive approach as you want to become as familiar with the way in which the people being studied saw their world as possible. There are three main types of historical records that can be used to achieve this, and each must be approached in a slightly different manner. These types are referred to here as descriptive, personal, and second-party records. Creating a timeline of site occupants relied on descriptive records while the personal and second-party varieties were not utilised until later. As such they are introduced later in this chapter where they are more relevant.

Descriptive records are those that only describe events, places or people. These include maps, insurance plans, rates records, probates, household inventories, birth, death and marriage certificates and photographs. Although there is always the risk of mistakes in these records which can affect their interpretation, such as incorrect dates or misspelling of names, these are often easy to identify through comparisons with other records. Thus descriptive records are the least biased (although no historical records are completely free of bias) and most reliable of historical accounts (Ziemann and Dobson 2008: 14). They are, however, restricted to providing evidence of an individual's or household's movements, economic situation and family make-up and do not reveal the thoughts or influences driving the decisions being made by these people (Barnes 1962; Appleby *et al* 1994; Tosh and Lang 2006). For this part of the

research the detail able to be gleaned from this type of evidence was sufficient to create a picture of who was occupying which part of the site and when.

Rates records were used to create timelines of owners and/or occupiers for each town section under consideration, and, although there were several small gaps in these records, a comprehensive occupation sequence was able to be produced. The complete timelines are presented in Appendix A. Two maps (1855 and 1866) and two insurance plans (1880 and 1908) helped with the process of matching some owners with their particular portions of the site as well as revealing the approximate footprints of the buildings at each of these dates. Photographs of the site dating from the 1850s to the early 1900s allowed for building footprints to be refined and revealed other important site features such as infrastructure, building materials and gardens.

Once the evidence from the available descriptive records was compiled and a detailed timeline created for each town section, the deposits dated in the previous step were able to be correlated to and potentially associated with the identified occupants.

4. Associating the Deposits with Households

Once the deposits had been dated and a timeline of site inhabitants created it was usually fairly straightforward to attribute the assemblages to households. Location and deposit date were the first things taken into consideration, and these enabled several of the more tightly dated deposits to be quickly associated with the household most likely to be responsible for them. To do this the excavation plans were overlaid on historic maps and plans, council records consulted to identify potential boundary changes and historical photographs were studied to identify any correlations between the features and historical structures. For those deposits with broader date ranges or those that could, based on their probable deposition date, belong to more than one household it was necessary to take other evidence into account. Major site transformation events, in particular the construction, modification or demolition of buildings, were useful to consider in these cases because the people who undertook them were often recorded, and such events influence where particular deposits would be positioned. This is most strikingly obvious for a series of deposits on TS191, which

all contain demolition material relating to a stable that was built and pulled down by the same family (the Chavannes).

Some features or deposits that were initially unable to be definitively attributed to a particular site occupant based upon dating and location were subsequently able to be associated with households through ceramic vessel refitting and/or matches between deposits of unknown association and those of known association. For this process the most ubiquitous patterns and decoration styles (such as Willow and Asiatic Pheasant transfer prints and most banded and gilt designs) were not used as they were present in most deposits and were often not distinctive enough to confidently cross-match individual vessels without a fine-grained analysis. Vessels with rarer decoration types were found to be the most useful for this purpose.

As with any urban archaeological site, there was an inescapable degree of cross contamination between deposits relating to different households and time periods, due to the high level of site modification. The effect this had on interpretation was largely ameliorated by the use of dating methods that take into account multiple artefact types and establish the most likely deposit date range for each assemblage. Cross-contamination can be thought of as archaeological background noise, and acts as a reminder of the entangled relationships of the site inhabitants over time and space.

Domestic and Commercial Deposits

For some of the larger artefact deposits from the site it was obvious that they contained material from both domestic and commercial contexts, especially with regards to the ceramic vessels. Domestic vessels here refer to ceramic items used in a household setting for the consumption or preparation of food, while commercial ceramics are those that were not sold or used before being discarded. Three sources of potential commercial ceramics were identified: Robert Mclean's and Edwin Moul's general stores on TS189 and Andrew Tod's bonded warehouse on TS186. McLean opened his general store in 1871 and went bankrupt three years later, leading to a portion of his unsold stock being disposed of, while Edwin Moul took over the neighbouring property in the 1880s and sold a variety of homewares until he rebranded as a furniture store in 1897. Tod operated a bonded warehouse through which passed a variety of imported goods including large amounts of pottery from the early 1870s until the mid-1890s.

In order to distinguish between ceramic vessels originating from domestic and commercial settings within single features a simple presence-absence use-mark analysis was undertaken, using Griffiths (1978) as a guide. Griffiths' paper outlines her preliminary research into historical ceramic vessel use-mark analysis and provides detailed descriptions of some of the types of marks that can be observed as well as their cause, enabling inferences about usage patterns. For this research, however, use-mark analysis was undertaken only to identify those ceramic vessels in a deposit that had been used versus those that had not.

Types of Use-Marks

Use-marks were identified using an adapted version of Griffiths' (1978) preliminary research. In her study she identifies seven categories of use-wear (1978: 71) but focuses on scratches left by cutlery and abrasion caused by storage practices. For this analysis four types of use-marks were recorded: cutlery marks, storage abrasion, display abrasion and other marks.

Cutlery marks are easily identifiable as long scratches, usually on the interior base of a vessel (Figure 26). These are caused, as the name suggests, by the use of metal cutlery items during the serving, preparation and/or consumption of food or drink from the vessel and can be further categorised into spoon/fork and knife marks. Spoon/fork marks are characterised by their curved shape and uniform line which tapers slightly at each end. This is a result of the scooping motion used to pick up food with these utensils. In most cases it is not possible to distinguish marks made by spoons or forks, but when these types of marks appear in hollowware vessels such as cups or bowls it can be assumed that they were created by spoons performing a stirring action. Knife marks are straighter than spoon/fork scratches and are often jagged, or appear as a group of short, roughly parallel lines as a result of the sawing motion employed in cutting large pieces of food. These marks also tend to be more visible, being deeper than spoon/fork marks due to the increased force applied during their creation.



Figure 26. Whiteware plate from F313 showing cutlery marks.

Storage abrasion is characterised as the wearing down of the glaze by prolonged contact between the vessel and a shelf or other ceramic item. This type of wear is most visible on the footring/rim of vessels but can sometimes be observed on the obverse side, particularly when a vessel has been stored in a stack with other similar vessels (Figure 27). Abrasion caused by stacking usually follows the shape of the footring/rim of the vessel stacked above the one being analysed, and can range in severity from slight to total loss of glaze in the affected area. Display abrasion is usually visible as glaze-wear around the rim of flatware vessels which have been rested against a vertical surface so that their decoration can be seen. Other potential display marks are small patches of abrasion at four points around the rim of a vessel where a wire hanging frame has been attached or the presence or evidence of an attachment on the reverse for hanging on a wall.



Figure 27. Whiteware plate from F313 showing storage wear on shoulder.

Other types of use-mark include chips with heavily worn and rounded edges (Figure 28) suggesting they have been present on the vessel for a considerable amount of time before deposition; repairs, whether with glue or wire fixings; and heavy staining such as that often found inside teapots.



Figure 28. Whiteware plate from F313 showing chips with worn edges.

As previously stated, the extent of each of these marks was not recorded, merely their presence, with the above descriptions acting as guides for where to look and what to look for. A detailed analysis of the frequency of each type of use-mark was not undertaken here as the primary aim of the analysis was to separate the domestic vessels from mixed deposits, but this approach could easily be used to answer more specific questions about how, and to what degree, particular ceramic vessels were used.

Limitations

This method of use-mark analysis is not without several important limitations which must be taken into consideration. Firstly, this type of analysis is only possible on ceramic ware types where the glaze is not fused with the body. This means that it is limited to earthenwares and some soft-paste porcelains, although on the latter vessels the glaze is bonded fairly strongly to the body and so use-wear is harder to produce. The exception to this rule is where rounded chips, repairs and attachments for display are observed, all of which can appear on porcelain and stoneware vessels. Differential resistance to wear means that not all ceramic vessels within a deposit can be reliably designated as domestic or commercial and, depending on the assemblage, this can have significant ramifications for interpretation.

Another issue is encountered when analysing fragmentary vessels as the portion on which the use-marks would appear may be missing. For this assemblage, although the use-mark analysis was undertaken initially by individual sherd, vessels from each deposit were refitted where possible and the use-mark data combined. This did not solve the problem for the more fragmentary vessels, for which only small portions were represented, but these only made up a small proportion of most of the analysed assemblages. It was sometimes also possible to assign these fragmentary vessels to the domestic category based on other matching vessels or set components which did exhibit obvious use-wear.

Use in a household setting is obviously not the only activity that can leave marks and scratches on ceramic vessels, particularly those recovered from an archaeological context. Taphonomic processes such as water-rolling can cause glaze abrasion and wear down sharp edges of chips and breaks, although this is usually far more

widespread than the localised marks caused by storage or display. Excavation tools, whether hand held or machine, and the cleaning process can also cause a variety of marks on ceramic artefacts, including scratches superficially similar to those made by cutlery. It is usually possible to differentiate these marks on closer inspection. For example, when the vessel is refitted any scratches which end on the very edge of a sherd are probably excavation related, as knife or spoon/fork marks made during the vessel's use-life will almost always continue onto the adjoining fragment. Excavation scratches are also usually "too deep and less straight or too light and aimless" to be cutlery marks and so can be easily distinguished (Griffiths 1978: 79, Figure 4).

The results created by this analysis also have their limitations. Those vessels which show signs of use were categorised as domestic as they were more likely to have come from a household context, while the vessels which showed no evidence of use and those which were unable to be analysed using this method were not included in the interpretation of the household's artefact assemblage. This means that there will be some household vessels which will fall into the "no usewear" category (ie. show no signs of use) but the effect on the overall interpretations will be minimal as all the households studied in detail have at least one other discrete deposit associated with them which can provide a sample of non-earthenware vessels. The commercial deposits are not a primary focus of this research so it was not necessary to accurately categorise the "no usewear" ceramic vessels further.

Once this step was completed 28 features containing 32 discrete deposits were able to be associated with households or businesses. Four of the features contained mixed deposits which were able to be at least tentatively separated using use-mark analysis. The six features which were unable to be attributed to a household were still incorporated into the overall assemblage and some provided general evidence for time period specific issues raised during the course of the narratives.

5. Further Historical Research

Three households with at least some presence in the historical record and multiple associated domestic features and/or deposits were each selected to be the focus of a narrative. For these families it was therefore necessary to undertake more in-depth historical research than was conducted to establish the occupant timeline. This

research utilised some of the descriptive records already encountered but also relied upon two other types of historical data: personal and second-party records.

Personal records are those written or created by the individual being researched. These can include letters, diaries, autobiographies and artworks and have the ability to reveal the ways in which that person acted, thought and/or their motivations for behaving in particular ways. The intended audience must always be considered when using these sources, however. While private diaries and journal entries may be intended as personal reflections on events and interactions experienced by the author, personal records meant to be read by others (letters, autobiographies, poems etc.) are often driven by a desire for the reader to see the author and their life in a particular way which may or may not be entirely accurate or representative (Wilkie 2006: 14; Müller 2008). Unfortunately, no personal records for any of the families or individuals studied during the course of this research were available. Letters and diaries of other contemporary Whanganui residents were consulted, however, and were used to inform the subsequent interpretations where appropriate.

Second-party records include those written about a particular place, event or person by a secondary observer. Examples include newspaper reports, histories, biographies and previous archaeological interpretations. When using sources such as these it is important to consider the author's agenda(s), deliberate or otherwise, as this will have significant implications for how the subject is portrayed or which aspects are focused on in the description. For court proceedings reported in the newspaper, for example, the author may favour one side over the other and their description of events and characters will be influenced by this (Verhoeven 2008: 91; Donnelly and Norton 2012: 54). They are useful, however, in that they can reveal the way in which the subject was viewed by other members of the community, which in itself may reflect the front the subject presented to the rest of the world, and can give a more complete view of reality than bureaucratic records alone (Müller 2008:25). When combined with the archaeological and other historical data, such accounts can pick up upon disparities between the person and their persona. Understanding the dynamics at work around these second party sources is paramount for using them in the most meaningful and accurate way when constructing narratives about people in the past.

Second-party records were the most common historical record type found relating to the site occupants, although they were largely restricted to newspapers and local histories. The local newspapers (most notably the *Wanganui Chronicle*, *Wanganui Herald*, *Hawera and Normanby Star* and *Patea Mail*) provided a wealth of references to many of the occupants' movements, involvement in local organisations and events, changes in fortunes and, sometimes, descriptions of their character or personalities. More general information was gathered from these and other regional, national and international newspapers and various local histories (Chapple and Vietch 1939; Smart and Bates 1972; Atwell 2006).

6. Creating the Narratives

The final step in the process is combining the evidence from the material culture and historical record for the three households to form cohesive and meaningful narratives. This did not necessarily require in-depth interpretations of the entire artefact assemblages associated with the families, but instead focused on those items that best reflected core themes that arose during the analysis. Taking such a data-led approach, especially when looking at multiple distinct groups or households, runs the risk of creating sprawling narratives with no clear direction so care must be taken to identify core themes early on. This does not necessarily prevent each narrative from addressing unique and, on the surface at least, unrelated issues or experiences, as this variety is what this approach seeks to highlight. In the end it requires the striking of a fine balance between following certain artefacts down interesting paths while maintaining a grounding in a common theoretical and/or topical area. The common thread for this research concerned the ways in which material culture reflects the changing nature of the colonial experience in Whanganui as this direction was felt to fit the multiple narrative structure comfortably while allowing for a relatively broad scope. This process involved the application of several key theoretical concepts identified in Chapter 1, including heteroglossia, multi-scalar analysis and viewing artefacts as processes, active agents and palimpsests.

Heteroglossia

Heteroglossia, as discussed previously, refers to the identification and presentation of different voices when interpreting the past. This usually involves consulting diaries,

journals and letters to tease out an individual's thoughts but as these were not available for any of the Whanganui families used for this research a different approach had to be taken. Contemporary accounts of these families were restricted to bureaucratic documents and newspaper reports and advertisements, most of which were written about them rather than in their own voices. This is where the material culture came in. The artefact deposits left by these households are more than just rubbish, they are the direct result of the multitude of decisions, interactions and intentions held and made by the people within them and as such can be used to describe and understand their places and roles in nineteenth century Whanganui.

The concept of heteroglossia as an acceptance that there is more than one way of describing the same material conditions can also be applied to the archaeological record by describing and interpreting the same site through the experiences and remains left behind by multiple, overlapping households. This research facilitates a heteroglossic interpretation through the creation of multiple narratives which each provide unique and personal accounts of life in colonial Whanganui.

Micro-Histories and Multi-Scalar Analysis

Even though the narratives are based upon single households, people and sometimes even individual artefacts, this does not mean that broader scales of interpretation have been neglected. Each of the families followed for this research functioned as active members of the local, national and global community and this approach allows for this aspect of the colonial experience to be emphasised. This was achieved by drawing in data from the deposits not associated with one of the three families to show the ways in which they interacted with their closest neighbours and other members of the Whanganui community, while evidence from some of the material culture alongside comparisons with contemporary international examples reveal insights into the global community. The result is then a story which vacillates between scales while remaining true to its aim of describing and explaining the ways in which these multi-scalar processes were experienced by the individual.

Artefacts as Processes, Active Agents and Palimpsests

This approach also highlights the central roles of material culture, both passive and active, in the lives of these families. Building the narratives around certain artefacts

found in each household's deposits just as much as around the historical record shows that material culture formed the focus of many colonial experiences and in return had notable influences on the people, economy and even the landscape of nineteenth century Whanganui.

By following this research design, the end result is a set of narratives which present a nuanced picture of life in nineteenth century Whanganui. Whereas traditional historical archaeological interpretations tend to separate out the history and the archaeology before drawing them together briefly at the end, this approach allows for them to be presented together, with neither being given overt emphasis over the other. The individual scale of each of the narratives also allows the reader (academic, professional or public) to more easily relate to the story than if they were being presented with a purely descriptive account or one which relies on wide-scale models of human behaviour. In addition, this method is able to portray the complex and entangled nature of the relationship between people and objects better than the more common divisional presentation of history *then* archaeology *then* interpretation.

Chapter 5: The Building Blocks

This chapter presents a description of the material analysed from the VRC site organised by material type. It is intended to act as a reference for the interpretations and narratives presented in subsequent chapters and the terms used in those to refer to certain artefact types. It does not include any in depth analysis or interpretations of the assemblage. Emphasis is placed upon aspects of the assemblage that will provide the most relevant data for this type of research, most notably evidence that helps with chronology and identification of activity types and other contextual aids. The chapter is organised into three main material types (ceramic vessels, glass vessels and other) as each need to be approached in slightly different ways. Faunal remains, fabric, and leather finds were excluded from the research (with rare exceptions) since they require specialist analysis and conservation techniques outside the scope of the present study of core material culture. It was also felt that the evidence gathered from the bulk of the material was sufficient to pursue the research aims and questions. It is hoped that these will be analysed in the future and will be able to add to our understanding of the VRC site and its inhabitants. For detailed descriptions of the artefact assemblages collected from each feature see Appendices B and C.

VRC Ceramic Vessels

The VRC ceramic vessels were organised and analysed on two levels. Firstly, they were organised into functional categories based upon their forms. This allows for an understanding of the types of activities being undertaken at the site and facilitates comparison of these between the features. The second level of analysis uses ware types and decoration styles which will be used primarily as chronological data but also used to comment on patterns of consumer choice, identity and, to a lesser degree, economics. Maker's marks found on ceramics are another important source of chronological information and details of those found can be found in the relevant deposit descriptions in Appendix C.







For both ware types and decoration styles Brooks' 2005 *Archaeological Guide to British Ceramics in Australia 1788-1901* was an invaluable resource. While this book focuses

on Australia almost all of the information can be comfortably extended to New Zealand examples as the majority of these artefacts were exported from Britain and were popular in both countries for comparable periods.

Vessel Forms

A wide range of ceramic vessel forms were found at the VRC site and for ease of analysis and interpretation they were categorised into six functional types: tableware, kitchenware, storage vessels, toilet ware, decorative ware and other (Table 1).

Table 1. Ceramic vessel forms by functional type

Vessel Forms	MNV	
Tableware	1259	
Toilet ware	51	
Kitchenware	45	
Storage vessels	152	
Decorative vessels	19	
Other	153	
Total	1679	

Tableware

Tableware refers to those vessels which were intended to be used for serving or consuming food and drink (Table 2). This broad category includes two sub-types (dinnerware and teaware) which relate to the meal for which some of the vessels were most likely to be used, although it is not always possible to definitively place particular items into one of these specific sub-types. For example, it is difficult to tell whether a small plate belonged with a dinner set or was part of a tea trio (cup, saucer and plate) unless you have the accompanying set components. Some tableware vessels also have a more general role and may have been used in multiple settings. For these reasons tableware is used as an over-arching category, with the sub-types only being used when definitive identification is possible.

Dinnerware vessels are those used during substantial meals and are often present in matching sets. Vessels which fall under this heading are dinner plates, side plates (when they can be matched with dinner plates of the same set), ashettes and tureens. Teawares are those vessels which were used to serve and consume tea and/or coffee and often an accompanying light meal. Teaware vessels found at the VRC site were

cups, saucers, sugar bowls, creamers and teapots. Side plates and eggcups can also be included in this category if accompanied by matching cups and/or saucers. The more general tableware vessels found at the site were jugs and table bowls. Caution must be taken when using these sub-types, however, as there is every possibility that tea cups could have been used during lunch or dinner or an ashette used to serve snacks which accompanied an afternoon tea.

Table 2. Ceramic tableware forms by MNV

Vessel Form	MNV	
Dinner plate	155	██████████
Side plate	143	██████████
Soup plate	8	█
?plate	136	██████████
Table bowl	43	████
Ashette	38	████
Tureen	31	████
Jug	34	████
Eggcup	20	██
Mug	11	█
Cup	325	████████████████████
Saucer	296	██████████████████
Teapot	19	██
Total	1259	

Toilet ware

Toilet ware vessels include those which were used as part of personal hygiene routines. The VRC assemblage contains examples of five such vessels: ewers, basins, chamberpots, cosmetic jars and toothbrush holders (Table 3).

Table 3. Ceramic toilet ware forms by MNV

Vessel Form	MNV	
Ewer	12	██████
Basin	8	████
Chamberpot	8	████
Toothbrush holder	6	████
Cosmetics jar	17	██████
Total	51	

Kitchenware

Vessels intended for use in the preparation of food come under the kitchenware heading. VRC examples include milk pans, mixing bowls, roasting dishes, a strainer and water filters (Table 4). Milk pans are large, shallow dishes used to separate the cream from fresh milk. Their presence implies that a household was making its own butter.

Table 4. Ceramic kitchenware forms by MNV

Vessel Form	MNV	
Mixing bowl	28	████████████████████
Roasting dish	10	██████████
Strainer	1	█
Milk pan	3	██
Water filter	3	██
Total	45	

Storage vessels

This category contains those vessels designed to be used as utilitarian storage containers, usually for food or household products. Bottles, jars and crocks all fit under this heading. Seven types of bottle were identified in the VRC assemblage (Table 5) but caution must be used when applying functional names to these vessels since some types were regularly re-used for other purposes, particularly storage of homemade preserves, sauces or beverages. In these cases, the terms are strictly used to describe a particular bottle shape rather than its contents. This is less of a problem for bottle types such as ink and blacking which are unlikely to have been re-used as containers for other products.

Table 5. Ceramic storage vessel forms by MNV

Vessel Form	MNV	
Blacking bottle	17	██████████
Ginger beer bottle	2	█
Ink bottle	22	██████████
Oil bottle	8	██████
Porter bottle	1	█
Stout bottle	3	██
Wide-mouth bottle	2	█
?bottle	49	████████████████████
Jar	46	████████████████████
Crock	2	█
Total	146	

Decorative ware

Decorative vessels are those whose primary function is to add to the aesthetic appeal of the home. The VRC assemblage contains various decorative forms: vases, figurines, fairings, card holders and flower pots (Table 6). Due to the large variation in shape and size of these vessels discerning the particular type is often difficult so in most cases they can only be described as general decorative vessels.

Table 6. Ceramic decorative vessel forms by MNV

Vessel Form	MNV	
Vase	4	■
Flower pot	2	■
?decorative	13	■
Total	19	

Other

Some vessel types do not fit comfortably into any of the above categories. Candlestick holders and baby feeders were also found at the VRC site and are placed in this category (Table 7).

Table 7. Other ceramic vessel forms by MNV

Vessel Form	MNV
Candle holder	4
Baby Feeder	2
Unidentified	147
Total	153

Ware Types

The ware of a ceramic vessel refers to the body material from which it is made and can be broadly categorised into one of three main types (earthenware, porcelain and stoneware) based on the type of clay used and how it was fired. Each of these types is best suited to a different purpose and includes a number of sub-classes (Table 8). These sub-classes reflect differences in quality, origins and treatment of particular wares and themselves display patterns in vessel forms and concepts of quality.

Table 8. Ceramic vessel ware types by MNV

Ware	MNV
Earthenware	
Terracotta	2
Coarse red earthenware	3
Tin-glazed earthenware	2
Creamware	4
Pearlware	2
Whiteware	1176
Ivory-dyed whiteware	15
Yellowware	31
Refined red earthenware	5
Dyed-body ware	10
White granite	1
Buff-bodied earthenware	17
Porcelain	
Bone China	218
European porcelain	68
Japanese porcelain	6
Chinese porcelain	1
Stoneware	
Salt-glazed stoneware	55
Slip-glazed stoneware	23
Bristol-glazed stoneware	27
Lead-glazed stoneware	2
Chinese brown-glazed stoneware	1
Total	1679

Earthenware

Earthenware was the most common ware type in the VRC assemblage. It is the coarsest of the body materials and is fired at a significantly lower temperature than porcelain or stoneware. As a result, it remains unvitified and must be glazed if the vessel is required to be watertight. The low firing temperature also means that the glaze does not fully bond to the body and responds to temperature and moisture level changes at a different rate, often resulting in large cracks or “crazing.” The relatively low costs of producing earthenware compared to the other body types meant that this was used for utilitarian and everyday vessels, although even within this class there is huge variation in quality. The following section describes each of the sub-classes of earthenware encountered in the VRC assemblage along with the vessel forms they were used for and any chronological information which can be gathered from them.

Terracotta



Figure 29. Terracotta plant pot base from F700

Body: Unrefined, orange, air bubbles and inclusions common.

Glaze: Usually unglazed.

Decoration: Usually undecorated.

VRC vessel forms: Flower pots.

Terracotta is a low-fired coarse earthenware with a distinctive orange body colour. It is very rarely glazed or decorated and is most often used in the nineteenth century for plain garden vessels such as flowerpots.

Two ceramic fragments of this body type were recovered from the VRC site, each from a different feature (F125 in TS189 and the top of F700 in TS187). Both sherds were from generic round flowerpots which would have been a common sight in many Whanganui gardens during the nineteenth, twentieth and even twenty-first centuries.

Coarse Red Earthenware



Figure 30. Coarse red earthenware milk pan fragment from F659

Body: Unrefined, large air bubbles and inclusions common, red.

Glaze: Lead (colourless), slip (cream/white) or a combination of the two.

Decoration styles: Usually undecorated.

VRC vessel forms: Milk pans.

Coarse red earthenware, sometimes referred to as “redware,” is a low fired earthenware with a deep red body. This body type was commonly used for many vessel forms prior to the introduction of mass-produced refined earthenware but by the late eighteenth century was limited to utilitarian vessels (Brooks 2005: 32).

Fragments from three coarse red earthenware vessels (all milk pans) were found in TS190 (F656 and 659) and TS191 (F420). Most of the fragments had an opaque white or cream slip on the interior surface and some had simple moulded decoration around the rim.

Tin-Glazed Earthenware



Figure 31. Tin-glazed earthenware jar base from F379

Body: Unrefined, large air bubbles and inclusions common, buff to grey.

Glaze: Tin, opaque white to pale blue.

Decoration styles: Painted decoration common.

VRC vessel forms: Storage vessels.

Tin-glazed earthenware is characterised by a thick, opaque white to blue tin glaze applied to a coarse earthenware body. Jars made of this ware would have originally held any of a wide variety of preserved Chinese or Japanese foods, condiments and liquors, including soy sauce, pickled vegetables, spirits or wine (Yang and Hellmann 1998).

Two bases from tin-glazed earthenware ginger jars were found on TS192 (F186 and F379). One had painted green decoration visible over the opaque tin glaze.

Creamware



Figure 32. Creamware side plate from F656

Body: Refined but small inclusions and air bubbles common, cream to off-white.

Glaze: Lead glaze, usually green tinted.

Decoration styles: Rarely decorated.

VRC vessel forms: Tableware, storage vessels.

Creamware (also known as “Queen’s ware” or CC ware) was first produced by Josiah Wedgwood in 1761 (Brooks 2005, 29) and soon began to be manufactured on a large scale in the Staffordshire potteries. This ware was an attempt by British potters to emulate the fine porcelain coming out of China at the time (Francis 2001, 3). The green tinted glaze was intended to make the cream coloured body appear closer to these pale white porcelains. It was the first “fine” pottery to be industrially mass produced and

marketed and dominated the British ceramic market, along with Pearlware, until the end of the eighteenth century. By this time improvements in the manufacture process and new, better quality body and glaze components were able to produce a finer-grained and whiter ceramic (whiteware) which superseded its predecessors. This process was a gradual one, with cream and pearlwares being improved and refined until they resembled whiteware rather than being rapidly replaced with an entirely different ceramic (Miller 1991). This poses a potential problem for identification and cataloguing of these ware types, however by the time the settlement of New Zealand by Europeans properly commenced whiteware was already established (Brooks 2005, 17), so this problem is reserved for the very earliest European sites (for example the Hohi mission station (Smith et al. 2012)). Recent attempts have been made to standardise the identification of these three related, and at times extremely difficult to distinguish, ware types using colorimeters and spectrophotometry (Marini 2013; Chenoweth and Farahani 2015), however these methods have proved to be only marginally more accurate than doing it by eye, if at all. Creamware did continue to be produced by some potteries well into the nineteenth century but on a much smaller scale and it was usually reserved for cheaper utilitarian vessels.

Creamware was found in four of the VRC contexts, three of which were in TS190 and one in TS191 (Table 9). One of the vessels (a side plate) has a maker's mark and date stamp which identifies it as having been manufactured by the Minton pottery company in Staffordshire in or after December 1862. This is a reasonably late date for the production of this ware type and by this point it would have been cheap compared to the whiter and more refined whiteware which dominates most assemblages.

Table 9. Creamware vessels by context

Town Section	Context	Vessel Form (portion)	MNV
TS191	F420 spit 3	? (rim)	1
TS190	F656	Side plate (complete)	1
TS190	F657	Jar (base)	1
TS190	F672 spit 1	Plate (base, footring)	1

Pearlware



Figure 33. Pearlware bowl base from F313, note the blue glaze

Body: Refined but small inclusions and air bubbles common, off-white to white.

Glaze: Lead with blue cobalt tint.

Decoration styles: Almost always decorated, sometimes under-glaze transfer printed or shell-edged.

VRC vessel forms: Tableware.

Pearlware (also known as “China glaze”) is another late eighteenth century Staffordshire attempt to emulate the English version of Chinese porcelain (Miller and Hunter 2001). It was first produced around 1780 and has a whiter body than Creamware, made to look even paler through the incorporation of cobalt oxide into the lead glaze which gives it a distinctive blue tint (Godden 1988: 8). Whereas Creamware is usually undecorated, Pearlware almost exclusively bears some form of decoration (Brooks 2005: 31). As mentioned above, Pearlware was one of the forerunners of nineteenth century whiteware into which it gradually evolved. Unlike Creamware,

however, Pearlware stopped being produced once whiteware was perfected around the 1820s.

Only two vessels from the VRC site were identified as Pearlware. A Willow pattern tureen base was found in F478 on TS191 and a piece of a blue floral UGTP bowl was found in the F313 well on TS189. It is probable that these vessels arrived in Whanganui with their owners as by the time the settlement was established (1840) this ware type was out of production.

Whiteware



Figure 34. "Rhine" pattern whiteware side plate from F374

Body: Refined, can contain small inclusions or air bubbles, white.

Glaze: Usually lead, colourless or, rarely, coloured.

Decoration styles: Various printed, painted, enamelled or moulded.

VRC vessel forms: Tableware most common, kitchen, toilet and storage vessels also present.

Whiteware is a refined earthenware distinguished by its white body and (usually) colourless lead glaze as opposed to its predecessor Pearlware's blue tinted glaze. It was developed as a result of concerted efforts by Staffordshire potters including Spode and Wedgwood to produce the whitest, cheapest refined earthenware (Brooks 2005, 35). Once this was achieved in the early nineteenth century whiteware dominated the global ceramic market and would continue to do so into the twentieth century. It was used for most vessel forms and could be decorated in a huge variety of ways and as a result it is usually the predominant ceramic ware in New Zealand archaeological deposits.

As the nineteenth century progressed so did the manufacturing processes used to create whiteware. The body gradually became more refined and sometimes semi-vitrified, and several pottery companies began to market their own whiteware as superior to others. This was chiefly done by giving their product a name which portrayed strength, purity and/or a close resemblance to porcelain (Godden 1988: 60). Terms such as "stone china," "ironstone" and "opaque porcelain" were commonly used and sometime these wares are distinguished from traditional whiteware. This has not been done here, however, as it is often extremely difficult to distinguish these specific wares unless a fragment bears a maker's mark, and the extra chronological information gathered from this distinction is minimal. The two exceptions to this are Ivory-dyed Whiteware and White Granite (discussed below) which are relatively easy to distinguish and do provide precise dating information.

Whiteware was by far the most common ware type for the VRC assemblage and was recovered from every deposit which included ceramics. In total at least 1,189 whiteware vessels were catalogued. As can be seen from Table 10, whiteware was used for most vessel forms but in particular for tableware.

Table 10. Whiteware vessel forms by MNV

Vessel Form	MNV	
Dinner plate	130	████████████████████
Side plate	106	██████████████████
Soup plate	8	█
?plate	128	██████████████████
Table bowl	33	████
Ashette	36	████
Tureen	29	████
Eggcup	8	█
Jug	18	██
Mug	7	█
Cup	228	██
Saucer	215	██████████████████████████████████████
Teapot	2	█
Strainer	1	█
Kitchen bowl	16	██
Roasting dish	2	█
Bottle	3	█
Jar	39	████
Ewer	8	█
Basin	7	█
Chamberpot	12	██
Toothbrush holder	8	█
Cosmetics jar	15	██
Baby feeder	1	█
Unidentified	115	██████████████████
Total	1176	

Ivory-Dyed Whiteware



Figure 35. "Cairo" pattern ivory-dyed whiteware side plate from F420

Body: Refined, can contain small inclusions or air bubbles, ivory/cream.

Glaze: Usually lead, colourless.

Decoration styles: Under-glaze transfer printing.

VRC vessel forms: Tableware.

This ware consists of the same clay as whiteware but which has been dyed a creamy ivory colour before being made into a particular vessel. This was done by some pottery companies in response to the popularity of the Japanese aesthetic. Upon the country being opened to the West in the 1860s Japanese design soared in popularity and this influence extended to British made ceramics by the early 1880s (Charleston 1968: 299). This fad was a short-lived one however, and ivory-dyed whiteware was out of fashion by the end of the decade.

All of the fifteen ivory-dyed whiteware vessels found at the VRC site are from one dinner set and are decorated with an Egyptian themed green UGTP pattern (Cairo). The set includes six dinner plates, six side plates and three oval Ashettes of varying size. The majority of the fragments were recovered from the F420 well but one piece was found in nearby F375 and another three pieces in F516. These three features are all within TS191.

White Granite



Figure 36. White Granite cup from F166

Body: Refined, semi-vitrified. White with slight grey tinge.

Glaze: Lead, colourless.

Decoration styles: Moulded decoration common, especially the Berlin Swirl motif.

VRC vessel forms: Hollowware.

White Granite is used here to refer to a specific type of semi-vitrified whiteware, although elsewhere it can include other ironstone and stone china wares (for example Samford and Miller 2015). This ware's distinguishing characteristic is its grey tinged, very hard body which is often noticeably thicker than other whitewares. The only decoration generally found on White Granite vessels are simple moulded designs, particularly a pattern known as "Berlin Swirl" (Brooks 2005: 34, Figure 4.15). This ware was first produced in the 1840s and was used largely for table and teaware

vessels (Miller 1993: 6). Only one piece of ceramic from the entire VRC assemblage was positively identified as being white granite ware: a small rim fragment from an unknown hollow vessel from F656 in TS190 (the image shown above is from a deposit not included in the analysis but better illustrates this ware type).

Yellowware



Figure 37. Yellowware mixing bowl base and rim from F313

Body: Refined but small inclusions and air bubbles common, mustard yellow.

Glaze: lead glaze, colourless.

Decoration styles: Moulded decoration common, sometimes has a pale slip on the interior surface.

VRC vessel forms: Utilitarian kitchenware.

Yellowware is a refined earthenware with a distinctive yellow body. It is thought to have been first produced in the 1830s (Miller 2000: 13) and was usually used to make utilitarian vessels.

Yellowware was found in small amounts across the site (Table 11), with at least 31 vessels represented in the assemblage. Its use was restricted to utilitarian kitchen

vessels such as mixing bowls, jars and roasting dishes which would almost never have made it to the table when guests were visiting. The only possible exceptions to this rule are three yellowware jugs with slip decoration, although it is likely that these would only have been used in informal settings. The yellowware mixing bowls often had simple moulded decoration covering the outer surface and a white slip on the interior and there is very little variation within this vessel form.

Table 11. Yellowware vessels by context

Town Section	Context	Vessel Form (portion)	MNV
TS187	F700 spit 1	Mixing bowl (rim, body, base)	1
TS189	F125	? (body)	1
TS189	F165	Jug (body)	1
TS189	F313 spit 2-6	Roasting dish (rim, body)	1
TS189	F313 spit 2-6	Mixing bowl (rim, base)	1
TS189	F313 spit 2-6	Jug (handle, body)	1
TS189	F313 spit 2-6	? (body)	1
TS190	F656	Roasting dish (rim, base)	1
TS190	F656	Jug (handle, base)	1
TS190	F657	Mixing bowl (rim)	2
TS190	F657	Roasting dish (rim)	1
TS190	F659	Mixing bowl (body)	1
TS190	F659	? (rim)	1
TS190	F671	? (body)	1
TS190	F710 spit 1	Mixing bowl (rim)	1
TS190	F710 spit 1	? (body)	1
TS191	F435	Mixing bowl (rim)	1
TS191	F478	Jug (body)	1
TS191	F478	Jar (rim)	1
TS191	F493	Jug (rim, same vessel as F478)	0
TS191	F495	Roasting dish (rim)	1
TS191	F510	? (body)	1
TS191	F516 spit 1	? (body)	1
TS191	F420 spit 1	Mixing bowl (rim)	1
TS192	F185	Mixing bowl (rim, base)	1
TS192	F264	? (body)	1
TS192	F334	Roasting dish (rim)	1
TS192	F374 spit 1 and 2	Mixing bowl (rim, body)	1
TS192	F374 spit 2	Roasting dish (rim)	1
TS192	F379 spit 2	Mixing bowl (rim, base)	1
Total			31

Refined Red Earthenware



Figure 38. Manganese glazed refined red earthenware teapot body and handle from F700

Body: Refined but small inclusions and air bubbles common, red.

Glaze: Various, including lead, manganese and black slip glazes.

Decoration styles: Moulded, slip and lustre decoration common.

VRC vessel forms: Teapots and jugs.

Refined red earthenware is a finer grained earthenware body which has been fired at a higher temperature than coarse red earthenware. It is usually a deeper red than its coarse counterpart and is usually used for tableware vessels such as teapots.

At least five refined red earthenware vessels were present in the VRC assemblage, found in four features across TS187 (F700), TS189 (F125) and TS191 (F478, 550). Four of the vessels are teapots and the other a jug. A variety of glazes and decoration styles were used on these vessels, including lead, slip and manganese glazes and moulded, slip and lustre (copper and silver) decoration.

Dyed-Body Ware



Figure 39. Basket weave dyed-body ware sherd from F313

Body: Refined, sometimes semi-vitrified, various colours but blue most common.

Glaze: Lead, colourless.

Decoration styles: Moulded decoration common, particularly basket weave pattern.

VRC vessel forms: Tableware and decorative vessels.

Dyed-body ware, as the name suggests, is a refined earthenware which has been dyed prior to being formed into a vessel, giving an even overall colour. Blue is the most common colour found but others (such as green and grey) are also known (Brooks 2005: 30). Some dyed-body wares are semi-vitrified however the information value of the distinction between these and their more porous equivalents is limited. Moulded decoration is common on these vessels.

Blue was the only colour of dyed-body ware found at the VRC site. At least ten vessels were present, including four jugs, two plates, one jar and three unidentified vessels. Most had moulded decoration on at least part of the sherd, either in the form of floral motifs or a basket weave design. The fragments were found in ten features across TS189 (F125, 313), TS190 (F620, 659), TS191 (F420, 430, 495, 510) and TS 192 (F186, 379).

Buff-bodied Earthenware



Figure 40. Buff-bodied earthenware jug base from F656

Body: Refined, but small inclusions and air bubbles common, buff colour.

Glaze: Various. Lead (colourless and coloured) and manganese common.

Decoration styles: Moulded decoration common.

VRC vessel forms: Jugs and teapots.

Buff-bodied earthenware is another refined earthenware that is largely used for utilitarian vessels. The exception to this are teapots which are commonly made of buff-bodied earthenware but usually have a brown manganese glaze over moulded body decoration. This combination is known as Rockingham decoration and is extremely common in nineteenth century New Zealand deposits. Buff-bodied earthenware is not overly chronologically sensitive as it remains consistent throughout the nineteenth century,

Three buff-bodied earthenware jugs and fourteen teapots were found at the VRC site. The jugs were found in F165, F374 and F656. The F165 and F374 jugs were decorated with moulded floral designs and the F374 jug also had a green and blue coloured glaze. The F656 jug was undecorated. All nineteen of the teapots were decorated in the Rockingham style with a streaky brown Manganese glaze and moulded decoration. These teapots were found in features on TS187 (F700), TS189 (F313), TS191 (F375, 420, 495, 510, 516) and TS192 (F185, 186, 264, 326, 334, 372, 379).

Porcelain

There are two main types of porcelain: hard and soft-paste. Hard-paste porcelain is made from a mixture of kaolin clay and feldspathic rock while soft-paste porcelain has additional substances, such as burnt animal bone, added (Godden 1988, 9). Both are fired at extremely high temperatures with hard-paste porcelain being heated to the point where the glaze completely fuses with the body. In soft-paste porcelain the firing temperature is slightly lower, meaning the glaze does not fully fuse with the body which allows for small cracks or “micro-crazing” to develop if the vessel is exposed to variable temperatures during its use-life (Miller 1991: 11).

Hard-paste porcelain was the most expensive ceramic type throughout the eighteenth and nineteenth centuries and was usually reserved for decorative vessels or fancy teaware while soft-paste porcelain was durable enough to be used for vessels which would be used more regularly.



Figure 41. Small Chinese porcelain jar from F620

Body: Vitrified, grey to blue.

Glaze: lead, colourless, fused to body.

Decoration styles: Painted decoration common.

VRC vessel forms: Storage vessel.

Hard-paste porcelain has been made in China since at least the ninth century (Harris 1974: 4). It has a blue tinted body which makes it easy to identify and is often decorated with blue hand-painted underglaze designs. This style heavily influenced ceramic production around the world, especially in Britain, and would go on to inspire the quintessentially British blue and white pottery which would become so popular in the late eighteenth and nineteenth centuries. Chinese porcelain is found in the earliest New Zealand colonial sites (Woods 2012) and remains a fixture of archaeological deposits, albeit in small amounts, throughout the nineteenth century.

Two fragments of Chinese porcelain were found at the VRC site, representing one jar. The sherds were found in F620 (TS190).

Japanese Porcelain



Figure 42. Japanese porcelain vase from F125

Body: Vitrified, pale grey. Imperfections sometimes present.

Glaze: lead, colourless, fused to body.

Decoration styles: Enamelled decoration common.

VRC vessel forms: Decorative vessels.

Japan began producing hard-paste porcelain in the seventeenth century, but on a significantly smaller scale than China (Harris 1974: 6). Once contact with the west was resumed in the 1860s they began to manufacture vast amounts of porcelain for export, much of which is seen as inferior in quality to Chinese or European porcelain. The body of porcelain from Japan is a pale grey colour and it is often decorated with bright polychrome enamelled designs.

Fragments from six decorative vessels make up the Japanese porcelain assemblage for the site. The sherds were recovered from five features in TS187 (F700), TS189 (F125), TS191 (F420) and TS192 (F186, 264). Two of the vessels can be more precisely

identified as small vases but the others are too fragmentary to discern their specific form. All bear enamelled decoration in various bright shades.

European Porcelain



Figure 43. European porcelain card holder from F385

Body: Vitrified, white.

Glaze: Lead, colourless, fused to body.

Decoration styles: Various printed, painted, enamelled or moulded styles common.

VRC vessel forms: Teaware, decorative vessels.

Hard-paste porcelain was first successfully manufactured in Europe by German pottery company Meissen in the early eighteenth century after spending decades trying to perfect the Chinese methods (Harris 1974: 8). Germany would continue to be a major production centre for porcelain into the twentieth century but other potters around the region soon began to produce this ware. European porcelain can be identified by its bright white body (Brooks 2005: 30).

At least 68 European porcelain vessels were represented in the VRC assemblage, with sherds found in 21 features in TS187 (F700), TS189 (F125, 165, 313), TS190 (F620, 659, 671, 672, 710), TS191 (F375, 420, 493, 495, 550) and TS192 (F185, 186, 264, 326, 374, 379, 385). Vessel forms were dominated by tea and breakfast set components but also included a significant proportion of decorative vessels (Table 12).

Table 12. European porcelain vessel forms by MNV

Vessel Form	MNV	
Plate	5	■
Eggcup	4	■
Jug	2	■
Mug	2	■
Cup	17	■
Saucer	16	■
Cosmetics jar	1	■
Candleholder	4	■
Decorative	11	■
Unidentified	6	■
Total	68	

Bone China



Figure 44. Floral UGTP Bone China bowl rim from F334

Body: Semi-vitrified, fine-grained, ivory to white.

Glaze: Lead, colourless, partially fused to body.

Decoration styles: Various printed, painted, enamelled or moulded styles common.

VRC vessel forms: Tableware, especially tea and breakfast ware.

Bone China is a specific type of soft-paste porcelain. It was traditionally only produced in England and was first produced commercially in 1800 by Spode. The original recipe included bone ash, china clay and Cornish stone and the finished product was known for its white (although this often darkens over time to ivory), semi-translucent body that was sturdy and yet fine enough to use for decorative items (Kara and Stevens 2002: 731). It quickly became the most popular porcelain in Britain, thanks mainly to the strength added to the mix by the bone ash which made the manufacturing process easier and meant it was more durable once in use (Godden 1988: 9). While not all soft-paste porcelain is Bone China, the term is applied to all soft-paste porcelain sherds in this assemblage. It is a relatively safe assumption to make that the vast majority of the soft-paste porcelain found at the site is Bone China as it so completely dominated the market (Brooks 2005: 25), and no interpretive value is lost by mis-identifying the soft-paste porcelain sherds unless an in-depth chemical analysis of the body composition was to be undertaken.

Fragments from at least 218 Bone China vessels were recovered from the VRC site, with the majority being tea set components (Table 13).

Table 13. Bone China vessel forms by MNV

Vessel Form	MNV	
Dinner plate	3	█
Side plate	30	██████████
Table bowl	9	██████
Tureen	1	█
Eggcup	8	██████
Jug	5	████
Mug	2	██
Cup	83	██
Saucer	71	██████████████████████████████████████
Unidentified	6	██████
Total	218	

Stoneware

Stoneware's durability and strength lent itself perfectly to heavy duty storage vessels and aerated beverage bottles which the early nineteenth century glass industry had yet to successfully produce (Oswald, Hildyard, and Hughes 1982: 88), as well as ink and blacking jars. As the century progressed improvement in glass manufacturing lessened the need for stoneware drink bottles but new uses for the material emerged. These included ink bottles, infrastructure pipes, water filter cases and telegraph insulators (ibid: 62). Specific vessel forms made in this medium usually exhibited very little variation over the course of the nineteenth century and even into the twentieth. Blacking and ginger beer bottles, for example, maintained the same appearance from the early nineteenth century until the 1920s at least. By this point glass was a significantly more cost-effective and, for foodstuffs, hygienic material for manufacturing these containers and they were abandoned by all but the most steadfast companies (Askey 1981: 130).

The different types of stoneware are usually distinguished through the glaze, although there are some noticeable differences in the body which result from the finishing methods. All generally have similar, largely utilitarian uses and are incredibly common in nineteenth century New Zealand archaeological deposits.

Salt-Glazed Stoneware



Figure 45. Salt-glazed stoneware ink bottles from F435

Body: Vitrified, grey.

Glaze: Salt glaze, patchy brown with pitted surface.

Decoration styles: Almost always undecorated.

VRC vessel forms: Storage vessels.

Salt-glazed stoneware can be easily identified by its matte brown, pitted surface and grey body. This finish was achieved by throwing salts into the firing kiln with the blanks rather than applying a liquid glaze to the bottles directly, and results in variable coverage. Salt-glazed stoneware had its heyday in the mid-nineteenth century before being gradually replaced by slip-glazed varieties (Askey 1981: 25).

Sherds from at least 55 salt-glazed stoneware vessels were recovered from the VRC site. Of these, 51 were bottles (eighteen ink, seventeen blacking, one ginger beer and nineteen unidentified bottles), two water filters and two were from unidentified vessels. Fragments were found in 23 features across TS187 (F700), TS189 (F125, 165, 313), TS190 (F620, 656, 657, 659, 671), TS191 (F375, 420, 435, 516, 550) and TS192 (F185, 186, 264, 326, 334, 372, 373, 374, 379).

Slip-Glazed Stoneware



Figure 46. Slip-glazed stoneware bottles from F430

Body: Vitrified, buff colour.

Glaze: Buff slip glaze.

Decoration styles: Usually undecorated, can have moulded decoration.

VRC vessel forms: Storage vessels.

Slip-glazed stoneware is characterised by its uniform buff body and slip. The smooth finish achieved by the slip glaze allows for vessels to be cleaned easier than salt-glaze examples with their pitted surface and as a result this ware type becomes favoured for food and beverage containers from the middle of the nineteenth century (Askey 1981: 25).

Fragments from at least 23 slip-glazed stoneware vessels were recovered from seventeen features on the VRC site. These features were spread across TS189 (F125, 165, 313), TS190 (F656, 657, 679), TS191 (F420, 430, 478, 515, 516) and TS192 (F185, 186, 326, 334, 372, 379). Bottles were the most common vessel form, accounting for nineteen of the vessels. Of the bottles which could be identified to type three were ink, three stout and one a ginger beer bottle. Two large crocks, a water filter and one unidentified vessel of this ware were also recovered. Some of the vessels in this category may have had a Bristol glaze (discussed below), however without the top portion upon which this glaze is placed it is not possible to tell.

Bristol-Glazed Stoneware

Body: Vitrified, buff colour.

Glaze: Buff slip glaze with darker brown top portion.

Decoration styles: Usually undecorated, can have moulded decoration.

VRC vessel forms: Storage vessels.

Bristol-glazed stoneware is used to refer to slip-glazed stoneware vessels with a second, darker glaze applied to the top portion. This glaze, originally developed by the Powell pottery company in Bristol, is a mixture of zinc oxide, potash of lime, silica and alumina (Oswald, Hildyard, and Hughes 1982: 95). The glaze formula was never patented which allowed any pottery factory to manufacture it and aided in this ware's abundance (ibid: 68).



Figure 47. Bristol-glazed stoneware bottles from F313

Fragments from at least 27 Bristol-glazed stoneware vessels were found in sixteen features on TS189 (F313), TS190 (F620, 656, 657, 671), TS191 (F375, 414, 420, 495, 510) and TS192 (F186, 264, 373, 374, 379, 385). Twenty-four of the vessels were bottles (eight oil, two wide-mouth, one porter and thirteen unidentified bottles), one was a jar and two were unidentified.

Lead-Glazed Stoneware

Body: Vitrified, buff to white.

Glaze: Colourless lead glaze.

Decoration styles: Sometimes UGTP.

VRC vessel forms: Storage vessels.

Stoneware finished with a colourless lead glaze is far less common than the three types mentioned above. Of the two examples found at the VRC site, one (found in KJ17) had a black UGTP label on the body which identified it as an ink bottle. The other fragment found at the site (F379 in TS192) was a small body sherd from a bottle or jar.



Figure 48. Lead-glazed stoneware ink bottle from KJ17

Chinese Brown-Glazed Stoneware



Figure 49. Chinese brown-glazed stoneware sherd from F656

Body: Vitrified, buff to brown colour.

Glaze: Manganese.

Decoration styles: Almost always undecorated.

VRC vessel forms: Storage vessel.

Chinese brown-glazed stoneware is common in New Zealand archaeological sites where there were Chinese occupants as this body type was used for generic Chinese food and condiment storage, much like tin-glazed earthenware.

Only one fragment of Chinese brown-glazed stoneware was present in the VRC assemblage: a body sherd from F656 (TS190).

Decoration Styles

By the time the VRC site was first occupied by Europeans a wide variety of ceramic decoration styles were available and, more importantly, affordable. This is reflected in the VRC assemblage which included seventeen decorative methods in a huge array of colours and styles (Table 14). The following section has been organised by application method of each of the styles and includes descriptions of how the decoration was achieved, what colours and patterns were recorded and on which vessels, as well as any chronological information which the styles may hold.

Table 14. Ceramic vessel decoration styles by MNV

Decoration Style	MNV
<i>Printed</i>	
Sponged	11
UGTP	787
Decal	5
<i>Painted</i>	
Hand painted	22
Enamelled	34
Banded	156
Gilt	197
Lustre	4
<i>Slip</i>	
Annular	4
Mocha	1
<i>Moulded</i>	
Moulded	57
Edge-moulded	11
Shell-edged	2
Sprigged	50
<i>Other</i>	
Rockingham	14
Incised	1
Undecorated	318
Total	1671

Printed

These decorative styles were achieved through the printing of a design onto the vessel, either above or under the glaze. This results in a uniform design which can be replicated closely on multiple vessels. Types of printed decoration are distinguished here by the applicator used and the point during the manufacture process the print was applied.

Sponged

Decoration applied with an unshaped sponge (resulting in an all over, stippled design) was common from the late eighteenth century to the 1860s and was especially popular during the 1830s, while designs applied with cut sponges (where the sponge applicator is cut to a specific shape) were in vogue from the 1840s until the early 1870s, although they continued to be produced into the twentieth centuries (Samford and Miller 2015c). Spongeware was produced by most British (especially Scottish) potteries and was generally their cheapest decorated product (Kowalsky and Kowalsky 2001: 9). It was also commonly produced for export to the colonies (ibid: 7).



Figure 50. Spongeware saucer from F313

The VRC assemblage contains eleven spongeware vessels found on TS189 (F125, 313), TS190 (F656), TS191 (F493) and TS192 (F186, 264), making this decoration style

present in 18% of features at the site. Six distinct patterns were able to be identified amongst these vessels (illustrated in Appendix D). Blue, purple and green as well as four polychrome designs were recorded. Of the eleven vessels six were saucers, three cups and two unidentified hollowware items.

Under-Glaze Transfer Printing

Under-glaze transfer printing (UGTP) began to emerge as an alternative to hand-painting porcelain decoration in the 1760s and allowed for a much more efficient manufacture process as well as much more detailed designs (Miller and Hunter 2001). This decorative technique was adopted by the Staffordshire potters in 1783 where it moved from porcelain onto the newly popular refined earthenwares (Shaw 1829: 214).

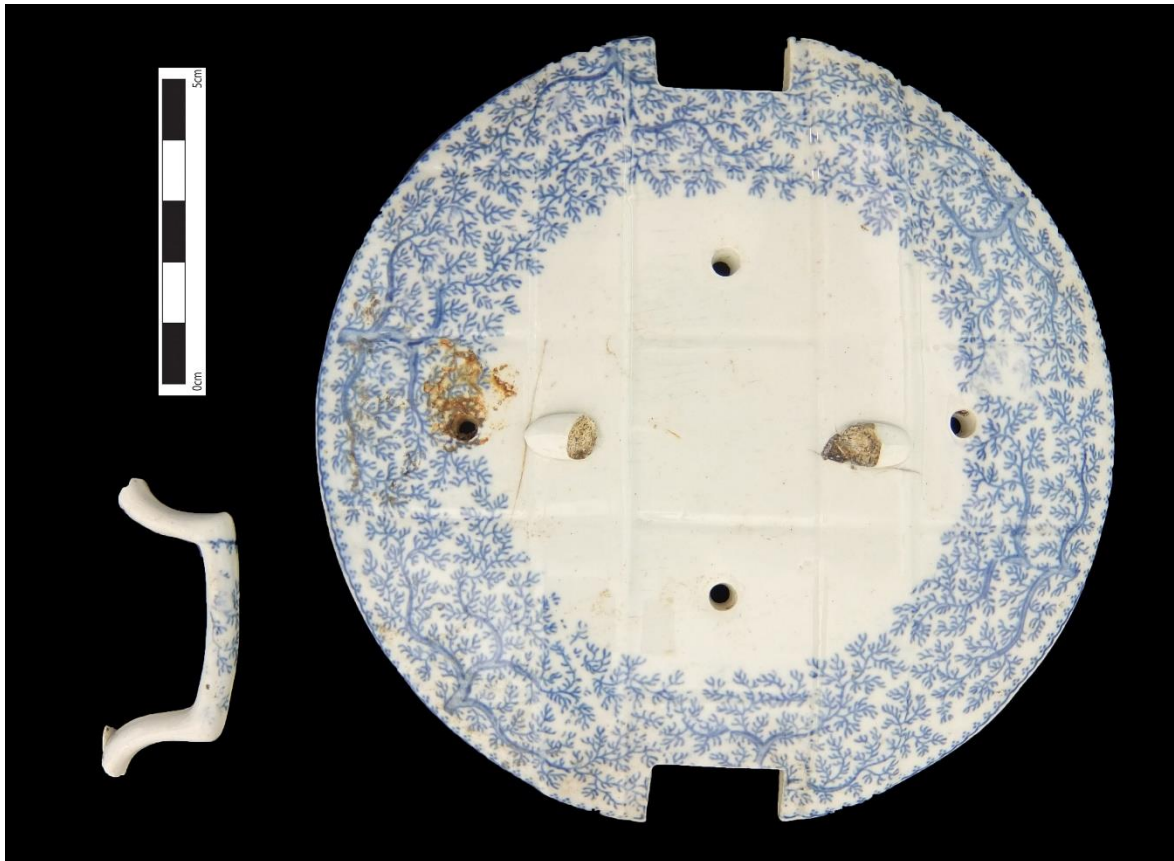


Figure 51. "Fibre" UGTP pudding mould lid from KJ13

The UGTP process begins with a copper plate etched or engraved with the desired pattern to which a coating of ink is applied. During the early decades of this method's production these designs were commonly copied from artworks or illustrated books and pottery companies would regularly imitate each other's patterns. This changed in

1842 when strict copyright laws came into effect and potteries had to either design their own patterns or purchase them from other manufacturers (Coysh and Henrywood 1982:11). Once the copper plate is coated in ink a sheet of tissue paper is laid upon it and used to transfer the print to the ceramic vessel. Although this technique was initially reserved for the most expensive wares, the demand for UGTP vessels rapidly expanded to include less wealthy customers and as a result the quality of the prints on the majority of the vessels deteriorated, with misalignments and other faults commonly observed (Erskine 2003: 9).

The ink colour, central designs and border motifs on UGTP vessels are proven to be extremely useful as chronological markers in archaeological contexts (for example Samford 1997; Woods 2011; Smith and Woods 2013; Maxwell, Woods and Robinson 2016) although a certain degree of caution must be taken with late nineteenth century sites as this decorative technique enjoyed a revival from the 1870s to the turn of the twentieth century (Majewski and O'Brien 1987: 145).

UGTP was by far the most common decorative technique observed on the VRC ceramic vessels, accounting for 47% of the total vessel count, and was present in all of the deposits which contained ceramic remains. Blue was the dominant colour of UGTP prints while purple, green, black and grey were also popular. Brown, red, flow blue and polychrome UGTP designs were also present but in significantly smaller amounts (Table 15). This technique was observed on the majority of vessel forms included in the VRC assemblage.

Table 15. UGTP colours by MNV

	Blue	Flow Blue	Black	Brown	Purple	Green	Grey	Red	Polychrome	Total
Plate	183	4	20	15	20	30	61	-	-	333
Table bowl	12	3	2	8	1	-	2	2	-	30
Ashette	14	1	2	-	1	4	2	-	-	24
Tureen	19	-	1	1	2	1	3	-	-	27
Jug	2	1	2	1	2	2	-	-	-	10
Eggcup	1	-	1	1	-	-	-	-	-	3
Mug	-	-	1	2	1	1	-	-	-	5
Cup	30	4	15	11	30	19	7	1	2	119
Saucer	28	2	10	11	25	25	9	-	1	111
Strainer	-	-	-	-	-	-	-	1	-	1
Bottle	-	-	1	-	-	-	-	-	1	2
Jar	-	-	1	-	1	-	-	-	1	3
Ewer	1	-	1	2	1	-	1	1	-	7
Basin	-	-	-	-	-	5	1	1	-	7
Chamberpot	3	-	-	1	-	2	-	-	-	6
Toothbrush holder	1	-	-	-	2	-	-	-	-	3
Cosmetics jar	-	-	8	-	-	-	-	-	3	11
Baby feeder	-	-	1	-	-	-	-	-	-	1
Unidentified	25	2	15	6	18	11	4	2	-	83
Total	319	17	81	59	104	100	90	8	8	787

Decal

Decals are a later printed decoration method than those mentioned above and only began to be mass-produced in the early twentieth century (Majewski and O'Brien 1987: 147). They are printed over the glaze and the details of the designs are much finer than those on transfer-printed vessels. Decals can be either monochrome or polychrome however the latter is far more common.



Figure 52. Decal decorated cup and saucer from F700

Five vessels with polychrome floral decal decoration were included in the VRC assemblage. Four came from the top spit of F700 in TS187. Three of the vessels (a side plate, cup and jug) were European porcelain while the other (an unidentified hollowware vessel) was whiteware. The other vessel (a Bone China sugar bowl) was found in F185 on TS192.

Painted

Painted decoration was applied by a person with a brush. Types of painted decoration are distinguished here by the point during the manufacture process which they were applied and the characteristics of the motifs such as colour and location on the vessel.

Hand Painted

Hand painted here refers to decoration applied under the glaze, by hand and with a brush. This method of applying decoration to ceramic vessels was made largely redundant by the advent of UGTP but continued to be manufactured on a relatively small scale throughout the nineteenth and twentieth centuries. Painted decoration can

be chronologically sensitive but most of this variation relates to pre-1830 (Samford and Miller 2015d) so is of little relevance for Whanganui.



Figure 53. Hand painted candleholder from F671

Twenty-two painted vessels were represented in the VRC assemblage. These were found in eleven features (32%) across TS187 (F700), TS189 (F125, 165), TS190 (F620, 671), TS191 (F375, 420) and TS192 (F185, 186, 374, 379). This style of decoration was present on a variety of ware types and vessel forms, as well as in a range of colours (Table 16). Whiteware and Bone China were the most common wares with nine and eight vessels respectively, but European porcelain (four vessels), Chinese porcelain (one) and tin-glazed earthenware (one) vessels also bore painted designs.

All of the Bone China and one whiteware cup were decorated with a pink band around the rim with a gilt gold border. This particular style seems to have been popular on tea and breakfast ware in Whanganui during the late 1880s through the 1890s and was regularly advertised for sale (for example *Whanganui Chronicle* 27/11/1891, page 3). The remainder of the painted vessels were decorated with what appear to be floral

motifs, with the exception of the Chinese porcelain jar which has Chinese characters on the body.

Table 16. Hand painted ceramic vessel colours by MNV

	Blue	Brown	Green	Orange	Red	Pink	Pink/gold	Polychrome	Total
Plate	-	-	-	-	-	-	1	1	2
Jug	-	-	-	-	1	-	-	-	1
Cup	-	-	-	-	1	-	5	-	6
Saucer	-	-	-	-	-	-	3	-	3
Jar	1	-	1	-	-	-	-	-	2
Candle holder	-	-	-	-	-	1	-	1	2
Decorative	-	-	-	1	-	-	-	-	1
Unidentified	1	1	-	1	-	-	-	2	5
Total	2	1	1	2	2	1	9	4	22

Enamelled



Figure 54. Enamelled cup from F374

Enamelled decoration is similar to painted decoration in that it is applied by hand using a brush but in this case it is applied over rather than under the glaze. This means that enamelled designs have the tendency to rub off when exposed to any sort of wear so this style is rarely found on vessels that were intended to be used regularly. This process also required an additional firing step once the decoration had been added, meaning that enamelled vessels cost more than their underglaze painted or printed counterparts (Samford and Miller 2015d).

Fragments from at least 34 enamelled vessels were recovered from sixteen features (47%) on TS187 (F700), TS189 (F125, 313), TS190 (F620, 656, 659, 710), TS191 (F420, 430, 448) and TS192 (F185, 186, 264, 334, 374, 379). Bone China was the most common enamelled body type (thirteen vessels), followed by European porcelain (nine vessels). Japanese porcelain and whiteware vessels were also found with this style of decoration but in smaller numbers (five and six vessels respectively). The majority of the enamelled vessels were decorated with multiple colours but some monochrome examples were recorded (Table 17). As is to be expected with a decoration style as fragile as enamelling, a significant proportion of the vessels have largely decorative uses. Interestingly, however, these vessels are outnumbered by functional vessels. Tea and/or breakfast ware items make up the largest group but two dinner-sized and one soup plate are also included. It is possible that some of the large enamelled plates were intended to sit on a shelf or mantelpiece rather than be used at the table but soup plates, with their deep profiles, do not lend themselves to display in the same way.

Table 17. Enamel colours by MNV

	Blue	Green	Polychrome	Total
Plate	-	2	5	7
Table bowl	1	1	-	2
Eggcup	-	-	2	2
Mug	-	-	2	2
Cup	-	1	7	8
Saucer	-	-	2	2
Cosmetics jar	-	-	1	1
Candle holder	-	1	-	1
Decorative	-	2	5	7
Unidentified	-	-	1	1
Total	1	7	25	33

Banded



Figure 55. Blue banded ashette from F374

Banded vessels have one or multiple coloured bands which run around the rim and sometimes the shoulder. In the New Zealand context this decoration style does not appear in sites until around 1860 (Woods 2011) and reached peak popularity, especially on commercial ceramics, for the last two decades of the nineteenth century (Miller 1991: 7). This style was the third most popular in the VRC ceramic assemblage, behind UGTP and gilt.

Banded ware was found in every deposit which contained ceramics on the VRC site. All but seven of the VRC banded vessels were whiteware. The remainder were Bone China (six vessels) or European porcelain (one). Cups and saucers were the most common vessel forms but banded decoration was also common on table and toilet ware vessels. The colour palette for this style was limited with the majority of vessels having blue, red or green bands.

Table 18. Banded ceramic vessel colours by MNV

	Blue	Green	Red	Orange	Polychrome	Total
Plate	10	1	5	-	-	16
Table bowl	-	1	1	-	-	2
Ashette	10	-	-	-	1	11
Tureen	-	-	2	-	-	2
Jug	1	-	-	-	-	1
Eggcup	1	-	-	-	-	1
Mug	-	-	1	-	-	1
Cup	20	12	13	-	-	45
Saucer	25	5	19	-	-	49
Ewer	-	1	-	-	-	1
Basin	-	1	-	-	-	1
Chamberpot	1	1	-	-	-	2
Toothbrush holder	-	1	1	-	1	3
Unidentified	-	2	1	1	-	4
Total	68	25	43	1	2	139

Gilt

Gilt is a particular type of enamelled decoration characterised by the use of gold (or gilt) paint. Vessels from the VRC site which have been catalogued as gilt decorated are those which bear no other forms of decoration, as gilt enamelling can be found on some painted, UGTP and moulded vessels. This method of decoration originated in Germany in the early eighteenth century and was initially limited to hard-paste porcelain vessels due to the cost of the process (Miller 1991: 10). In the 1830s improved methods of preparing and applying the gilt decoration made it more practical and encouraged potters to use it on cheaper wares (Hunt 1979: 124).

Gilt decoration was the second most common style among the VRC ceramics and was found in almost all of the ceramic-bearing deposits analysed. Almost 90% of the vessels decorated in this way were teaware and more than half were Bone China (Table 19). The only gilt designs recorded on the VRC ceramics were plain bands, a central Tea Leaf motif or a combination of the two. The Tea leaf design was produced almost exclusively as an export product by British potters as it was not popular among the domestic market but enjoyed huge popularity in the colonies and America after about 1850 (Godden 1988: 164).



Figure 56. Gilt Tea Leaf saucer from F700

Table 19. Gilt ceramic vessel ware types by MNV

	Whiteware	Bone China	European Porcelain	Total
Plate	3	12	-	15
Table bowl	2	3	-	5
Tureen	1	-	-	1
Jug	-	3	-	3
Eggcup	2	1	3	6
Mug	-	2	1	3
Cup	18	50	8	76
Saucer	24	39	13	76
Candle holder	-	-	1	1
Decorative	-	-	1	1
Unidentified	2	3	2	7
Total	52	113	29	194

Lustre

Lustre decoration consists of a highly reflective metallic coating painted over the glaze on part of or the whole vessel. The Staffordshire potteries began to mass-produce lustre wares at the end of the eighteenth century and continued until this decoration went out of fashion in the late nineteenth century, with the ware hitting peak popularity around the 1860s (Samford and Miller 2015b). The two most common lustre types are gold, which produces a pinky copper colour and platinum, which gives a silver coating (Brooks 2005: 40).



Figure 57. Gold lustre jug rim from F700

This style of decoration was found on two refined red earthenware and two whiteware vessels. One of the refined red earthenware vessels (a jug) was found in F700 (TS187) and has a band of gold lustre on the body while the other (a teapot) was found in F478 (TS192) and bears a platinum lustre coating. The whiteware vessels (a jug and saucer) were both found in TS192 with fragments found in F185, 379 and 478. Both have gold lustre painted onto the body in the ubiquitous Tea Leaf motif.

Slip

Slip decoration includes those styles which are applied as a watered down clay mixture onto the unfired ceramic vessel. They are easily identified by the raised areas of the body where the decoration has been applied. Two types of slip decoration were recorded in the VRC assemblage, each distinguished by the method used to apply the slip and the way in which it was manipulated.

Annular

Annular decoration consists of simple bands of coloured slip applied around the body of a vessel. This style was most commonly found on yellow and whiteware vessels, especially hollowware, and was one of the cheapest decorated wares available in the nineteenth century (Miller 1991). It was first produced in the late eighteenth century and continues to be made today with very little variation in appearance since its introduction (Brooks 2005: 72).



Figure 58. Annular jug base from F313

Four annular vessels were recovered from the VRC site: a yellowware jug, a whiteware jug, refined red earthenware teapot and an unidentified whiteware vessel. The teapot and whiteware jug both have a thick blue band around the centre and were found in F700 (TS187) and F313 (TS189) respectively. The yellowware jug is decorated in shades of brown and black and was found in two features on TS191 (F478 and F493), while the unidentified whiteware vessel has white, blue and black bands and was found on TS192 (F334).

Mocha

Mocha is the term used to describe a fern-like motif found on some slip decorated vessels. This design, which was intended to resemble the semi-precious gemstone agate (Priddy 2004: 171), was achieved by applying an acidic solution (known as “mocha tea”) to the unfired vessel which would then react with the wet slip and branch out (Samford and Miller 2015a). As with other industrial slip techniques, mocha first appeared in the 1790s and is still made in the present. The peak popularity period for this style was ca.1790 to the 1830s (Brooks 2005: 40).



Figure 59. Mocha yellowware jug fragment from F165

A single fragment from a mocha decorated yellowware jug was recovered from F165 on TS189.

Moulded

Vessels were decorated in this way by placing them into a shaped mould which resulted in a design being left on the body in relief. Different types of moulded decoration were distinguished by the portion of the vessel on which the decoration was present.

Body Moulded

Those ceramic vessels described as simply having “moulded” decoration here refers to those with this type of decoration over the whole body as opposed to small areas. This style can be found on a wide variety of body types but is generally limited to hollow vessels (Table 20).

Forty-five moulded vessels were represented in the VRC assemblage and fragments decorated in this style were recovered from 25 features (74%) across all of the town sections.



Figure 60. Jug with fern motifs moulded on the body from F386

Table 20. Body moulded ceramic vessel ware types by MNV

	Coarse red earthenware	Whiteware	Yellowware	Buff-bodied earthenware	Refined-red earthenware	Dyed-body	Bone China	European porcelain	Slip-glazed stoneware	Bristol-glazed stoneware	Total
Plate	-	-	-	-	-	1	-	-	-	-	1
Jug	-	3	-	2	-	2	1	-	-	-	8
Cup	-	1	-	-	-	-	2	1	-	-	4
Saucer	-	1	-	-	-	-	3	1	-	-	5
Teapot	-	1	-	-	1	-	-	-	-	-	2
Milk pan	1	-	-	-	-	-	-	-	-	-	1
Kitchen bowl	-	-	6	-	-	-	-	-	-	-	6
Bottle	-	-	-	-	-	-	-	-	-	1	1
Water filter	-	-	-	-	-	-	-	-	1	-	1
Decorative	-	-	-	-	-	-	-	7	-	-	7
Unidentified	-	6	-	-	-	1	1	1	-	-	9
Total	1	12	6	2	1	4	7	10	1	1	45

Edge-moulded

Edge-moulded vessels are those with moulded decoration which is limited to the edge portion. This type of decoration is limited to nine plates and one ashette and was only recorded on whiteware vessels in the VRC assemblage. Most of these vessels display a relatively high degree of vitrification of the body, suggesting they were manufactured in the late nineteenth century. Edge-moulded vessels were only recovered from F700 in TS187, F125 and F313 in TS189, F656 and 657 in TS190, F420 in TS191 and F264 in TS192.



Figure 61. Edge-moulded plates from F700

Shell-edged

Shell-edge is a particular type of edge-moulding which is commonly found in early colonial New Zealand sites (Woods 2011: 62). It first emerged in the late-eighteenth century to meet demand for Rococo inspired pieces as this aesthetic movement took off among the general public (Brighton and Levon White 2006: 119). More precise manufacture dates can be discerned from shell-edged vessels depending on whether the rims are scalloped or unscalloped and the characteristics of the lines around the edge (they can be straight, curved or have small “buds” at intervals).

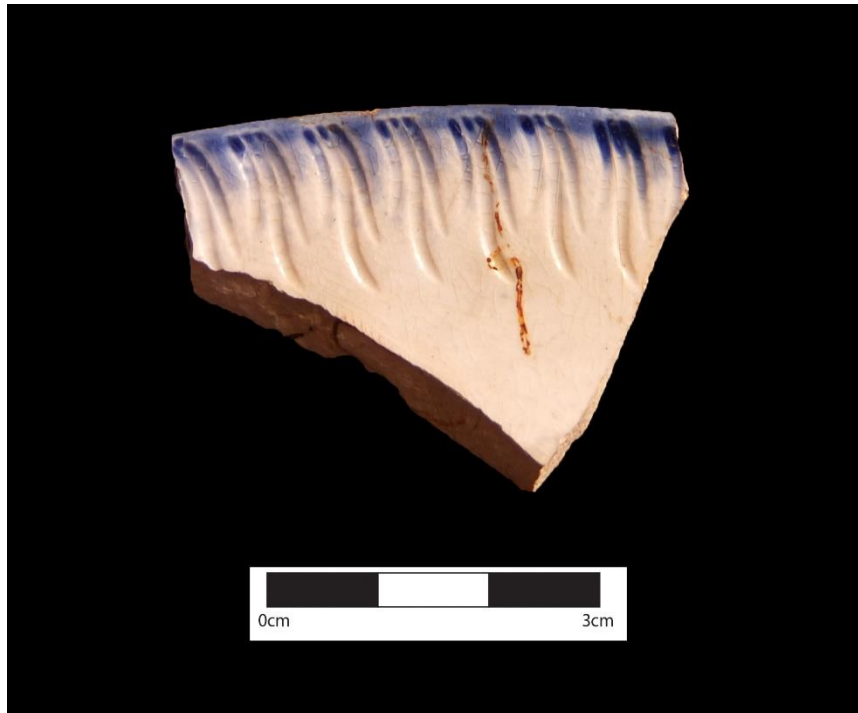


Figure 62. Shell-edged plate rim from F435

Rim fragments from two shell-edged whiteware (or possibly Pearlware) plates were recovered from F313 in TS189 and F435 in TS191. Both plates had blue unscalloped rims but the F313 vessel had impressed straight lines while the F435 plate had impressed curved lines.

Sprigged

Sprigged decoration refers to small, usually floral, moulded motifs. This method was almost exclusively on Bone China but can also be found on whiteware (Brooks 2005: 42). Sprigged teaware seems to have enjoyed a steady popularity throughout the mid to late-nineteenth century as they are commonly found in New Zealand archaeological deposits dating to this period.



Figure 63. "Imitation Jasper" sprigged saucer from F385

Fifty sprigged vessels were present in the VRC assemblage from 21 features (62%) across all town sections. Most were Bone China but there were also whiteware examples, and vessel forms were restricted to teaware (Table 21). Two types of sprig were observed on the VRC examples. Imitation Jasper was by far the most common, accounting for 92% of the sprigged vessels. This pattern consists of grape and vine leaf sprigs. The other pattern, Chelsea Sprig, was only found on four vessels and consists of daisy-like flowers.

Table 21. Sprigged ceramic vessel ware types by MNV

	Whiteware	Bone China	Total
Side plate	-	4	4
Table bowl	-	2	2
Eggcup	-	4	4
Jug	-	1	1
Cup	5	13	18
Saucer	6	14	20
Unidentified	-	2	2
Total	11	39	50

Other

Two types of decoration identified on ceramic vessels from the VRC site do not fit under any of the above headings: Rockingham and incised.

Rockingham

Rockingham decoration is characterised by a mottled brown manganese glaze over a (often moulded) buff earthenware body and originated in the Rockingham factory of the Swinton pottery company in the early nineteenth century. This ware was cheap and readily available, being produced by many small local potteries (Charleston 1968: 286). Teapots were the most common vessels produced in the Rockingham style.



Figure 64. Rockingham teapot spout and lid from F420

Fragments from at least fourteen Rockingham teapots were collected during the VRC excavations from thirteen features (38%) (Table 22). Most had some form of moulded decoration, either in the form of a scene with people or a pattern which mimics bamboo. The relative coarseness of this ware type makes refitting vessels difficult so it is hard to discern whether fragments from different features come from a single vessel.

Consequently, other ware types were used to determine which of the features and deposits were related before the Rockingham MNVs were calculated. Rockingham teapots were found in all Town Sections except TS190, and all but two features contained single examples. F313 and F420 contained two and four vessels respectively, but these were some of the largest features and both contained numerous matching ceramic sets in various sizes, suggesting that the associated households potentially did a lot of entertaining which may have required multiple teapots.

Table 22. Rockingham decorated ceramic vessels by context

Town Section	Context	Vessel Form (portion)	MNV
TS187	F700	Teapot (lid, rim)	1
TS189	F313 spit 2-5	Teapots (handles, body)	2
TS191	F375	Teapot (handle)	1
TS191	F420	Teapots (spouts, lids, handles, base)	4
TS191	F495	Teapot (spout, handle)	1
TS191	F510	Teapot (handle)	1
TS191	F516	Teapot (lid)	1
TS192	F185	Teapot (base, body)	1
TS192	F186	Teapot (spout, body)	1
TS192	F264	Teapot (lid, base)	1
TS192	F326 spit 2	Teapot (base)	1
TS192	F334	Teapot (body)	1
TS192	F372	Teapot (spout)	1
TS192	F379 spit 1	Teapot (rim, handle, body)	1
Total			17

Incised

The only other type of decoration recorded among the VRC ceramics was incised. This style of decoration is achieved by using a sharp implement to cut designs into the unfired vessel and is very uncommon in mass-produced ceramics as it is usually done by hand. Five fragments from an unidentified vessels had a similar crude incised pattern on the body. Four of these sherds were found in F334 and one in F374 (both in TS192).



Figure 65. Incised hollow vessel from F334

VRC Glass Vessels

The VRC glass vessel analysis focused on answering three main questions: what the vessels originally held, how they were made (and by who) and to when they date. The answers to these allow for higher levels of interpretation, including chronology of features and deposits, differences or patterns in consumption and activities occurring across the site. Addressing the first question required a functional approach, something which is often treated with caution in historical bottle analysis due to a variety of problems (eg. Middleton 2005; Petchey 2013). The first issue is that there are some bottle shapes that are not associated with any specific contents, and so are usually placed in a vague “unidentified” category and all but forgotten about. For other bottle shapes we are faced with the opposite problem: many common bottles have “folk” names derived from particular contents, such as black and ring-seal beers, despite these types being known to have contained a wide variety of substances. Mention these names and most people familiar with nineteenth century bottles will immediately know exactly what shape is meant but the risk is that, particularly to the inexperienced reader, these will be automatically classified as alcohol bottles due to the name.

There are many bottle types, however, that *can* be relatively confidently placed into functional categories based on their original contents. Firstly, many bottles had the product, brand or retailer embossed on the body, allowing easy identification. Some products or substances required specific body and/or top shapes to facilitate efficient storage and dispensing (Tasker 1989: 28). Most soda bottles, for example, have very particular forms relating to their closures to ensure the contents remain carbonated. For others, such as pharmaceuticals or poison, it was beneficial to place them in distinctive bottle shapes that reduce the risk of them being mistaken for something else.

The Victorian period was also the beginning of an era characterised by mass-consumption by all classes, and this changed the way manufacturers, retailers and customers approached the shopping experience. For the first time even the poorest people had choices when it came to most products, and this was also the case in colonial settings like New Zealand. Competition presented a challenge for manufacturers and retailers to get their product to stand out and be instantly recognisable, and the easiest way of doing this was to put it in a distinctively shaped container. For some products the container itself became as recognisable as the product. This often resulted in other, lesser known brands imitating the bottle form in an attempt to attract customers, and abandoning other bottle styles. This was particularly noticeable for products such as Worcestershire sauce.

Another potential problem with functional bottle analysis is the commonplace nineteenth century practice of bottle re-use. New Zealand did not have a glass bottle manufacturing industry until the 1920s so prior to that date all bottles had to be imported. This added to the cost of producing bottled goods and led to many manufacturers providing small refunds for returned empty bottles for refilling, or using any bottles they could find for their products. Re-use was also done in the home where preserves, sauces and home-made beverages were stored in any suitable bottle, often regardless of its original contents. This must be kept in mind as there is always a chance that a bottle only contained its original contents for a short part of its use-life. While this cannot be ignored it is also impossible in most cases to tell what a bottle could have been refilled with unless the replacement contents are present at discovery. Only one of the VRC bottles (a perfume bottle which contained blue ink) showed

definitive evidence of being re-used for something other than its initial purpose. In addition, it is probable that most bottles were purchased for the original contents. For research purposes the initial consumer choice is just as important as the act of post purchase re-use, as they provide evidence of different processes: the first tells us what people were buying and therefore consuming, and the second what they were using bottles for.








How the bottles were made was also a focus of the VRC analysis and was primarily used to help infer chronology. Manufacture methods and marks can provide precise chronological information which is invaluable for dating deposits by association, especially given a glass vessel's relatively short life span. Although analysis of manufacture methods was performed independently of the functional analysis, the production ranges of the specific products identified during the functional categorisation can be used to refine date ranges for individual vessels.

Bill Lindsey's (2015) *Historical Glass Bottle Identification and Information Website* was heavily relied upon for many aspects of the glass vessel analysis, including manufacture methods, chronological markers and assigning bottles to functional categories. This site, run in conjunction with the Society for Historical Archaeology, is an established and comprehensive resource for historical archaeologists. As well as being regularly updated and expanded it references other important sources which are not widely available.

Functional Types

The VRC bottles were organised into seven functional categories (Table 23), each of which is described below along with the relevant interpretive considerations.





Table 23. VRC glass vessel functional categories by MNV

Functional Type	MNV	
Generic	335	
Food	114	
Beverages	210	
Pharmaceutical	118	
Household	22	
Tableware	57	
Unidentified	110	
Total	966	

Generic

Glass vessel forms which could have held a variety of goods were categorised as “generic.” This included the most problematic bottle types in terms of assigning function due to their high levels of availability and prevalence of re-use both in commercial and household settings. Just under 35% of the VRC glass vessel assemblage comes under this heading, which is a significant proportion. Despite this, more than half of the vessels could be assigned a more specific functional category. It is also worth noting that most of the vessels placed under the generic heading almost certainly did contain beverages, at least initially, it is just that recorded instances of them being re-used are too common to ignore.

Table 24. Generic glass vessel forms by MNV

Bottle Type	MNV	
Round cross-section dark olive	166	
Bordeaux	60	
Ring-seal	109	
Jar	4	
Total	339	

Round Cross-Section Dark Olive Glass Bottles

Round cross-sectioned dark olive (commonly referred to as black glass) glass bottles (including Black beers, black porters, black stouts, squat black beers and export black beers) are commonly categorised as alcoholic beverage bottles but here have been placed under the generic bottle heading. These bottles dominated the glass bottle market from the eighteenth to the mid-nineteenth century and have been found to have contained a wide variety of non-alcoholic products including soft beverages (Jones 2010: 125), syrups, and even spices (McDougall 1990: 59). Bottle manufacturers and retailers only began referring to these as “beer” bottles several decades after the shapes came into widespread use, prior to this they were known as “commons” (Jones 2010: 98).

Table 25. Round cross-section dark olive glass bottle shapes by MNV

Round X-section Dark Olive Shape	MNV
Stout	3
Export	16
Small squat	11
Large squat	25
Unidentified	111
Total	166

Examples of four slightly more specific types were recorded (stout, export, small squat and large squat), although this was only possible for a quarter of the round cross-section olive glass bottles (Table 25; Figure 66). These face the same issue as the generic black beers, with the names being attached to the bottles *after* they became associated with a particular product. Their ubiquitous nature and wide variety of contents, however, mean these colloquial terms are of limited interpretive value and all the round cross-sectioned olive glass bottles have been categorised together.



Figure 66. Round cross-section dark olive glass bottle shapes identified from VRC assemblage. From left to right: stout, export, small and large squat

The fact that these bottles were the most common glass vessel before ca. 1880 in conjunction with their robustness made them prime candidates for re-use both in domestic and commercial settings (Tasker 1989: 36).

One hundred and sixty-six round cross-sectioned dark olive bottles were found in 20 features on the VRC site (59%). This includes F700 in TS187, F313 in TS189, F620, 656, 657 and 659 in TS190, F414, 420, 430, 435, 495, 515, 516 and 550 in TS191 and F185, 264, 326, 334, 373 and 374 in TS192.

Bordeaux

Bordeaux bottles have round body cross-sections, straight sides and neck, usually have a ring-seal finish and almost always have a mamelon (Figure 67). They are easily recognisable due to being almost identical to modern mass-produced wine bottles. This shape of bottle was most often used for wine but sometimes for other products such as olive oil (hence its classification as generic) and was in widespread production by the mid-nineteenth century (Lindsey 2015). The Bordeaux shape has undergone minimal change so it is not overly useful as a chronological marker, especially for the period covered by this research.

Sixty Bordeaux shaped bottles, in various shades of green, were found in thirteen features (38%) on TS87 (F700), TS189 (F121, 313), TS190 (F656, 657), TS191 (F420, 430, 515, 550) and TS192 (F185, 326, 334, 374).

Ring-seal

Ring-seal beer (sometimes called champagne) bottles are found on most late nineteenth century New Zealand archaeological sites. These bottles, which would replace the omnipresent black beers by about 1880, were also used to hold a variety of products other than beer (Petchey 2013) so have been classified here as generic. These bottles are immediately recognisable by their pronounced mamelon base, sloping shoulders and “string rim” finish (Figure 67). This finish, consisting of a single rectangular band of glass applied slightly below the rim, is designed so that the cork can be secured with thin wire to hold in the pressure of effervescent contents (Tasker 1989: 32).

In total 105 ring seal beers were found at the VRC site and were present in 53% of the features analysed. In TS187 they were found in F700, in TS189 F121 and 125, in TS190 F656, 657 and 659, in TS191 in F375, 420, 430, 448, 495 and 510, and in TS192 F185, 334, 373, 374, 385 and 497. All were dark green glass with the exception of three dark olive and one light olive example.



Figure 67. Examples of Bordeaux (left) and ring-seal (right) bottles

Jars










Unembossed jars, of which there were only four glass examples recorded among the VRC assemblage, have also been categorised as generic. This is due to the fact that, without surviving labels or residues of the contents, it is not possible to tell whether the jar held a food, cosmetic, household or medicinal product. Glass jars could also have been purchased empty for a variety of home uses.

Three of the VRC glass jars were found in TS192 (F373 and 379) and the other in TS189 (F121).

Food

Many types of condiments and preserves (both commercial and homemade) were kept in glass containers. Some of these, such as salad oil bottles, were deliberately designed for display during meal times while others which held ingredients for cooking were much plainer.

Table 26. Food vessel forms by MNV

Bottle Type	MNV	
Club Sauce	40	
Salad Oil	28	
Ketchup	4	
Tomato Sauce	1	
?Sauce	4	
Vinegar	4	
Wide-mouth	26	
Square-sectioned	6	
Barrel	1	
Total	114	

Club Sauce

Club sauce bottles get their name from their distinctive finish (Figure 68). This style was first used by Lea & Perrins for their hugely successful Worcestershire Sauce but was soon being copied by multiple other English sauce manufacturers. These bottles, particularly Lea & Perrins marked examples, are some of the most commonly found glass vessels in nineteenth and early twentieth century deposits (Tasker 1989: 88). The first recorded mention of club sauce (in this case Lea & Perrins) bottles in New Zealand is from the early 1850s (*The New Zealander* 26/7/1851, page 1) and this style enjoyed a steady popularity right through to the twentieth century.

Club sauce bottles were recovered from fifteen of the VRC features on TS187 (F700), TS189 (F121, 125), TS190 (F656, 657, 659), TS191 (F375, 414, 420, 510) and TS192 (F334, 373, 374, 385, 497). Of the 40 bottles collected thirty were able to be attributed to English sauce manufacturers on the basis of body embossing. As is to be expected,

Lea & Perrins bottles were the most common (fourteen) but five other manufacturers were also present. Six Hogarth & Co bottles, four R. Miller & Co, two Holbrook & Co, two Goodall Backhouse & Co, one Mellor & Co and one George Whybrow were identified. Goodall Backhouse & Co and Holbrook & Co both called their product Yorkshire Relish in an obvious attempt to attract customers who already enjoyed Worcestershire sauce while the others seem to have banked on the identical vessel form to appeal to shoppers.

Salad Oil

Salad oil bottles were intended to be placed on the table during meal times and so were often decoratively moulded. Three styles of salad oil bottle were found at the VRC site: cathedral (25 examples), whirly (two) and vertically ribbed (one). Cathedral style salad oils (Figure 68) are incredibly common in nineteenth century deposits around New Zealand (eg. Woods 2013: 105) but the other two types are found less often. All three of these styles of salad oil bottle were common from about the 1840s until the early twentieth century (Lindsey 2015).

Salad oil bottles were recovered from twelve features on TS189 (F125), TS190 (F656), TS191 (F420, 430, 495, 510, 516, 550) and TS192 (F185, 326, 374, 379). All were light or aqua green in colour and one was also embossed with the name of a London based sauce and pickle manufacturer (Edward Pink & Sons) established in the late 1880s (Behm 2010).

Other Condiments

Worcestershire sauce and salad oil were not the only condiments available to the Victorians. Some products still popular today, such as ketchup and tomato sauce, have their origins in the nineteenth century and many came in distinctive bottle shapes designed to catch the eye of the customer and allow them to quickly identify the products they wanted.

Thirteen of these condiment bottles were found across the VRC site on TS187 (F700), TS189 (F121, 125, 313), TS190 (F657), TS191 (F420, 495) and TS192 (F373, 374, 497). Ketchup bottles were the most common (five bottles), followed by vinegars (four), unknown sauces (three) and tomato sauce (one). Three brands were identified through body embossing: H. Olson, an Auckland tomato sauce manufacturer (Figure

68), Champion's vinegar (Figure 69) and Burnett & Co, a Boston flavour extract and condiment company. Each of these were represented by a single vessel.



Figure 68. Examples of food bottles from the VRC site: (left to right) Lea & Perrins' Worcestershire sauce, cathedral style salad oil, Holson's tomato sauce and an unidentified sauce bottle with paper label

Wide-mouth bottles

Round cross-sectioned bottles with wide mouths (Figure 69) are another common food related glass vessel type. These bottles are rarely embossed so it is usually impossible to identify exactly what they held but their wide openings imply that the contents were thicker than the sauces kept in some of the other condiment bottles. This style of bottle would also have been easier to clean and re-fill with preserves and sauces made at home than the narrower necked varieties.

At least twenty-six wide-mouth bottles were represented in the VRC glass assemblage in a range of green and sometimes blue shades. Fragments from these bottles were found in eleven features on TS187 (F700), TS189 (F313), TS190 (F656, 659), TS191 (F420, 495, 510, 516) and TS192 (F334, 373, 379).



Figure 69. More examples of food bottles from the VRC site: (left to right) Champion's vinegar, wide-mouthed, square-sectioned and barrel (top)

Case Gins

Case gin bottles are some of the easiest historical bottles found in New Zealand to identify due to their dark green or olive colour and square, tapered bodies. This style has been made since the seventeenth century and has almost always held spirits or wine, most commonly gin (Lindsey 2015). Case gin bottles made prior to around 1880 were made in dip moulds and have four pointed heels (Figure 70) while later examples were usually made in shingle moulds which leave vertical striations on the body of the bottle and a more regular, flat heel (Figure 71).



Figure 70. An example of a dip-moulded case gin bottle with a tapered-up finish



Figure 71. Shingle mould case gin bases with embossed bases

Case Gin bottles were found in 50% of the VRC features. These bottles were recovered from TS187 (F700), TS190 (F656, 657, 659), TS191 (F414, 420, 430, 435, 478, 495,

in F516 on TS191 and two on TS192 in F497 and F379. These flasks have oval cross-sectioned bodies which taper towards the base and are intended to fit into pockets. The spirit shaped bottles have round cross-sections, straight sides and bulging necks and are similar to modern whisky bottles. The examples included in this category are all aqua, dark or light green while dark olive bottles in this shape were categorised with the generic round cross-section black bottles due to the difficulty in distinguishing bases of the spirit variety from the smaller beer styles. Spirit bottles were found on TS187 (F700), TS189 (F121, 313), TS190 (F620), TS191 (F420, 478, 510) and TS192 (F185, 264, 373).

Coffee and Chicory Bottles

Coffee and chicory (also known as camp coffee) was one of the first types of instant coffee drinks. It usually came in square cross-sectioned bottles with the brand name embossed on the body (Figure 73). Three such bottles were recovered from the TS190: one Symington & Co example from F657 and two unidentified brand bottles with partial body embossing (“...TH’S/ ... & LONDON/COFFEE/ ...ORY”) from F659.



Figure 73. A Robert Evans torpedo and Symington & Co coffee and chicory bottle from the VRC site

Torpedo Bottles

Torpedo, or Hamilton, bottles (Figure 73) were the first mass-produced glass containers specifically designed to hold aerated beverages. The shape was introduced by William Hamilton in 1809 but did not come into widespread use until the 1840s, and remained popular until the late nineteenth century (Munsey 2010: 2). Its egg-shaped body means that it has to be transported and stored on its side which keeps the cork wet and the seal tight.

Eighteen torpedo bottles were recovered from TS187 (F700), TS189 (F313), TS191 (F414, 493, 510) and TS192 (F326, 334, 373, 374). Five were embossed but of these only three were complete enough to allow them to be attributed to a retailer. Two could be traced to Edward Dixon, a Wellington based cordial and aerated water manufacturer who operated from the 1860s to the 1880s and the other to George Gower who ran a soda and lemonade company in Whanganui from 1865 to 1879 (Luff 2008: 9). Six other torpedo bottles had unusual etched marks on the body. Five had an etched capital “E,” both with and without serifs, and another had “Xg.” Similarly etched bottles have been recorded in Whanganui (Campbell, Gumbley, and Hudson 2009) but have never been officially attributed to manufacturers. A review of contemporary newspapers, however, presents two likely parties. The “E” bottles are probably the work of Robert Evans who had one of the first soda factories in Whanganui. He opened for business around 1864 and sold his lemonade, soda water and cordial factory to William Scown in 1874 (*Wanganui Chronicle* 1/12/1876, page 2). From at least 1870 he was joined in business by George Gower (*Wanganui Herald* 9/3/1870, page 2). Torpedo bottles with a capital “G” etched onto the body have been found and are attributed to Gower (Luff 2008, 9) so it seems likely that the “Xg” example from this site would be his doing as well.

Patent Soda Bottles

Six patent soda bottle styles were identified amongst the VRC glass vessel assemblage: Matthew’s, Lamont, Hogben’s, Hutchinson’s, Breffit and Codd (Figure 74). The increase in popularity of soft aerated drinks as the nineteenth century progressed created a demand for improved bottle forms which would remain sealed but be easier to transport and store than torpedo bottles. Most involved an internal stopper made of

various materials including wood, rubber, metal or glass. Because of the distinctive shapes (which are often accompanied by the inventor's name embossed on the side) and the fact that most new soda bottle designs were registered and closely guarded, patent aerated water bottles are able to provide precise chronological information (Table 29). This is further aided by the fact that most of these designs were adopted and then abandoned incredibly quickly, allowing these date ranges to be relatively confidently relied upon.



Figure 74. Examples of patent soda bottles from the VRC site: (left to right) Matthew's, Hogben's, Codd, Lamont, Breffit and Hutchinson's

Table 28. Patent soda bottle date ranges

Patent	Date Range	Reference
Matthew's	1860s-late 1880s	Lindsey 2015
Hogben's	1868-1880s	Fisher 2004: 205
Codd	1872-1930s	Munsey 2010: 4,17
Lamont	1874-1900s	Colonial Bottle & Collectors Club, WA 2016
Breffit	ca.1870s-ca. 1900	Lockhart et al. 2013: 232
Hutchinson's	1880-1910s	Fowler 2015

The earliest styles such as the Matthew's patent (sometimes known as gravitating stopper sodas) incorporated long, cylindrical wooden pegs with rubber seals which were pushed into the bottle to open it, with this basic concept being refined in subsequent designs (Hogben's, Lamont and Breffit). This style of closure was all but

eclipsed by the introduction of the Codd bottle with its immediately recognisable marble stopper and pinched neck. Another deviation from the gravitational stopper came in the form of the Hutchinson's patent bottle which had a simple metal and rubber spring mechanism in the neck. While the Hutchinson's patent took off in North America (Lindsey 2015), it appears to have been far less popular than the Codd style in New Zealand.

Codds were the most common style of patent soda at the VRC site with nine bottles being found in four features on TS190 (F657), TS191 (F510) and TS192 (F185). Breffit (F420 and 510 in TS191 and F185 and 374 in TS192) and Lamont patents (F659 in TS190, F510 in TS191 and F374 in TS192) were the only other styles represented by multiple examples while single Matthew's (F430), Hogben's (F510) and Hutchinson's (F430) were also found.

Patent soda bottles often have the retailer's name and brand embossed on the body as well as the manufacturer, allowing for them to be traced to the place they were filled and giving clues as to what they would have contained. Two aerated beverage companies were identified on the VRC patent soda bottles. Edwin Hodren, a Whanganui soda manufacturer who operated from the early 1880s until the end of the nineteenth century, used a variety of patent bottles. For his first decade of operation he used Lamont and Breffit patents before shifting to Codds for most of the 1890s (Luff 2008: 12). Four Hodren Codds, two Lamonts and two Breffits were included in the VRC assemblage. The other manufacturer represented was Lane & Co on a single Lamont patent bottle. Lane & Co were a Dunedin company who used this name from 1876 to the mid-twentieth century but would have stopped using Lamont patents well before the end of the nineteenth century (Robson 1995).

Other Soda Bottles







Examples of generic soda shaped bottles (similar to those in use today) were also recorded. The two which had tops had blob finishes and it can be safely assumed that the other two (which were dip moulded) would have had the same as this was the most common non-patent soda finish style during the second half of the nineteenth century and dip moulds were out of use before the new crown finishes came into widespread

use in the early twentieth century (Tasker 1989: 35). Soda bottles of this style were found in four features: F420 and 510 on TS191 and F185 and 497 on TS192.

Pharmaceutical

Aside from being refilled with prescriptions by chemists, it is unlikely that pharmaceutical bottles would have been re-used very often. Their often small-size and the relatively slow rate of use for most of their contents made them poor choices for use in home preserving or other kitchen uses and the fact that many were embossed with specific brand names made them difficult for manufacturer's or retailers to re-use. The bottle shapes which most pharmaceutical products came in during the nineteenth century was also limited (Table 30; Figure 75), making these some of the easiest glass vessels to place into a functional category.

Table 29. Pharmaceutical vessel forms by MNV

Bottle Type	MNV	
Cylindrical Pill	26	
Rectangular bevelled	38	
Rectangular panelled	14	
Oval cross-sectioned	30	
Herbal Tonics	9	
Other	1	
Total	118	

Cylindrical Pill Bottles

Small cylindrical bottles with wide openings relative to their body diameter commonly held pills but also some liquid pharmaceuticals. At least 26 cylindrical pill bottles were represented in the VRC assemblage, found on TS187 (F700), TS189 (F121, 125), TS190 (F620, 565), TS191 (F420, 495, 510) and TS192 (F373, 374, 379, 497). Bottle heights ranged from 78mm to 133mm and colours from aqua green and blue to colourless.

Three specific products were able to be identified through body embossing. At least three Mrs Winslow's Soothing Syrup bottles were recovered from F121, 125 and 373 and one Atkinson & Barker Royal Infants Preservative container was found in F497. Both these products were marketed at mothers for soothing wind, teething pains and other infant ailments and were both known to contain laudanum and high

concentrations of alcohol. Mrs Winslow's Soothing Syrup was produced from 1849 to the 1930s while Atkinson & Barker's Preservative was made as early as the 1790s until the 1880s. The other product identified on cylindrical pill bottles was St Jakob's Oel, two of which were found in F510. St Jakob's Oel (or St Jacob's Oil) was a German topical pain killer first produced in 1878 and made up until the 1940s.



Figure 75. Examples of pharmaceutical bottles from the VRC site: (left to right): cylindrical pill, rectangular bevelled, rectangular panelled (Davis' Vegetable Pain Killer) and oval cross-sectioned

Rectangular Bevelled Bottles

Rectangular cross-sectioned bottles with bevelled edges were the most common pharmaceutical shape in the VRC assemblage. Examples were found in twelve features (35%) on TS187 (F700), TS189 (F313), TS190 (F620, 657, 659), TS191 (F420, 510, 516) and TS192 (F373, 374, 379 and 497). Height for these bottles ranged from 74mm to 162mm.

Body embossing was able to identify two products and one retailer for the rectangular bevelled bottles. Six vessels once contained unknown pharmaceutical products sold by local Whanganui chemist H. B. Williamson who operated from 1876 to 1903 (Luff

2008: 43). Three bottles held Bonnington's Irish Moss, a herbal concoction for cough relief manufactured in Christchurch from 1872 and still in production today and another rectangular bevelled bottle held Professor Scott's King of Pain, another New Zealand product manufactured for a very short period at the end of the 1870s.

Rectangular Panelled Bottles

Other rectangular cross-sectioned pharmaceutical bottles found at the VRC site did not have bevelled edges but did have sunken panels covering all or part of each face. These were less common than the bevelled type with only fifteen being recorded. Portions of these bottles were found on Ts189 (F121), TS191 (F420, 510) and TS192 (F185, 264, 334, 373, 374, 497). Heights ranged from 99mm to 192mm.

Two pharmaceutical products were identified through body embossing on rectangular panelled bottles. At least nine Davis Vegetable Pain Killer containers were represented. This product was intended for both external and internal use and by the end of the nineteenth century was described as "one of the best known and most popular preparations in New Zealand (*Wanganui Chronicle* 18/9/1898, page 3). It was first produced in America in the 1840s and was still being advertised in New Zealand as late as the 1930s (*New Zealand Herald* 17/5/1937, page 12). The other product identified was Scott's Emulsion, a mixture of cod liver oil, lime and soda. This popular digestive aid was first produced in New York in 1876.

Oval Cross-sectioned Bottles

Pharmaceutical bottles with oval cross-sectioned bodies were another common shape in the VRC glass assemblage. Examples were found on TS187 (F700), TS190 (F657, 659), TS191 (F430, 448, 495, 510, 515, 550) and TS192 (F326, 334, 373, 497). Heights ranged from 110mm to 190mm.

Two products and one retailer were identified on oval cross-sectioned bottles. Kruse's Fluid Magnesia and Sir J Murray's Patent Re-Carbonated Fluid Magnesia were represented by one vessel each. Kruse's was an Australian antacid first produced in 1863 while Sir J Murray's product was developed in Northern Ireland in the early nineteenth century and distributed at least until Sir James Murray died in 1871. A local chemist's name was also embossed on one of the oval cross-sectioned bottles.

Wakefield & Hogg were in business on Victoria Avenue from 1877 to 1883 (Luff 2008: 42).

Herbal Tonics

Herbal tonics were some of the most popular nineteenth century pharmaceutical products, especially schnapps, bitters and sarsaparilla. These tonics were lauded as cures for a wide variety of ailments but their popularity probably also had a lot to do with their high alcohol content. The most common bottle forms for these products were square cross-sectioned, straight sided bottles, often with embossed brand names and/or decoration.

Schnapps was the most common herbal tonic found at the site, with at least six bottles being represented from TS187 (F700), TS189 (F121) and TS191 (F420, 478, 495, 516). Only one of these, however, had body embossing visible, allowing it to be identified as an Udolpho Wolfe's Aromatic Schnapps container. This brand of Schnapps was popular in New Zealand for most of the latter half of the nineteenth century and these bottles are commonly found on archaeological sites dating to this time. An emerald green square cross-sectioned bottle was found in F495 on TS191 and held Dr Townsend's Sarsaparilla. Dr Townsend's was one of the most popular pharmaceutical sarsaparilla brands and was produced on the east coast of the USA from 1839 into the early twentieth century, although the company stopped using embossed bottles around 1870 and switched to paper labels (Lindsey 2015). Two bitters bottles were also found; a dark green round cross-sectioned example with "T MEINHARD CO BOLIVAR" embossed on the base in F620 (TS190) and a dark green square example with "DR SOULE/ HOP BITTERS/ 1872" embossed on the body in F510 (TS191). Meinhard's bitters originated in Venezuela in the 1860s and were being exported around the world by the late nineteenth century while Dr Soule's bitters were first made in North America.

Other

The only other pharmaceutical bottle included in the VRC assemblage was a complete colourless rectangular bodied hair oil bottle found in F373 on TS192. This bottle was 96mm tall and had "THE ORIGINAL/ AND GENUINE/ ROWLANDS/ MACASSAR/ OIL/ NO 20 HATTON/ GARDENS/ LONDON" embossed on its body (Figure 76). Rowland's

Macassar oil was a popular hair conditioner that was first produced in the early nineteenth century and was largely targeted towards men (for example *Otago Witness* 24/9/1886, page 33).



Figure 76. Rowland's Macassar Hair Oil bottle

Household

Glass vessels which held products that were used in domestic settings but outside of food preparation or medicinal purposes are placed in this category (Table 31; Figure 77).

Table 30. Household vessel forms by MNV

Bottle Type	MNV	
Castor oil	5	██████
Ink	2	██
Perfume	11	██████████
Florida Water	1	█
Sewing Machine Oil	1	█
Poison	2	██
Total	22	

Castor Oil

Castor oil was used in a variety of ways, including as a medicine, an early form of mascara and was even administered as a punishment for misbehaving children

(Garland 2016). The bottles which held this product come in various sizes but are almost always made of cobalt blue glass and have a round body, convex shoulder and long, slightly tapered neck.

Five castor oil bottles were recorded in the VRC assemblage. One was found in TS187 (F700), one in TS190 (F657), one in TS191 (F420) and two in TS192 (F185). One of the F185 and the F420 examples had the same base embossing (“1004”).



Figure 77. Examples of household bottles from the VRC site. Clockwise from left: castor oil, barrel ink, poison, Murray & Lanman Florida water, Piesse & Lubin perfume and polygon ink

Ink

Ink bottles were produced in huge quantities by British and colonial glass factories and can be found in an equally large range of shapes and sizes (Lindsey 2015). Most were intended as single use vessels and this is reflected in the poor quality relative to other glass vessel types.

Two complete glass ink bottles were recovered from the VRC features. A light green polygon ink bottle was found in F374 (TS192) and an aqua green barrel shaped ink bottle was collected from F659 (TS190). Both had straight necks with burst off finishes

(where the top has not been modified after being removed from the pontil rod). The polygon example is typical of English ink bottles manufactured in the late nineteenth to early twentieth century while barrel shaped bottles were semi-popular from about 1840 to 1900 (Lindsey 2015).

Perfume

Perfume bottles also come in numerous forms but are usually identifiable through their small size and decorative appearance. Eleven examples of these bottles were recovered from TS190 (F620, 656, 657) and TS192 (F334, 373, 374, 497). The colour of these vessels ranged from colourless to aqua and light green and multiple body shapes were recorded (rectangular, round, oval and polygon). The five complete examples ranged in height from 69mm to 87mm and base diameters ranged from 19mm to 54mm. Body embossing on two of the perfume bottles was able to identify their contents to the manufacturers: Rimmel and Piesse and Lubin. Both these perfumery companies had bases in London and Paris and have a long history in the business. Another rectangular bottle was embossed with "GREENSILL'S MONA BOUQUET" which was a popular perfume advertised in New Zealand from at least 1876 to the end of the 1880s. This bottle was full of thick blue ink showing that even small glass vessels were sometimes re-used once their original contents was used up.

Florida Water

Florida water was a specific type of perfume which could contain a range of ingredients but which almost always included lavender. It originated in America and was an established product by the middle of the nineteenth century (Sullivan 1994: 81). It came in a characteristic bottle shape, similar to castor oil bottles but in lighter glass colours than cobalt blue and with a slightly different finish (Lindsey 2015). The VRC example was found in F497 (TS192) and is embossed with the name Murray & Lanman who were the biggest manufacturers of Florida Water in the late nineteenth century (Sullivan 1994, 86).

Sewing Machine Oil

One body fragment from a rectangular sewing machine oil bottle was found in F185 on TS192. The embossing present allowed the contents to be identified as Singer branded

sewing machine oil who began manufacturing sewing machines and related products from 1851.

Poison

Poison bottles were usually designed to make them look and feel different to any other bottled product. This was achieved by using bright cobalt blue glass which was very rarely, if ever, used for anything other than this or castor oil; making the bottles an unusual shape; and by covering the body in embossed ridges or large lettering warning against consuming the contents.

Two small poison bottles were included in the VRC assemblage, one complete bottle from F700 (TS187) and a top portion from F326 (TS192). Both were cobalt blue and had polygonal bodies. The complete example had “NOT TO BE TAKEN” embossed on one side and vertical ridges covering the others.







Tableware

Bottles were not the only vessels to be made from glass during the nineteenth century, tableware items were also produced. Tumblers were the most common glass tableware item in the VRC assemblage but stemmed glasses, bowls, decorative and serving dishes, eggcups and vases were also present (Table 32; Figure 78).



Figure 78. Pressed glass tableware vessels from the VRC site. Left to right: Tumbler, eggcup and stemmed glass

Table 31. Glass tableware vessel forms by MNV

Vessel Form	MNV	
Tumbler	34	
Stemmed Glass	7	
Eggcup	1	
Bowl	1	
Dish	8	
Vase	8	
Total	59	

Glass tableware vessels were recovered from 65% of features on the VRC site. This included one on TS187 (F700), three on TS189 (F121, 125, 313), four on TS190 (F620, 656, 657, 659), eight on TS191 (F374, 420, 430, 435, 478, 495, 516, 550) and six on TS192 (F185, 264, 326, 334, 373, 374).

Unidentified

Just over 10% (110 vessels) of the total glass vessel assemblage was not able to be confidently placed into one of the above functional categories. This is a relatively small proportion of the assemblage and so will not have a significant effect on the overall interpretation. Many of the unidentified bottles were at least able to be categorised by manufacture method (discussed below), meaning that they are still a useful analytical resource.

Manufacture Methods

The methods used to manufacture a glass vessel can provide important chronological information because most methods have known use periods, and most conveniently leave behind characteristic marks on the vessel which assist identification. Manufacture methods were able to be identified for 87% of the VRC glass vessels (Table 33).

Table 32. Glass vessel manufacture methods by MNV

Manufacture method	MNV	
Free blown	12	■
Dip mould	373	■
Two-piece mould	16	■
Post-bottom mould	23	■
Cup-bottom mould	220	■
Turn mould	101	■
Shingle mould	58	■
Pressed	43	■
Cut	1	■
Machine made	2	■
Unidentified	127	■
Total	976	

Free Blown

Free blown glass vessels are made without any form of standardised mould, instead being shaped by hand by a glass-blower. This was the earliest form of glass vessel production and was first used thousands of years ago but it ceased to be used for commercial bottle manufacture during the 1860s (Lindsey 2015) but continued to be used to make art glass and decorative items.

Twelve free blown vessels were included in the VRC assemblage: nine bottles and three vases. All nine of the bottles were “black beers” and all were represented by fragments. Various sizes were present, with base diameters ranging from 64mm to 92mm. Six of these bottles were recovered from the lower spits of F313 in TS189 and the other three from spit 3 of F420 in TS191. The three vases were made of red, opaque blue and yellow uranium glass and were all fragmentary. All but one of the fragments were found in F185 (TS192) while the other (a piece of the opaque blue vase) was found in F430 on TS191.

Dip Moulds

Dip moulds are the simplest of glass vessel mould types, consisting of a bucket-shaped body and base portion made of wood, metal, clay or clay-lined wood (Lindsey 2015). In the earliest dip moulds the rest of the bottle (shoulder, neck and finish) were still

shaped by hand but later developments saw the addition of two pieces above the main mould which largely took care of this step (Tasker 1989: 30). Bottles made in this way are characterised by a slightly pitted surface covering the majority of the body up to the shoulder, where a slight lip is sometimes visible (this is where the bottle spilled over the mould edge) (Toulouse 1969). One-piece dip moulded bottles have an obviously hand shaped shoulder and neck with a smooth surface while three-piece examples have two seams running up towards the finish.

One-piece dip moulds were being used to make glass bottles at least as early as the start of the eighteenth century and were one of the main manufacture methods used from the 1730s until about the 1820s when they were gradually replaced by new, more efficient mould types. This replacement process was complete, in Britain at least, by around 1865 (Jones 1986: 84). In the New Zealand context dip moulded bottles are usually dated to pre-1870, although there is the potential for later deposition dates of these vessels due to the short supply and regular re-use of glass bottles in the country during most of the nineteenth century (eg. Tasker 1989: 14).

Bottles made in dip moulds accounted for 38% of the total MNV. They were found in 26 features (76%) and on all town sections. They were *not* present in one TS189 feature (F165), three TS190 features (F671, 672, 710), two TS191 features (F448, 515) and three TS192 features (F186, 372, 385). For the vessels which could be identified to a specific type of dip mould there was a reasonably even split between one- and three-piece moulds, although nearly all of the one-pieces were a single vessel type (case gins). This method of manufacture was used on a wide variety of vessel forms (Table 34).

Table 33. Dip mould types by bottle form

	Dip Mould Type			Total
	1-piece	3-piece	?-piece	
Black beer	7	35	114	156
Case gin	66	-	-	66
Bordeaux	1	-	59	60
Spirit	-	8	-	8
Cognac	-	-	1	1
Squat beer	-	4	3	7
Ring-seal	5	1	7	13
Bitters	-	-	1	1
Matthew's patent	1	-	-	1
Hutchinson's patent	1	-	-	1
Soda	-	-	3	3
Torpedo	-	-	1	1
Club sauce	-	1	1	2
Wide-mouth	-	1	-	1
Castor oil	-	1	1	2
Cylindrical pill	-	11	4	15
Oval x-section	-	-	1	1
Patent medicine	-	1	-	1
Perfume	-	1	2	3
Unidentified	1	-	28	29
Total	81	64	226	373

Two-piece Moulds

Two-piece (or hinge) moulds can be identified by the presence of a single seam which starts and ends at the base of the finish. By the early nineteenth century this mould type was mostly used for aerated beverage bottles without defined bases, such as torpedo or round bottom soda bottles (Lindsey 2015).

This manufacture method was identified on sixteen bottles from the site, all of which were torpedo bottles. These bottles were recovered from seven features in TS187 (F700), TS189 (F313), TS191 (F493, 550) and TS192 (F326, 373, 374).

Post-bottom Moulds

A post-bottom mould consists of two or more body sections and a base plate which is smaller than the base of the bottle. These moulds leave a distinctive circular seam in the middle of the bottle base with two seams extending up either side of the body. Some versions of post-bottom moulds have additional sections around the shoulder which

leave more seams but it is the post portion which is the diagnostic attribute. It has yet to be ascertained when this type of mould was first used but bottles made in this way have been recorded dating to at least the 1840s to the early twentieth century (Lindsey 2015). Some American sources claim it was one of the most common moulds used for the last third of the nineteenth century (McDougall 1990: 73; Lindsey 2015), however this does not appear to be the case with bottles found in New Zealand archaeological contexts, where it is usually a minority.

Twenty-three bottles made in post-bottom moulds were identified (Table 35), accounting for just 2% of the overall glass vessel assemblage. These bottles were found in ten features on TS190 (F657, 659), TS191 (F375, 420, 430, 495 and 510) and TS192 (F185, 374, 379). The vessel forms were largely restricted to those bottles which can be confidently assumed to have contained soft beverages, particularly patent soda bottles.

Table 34. Post-bottom mould bottles by form

Vessel Form	MNV	
Breffit-patent	4	■ ■ ■ ■
Hogben's patent	1	■
Lamont patent	3	■ ■ ■
Gravitating stopper	1	■
Codd	9	■ ■ ■ ■ ■ ■ ■ ■ ■
Square sectioned	3	■ ■ ■
Wide mouth	1	■
Barrel ink	1	■
Total	23	

Cup-bottom Moulds

Cup-bottom moulds also have a separate base portion but it is larger than in post-bottom moulds, leaving a seam running around the heel of the vessel (Toulouse 1969: 593). The body section of cup-bottom moulds was most often made of two portions, but other configurations were sometimes used (Jones and Sullivan 1989: 45). These moulds were being used as early as the 1850s and were the dominant mould type used in bottle production from the late 1880s to the early twentieth century (Lindsey 2015).

Cup-bottom moulds were used to make 219 (23%) of the glass vessels in the VRC assemblage. Almost all of these were made in two-piece cup-bottom moulds (Table 36)

however three and four-piece examples were also recorded. These bottles were found in 28 (82%) of the deposits and were *not* found in one TS189 (F165), three TS190 (F671, 672, 710), one TS191 (F493) and two TS192 features (F186, 372). The vessel forms made in this mould type are varied, reflecting its popularity as a manufacture method.

Table 35. Cup-bottom mould types by bottle form

	Cup-bottom Mould Type				Total
	2-piece	3-piece	4-piece	?-piece	
Schnapps	1	-	-	2	3
Spirit	3	1	-	1	5
Coffin Flask	5	-	-	-	5
Breffit patent	1	-	-	-	1
Barrel (food)	1	-	-	-	1
Club Sauce	34	-	-	-	34
Ketchup	4	-	-	-	4
Salad Oil	29	-	-	-	29
Tomato Sauce	1	-	-	-	1
?sauce	2	-	-	-	2
Vinegar	2	-	-	-	2
Wide-mouth	5	-	-	-	5
Jar	1	1	-	-	2
Square-sectioned	7	-	-	1	8
Cylindrical pill	5	-	-	-	5
Castor Oil	3	-	-	-	3
Oval x-section	27	-	1	-	28
Rectangular bevelled	37	-	-	-	37
Rectangular panelled	14	-	-	-	14
Patent medicine	5	-	-	-	5
Hair oil	1	-	-	-	1
?pharmaceutical	1	-	-	-	1
Perfume	2	-	-	-	2
Ink	1	-	-	-	1
Poison	1	-	-	-	1
Unidentified	19	-	-	-	19
Total	212	2	1	4	219

Turn Moulds

The term “turn mould” is slightly misleading in that bottles described in this way could have been formed in a range of mould types but have all been finished in a turn mould. This process involves a bottle being spun inside the turn mould which has an abrasive interior designed to remove seam marks and smooth the bottle body (Lindsey 2015). This often results in small horizontal or angled scratches which run around the bottle.

In New Zealand contexts this mould type, particularly on ring-seal bottles, is characteristic of the last two decades of the nineteenth century, although this method had been around since at least the 1860s (Toulouse 1969).

A total of 101 turn moulded bottles were identified from sixteen features on TS87 (F700), TS189 (F121, 125), TS190 (F656, 657, 659), TS191 (F375, 420, 430, 448, 495, 510) and TS192 (F185, 334, 374, 497). Ninety-six of these were ring-seal bottles, one was a blob soda and the remainder were unidentified round cross-sectioned bottles. The base diameters of the ring-seal bottles ranged from 68mm to 91mm with a mean diameter of 83mm and the height ranged from 242mm to 306mm, averaging at 277mm.

Shingle Moulds

Shingle moulds are a type of closed mould used exclusively on post-1860 European case gin bottles (Lindsey 2015). These bottles are easily identified by the vertical striations which cover each face of the square cross-sectioned body.

Fifty-nine shingle moulded case gin bottles were found in five features on TS187 (F700), TS190 (F659) and TS191 (F430, 478, 510). The case gins ranged in height from 256mm to 273mm with an average of 262mm and in base diameter of 56mm to 73mm with an average of 71mm. They had a variety of moulded maker's marks on the base (Figure 71) but none were able to be identified.

Pressed

During the latter half of the nineteenth century the cheapest glass tableware was produced through a process known as pressing (Jones 2000: 142). This method, used on drinking vessels, bowls, dishes and decorative vessels, involved the molten glass being "pressed" into a mould and allowed for vast quantities of uniform vessels to be made quickly and efficiently. Vessels made in this way, particularly later in the nineteenth century, have blunt edges on the outer decoration and a curved base interior. Pressed glass tableware was in production from at least the 1820s and the style and orientation of the decoration does have some degree of chronological sensitivity (ibid: 160).

Forty-three pressed glass vessels were recovered from eighteen features on TS187 (F700), TS189 (F125), TS190 (F620, 656, 657, 659), TS191 (F375, 420, 430, 435, 478, 495, 516, 550) and TS192 (F326, 373, 374, 385). The most common vessel form was tumblers (29) but dishes/bowls (eight), stemmed glasses (three) and an egg cup were also recorded. Two fragmentary pressed glass vessels were unable to be identified to form. All but one of the pressed glass vessels were colourless glass, the exception being one of the unidentified vessels which was yellow.

Cut

Some decorative or drinking vessels are cut rather than pressed. This process entails pieces of the vessel being removed from a blank, much like the preparation of a gemstone. The result is a multi-faceted surface with sharp edges and clear angles on the interior corners of the vessel. Cut glass vessels are far more labour intensive than their pressed counterparts and therefore more expensive (Jones 2000: 142) and less commonly found.

The base of a colourless vase was the one example found of this manufacture method in the VRC assemblage. It was found in the top spit of F420 in TS191.

Machine-made

Machine-made bottles are made using a fully automated production process and begin to appear in the archaeological record around the turn of the twentieth century. For this reason they are often used as an initial indicator of a deposit's archaeological potential and their presence usually results in the deposit being labelled "modern" or disturbed. Vessels made in this way are easily identified by the uniformity of the glass and the presence of a seam running right to the top of the finish.

Only two machine-made glass vessels were identified in the VRC assemblage and both were jars with external screw finishes found in TS192. A small complete colourless jar was found in the top spit of F373 and fragments of a larger aqua green jar were recovered from spit 4 of F379.

Other Artefacts

The huge variety of other artefacts found at the VRC site means that taking the same approach for their description as the ceramic and glass vessels would be impractical.

For ease of organisation and interpretation these artefacts have been placed into functional categories. This allows for related artefacts made of different materials to be presented together in a more meaningful way than by describing each type individually. This section is intended as an overview of the types of material included in the VRC assemblage and more detailed descriptions of the artefacts found in each feature can be found in Appendices B and C. Unique artefacts that do not fit into a functional category used here are listed in these individual deposit descriptions.

Structural and Infrastructure Remains

Structural and infrastructure remains are those artefacts which relate directly to the built environment at the VRC sites. This includes pieces of buildings which once stood on site as well as objects such as pipes or wires which would have connected those buildings to civic systems put in place during Whanganui's development. These artefacts, particularly when used in conjunction with historical photographs, can reveal what the site would have looked like, how this changed over time and what facilities would have been available to the inhabitants.

Fasteners were the most common structural artefact found, with 1,304 fragments representing at least 1,094 examples and were recovered from 62% of features. Nails were the most numerous but bolts, screws, brads and tacks were also present. Most (99%) were ferrous but a small number of copper alloy (five), lead (two), copper (one) and steel (one) were also recorded. Only 32% of the fasteners were able to have their manufacture method identified. Of these, 190 (17%) were wire, 119 (11%) were cut and 42 (4%) were wrought.

Window glass was another common structural artefact collected from 29% of the VRC features. In total 196 fragments were recorded with an estimated MNI (calculated using thickness and colour of the glass) of sixteen window panes. All fragments were plate glass and ranged in colour from pale aqua green and blue to colourless. One piece of frosted window glass was also identified. Glass thickness ranged from 1.49mm to 7.94mm with an average of 2.56mm.

Roofing materials were present in eight features and mostly consisted of roofing zinc, although one piece of corrugated iron was also identified. Two portions of zinc spouting, a cast iron outdoor tap and two drain covers (one iron and the other zinc)

add to the picture of how the exteriors of the buildings would have looked. Nine pieces of infrastructure pipe were also present, one of which was stoneware and the rest coarse earthenware. Both salt- and lead-glazed portions were identified.

Artefacts from building interiors included multiple door components. Three round brass door knobs, two iron chamber locks and two brass keyhole faceplates are typical of the types of door fittings and security mechanisms used by nineteenth century inhabitants of the site.



Figure 79. Fragments of linoleum with geometric design from F186



Figure 80. Glass kerosene lamp font from KJ18

Interior wall and floor treatments were also represented in the VRC assemblage. Four wall or fireplace tiles in a variety of styles were identified. Two were whiteware, one refined red earthenware and the other porcelain. One of the whiteware examples has blue UGTP decoration and the other has a yellow tinted glaze over a moulded shell motif, the refined red earthenware tile has a plain black slip and the porcelain tile is undecorated. Multiple scraps of linoleum floor, decorated with a geometric pattern in shades of red, yellow and purple (Figure 79), were recovered from F186 on TS192. Portions of various types of interior lighting systems were recorded, including candle holders, oil lamps, kerosene lamps (Figure 80) and electrical fittings.

Food and Drink

The majority of food and drink related artefacts found on historical sites are ceramic and glass vessels but miscellaneous items can also reveal information about the consumption, storage and preparation of food and drink.

Cutlery often survives well in archaeological contexts so is regularly found in historical deposits. The VRC assemblage contained five forks (three iron, one nickel and one with an iron head and bone handle), one bone-handled butter knife, eight teaspoons (nickel, nickel silver, silverplate, pewter and copper alloy examples were identified) and six unidentified cutlery handles (three bone, two wood and one nickel silver).



Figure 81. Examples of cutlery found at the VRC site

A range of enamelled tin tableware vessels were recorded including two cups, two side plates, a bowl, an ashette (Figure 82) and a coffee pot.



Figure 82. Enamelled tin ashette from F313

Tin cans are another commonly found food related artefact and at least 40 of these containers, in various sizes, were represented in the VRC assemblage. Three iron jar lids in various sizes were also collected.

Other food and drink related artefacts include a bread knife, set of cast iron scales, bottle corks, wire bottle closures, a wooden gravitating stopper from a soda bottle and a large cast iron pot with long handle. Fragments from three ceramic decoy chicken eggs, each from a different deposit, suggest that chickens were being kept on site and their eggs collected by more than one resident.

Other Containers

Fragments and complete examples of various more generic containers were found across the site. Sixty matchboxes, fifteen tobacco tins, three buckets, a metal cashbox (Figure 83), a metal bottle with screw cap, 22 pieces of barrel hoop and fragments of fourteen unidentified containers were recorded.



Figure 83. iron cash box found in F313

Personal Dress

Although this analysis does not include the fabric and footwear collected from the site it is still possible to extract some information about personal dress from the artefacts that have been analysed. Buttons, buckles, jewellery and other accessories were identified in some of the features and can reveal some of the smaller details of the personal appearance, as well as sometimes giving clues as to the occupation or status of the site inhabitants.

Two belt buckles which do not appear to be military or harness components were recorded (Figure 84), as well as 26 buttons of various material including metal, bone, glass, shell and plastic and two hook and eyelet catches which would have acted as permanent fasteners for items of clothing.



Figure 84. Decorative belt buckle found in F313

Artefacts relating to the production and maintenance of clothing were also recorded, including two thimbles, ten pins and a wooden thread spool.

Other accessories recovered were the frame and cogs from a pocket watch, an ivory parasol handle (Figure 85), a fabric purse with copper alloy frame, three glass beads, a pale yellow celluloid comb and a miniature bone cricket bat which would have been part of a badge.



Figure 85. Ivory parasol handle from F326

Clay Tobacco Pipes

Clay tobacco pipes can provide chronological data as well as more ephemeral information relating to identity and personal beliefs. Details of maker's marks found on the VRC clay tobacco pipe assemblage can be found in the relevant deposit descriptions in Appendices B and C.

At least 66 tobacco pipes were represented in the VRC assemblage and a range of styles and features were recorded. There were a variety of bowl shapes, with ten out of the 26 recovered having spurs and three bearing moulded decoration. Ten of the bowls were blackened on the interior from heavy use and one had a small hole drilled through the base of the bowl just above the join with the stem. It is unclear what function this would have served. Of the twelve original bites recorded two were glazed while a further seven stem fragments had been broken and re-shaped into new bites. One stem fragment had moulded decoration present, two had embossed marks and 36 had incised marks. No complete tobacco pipes were recovered.



Figure 86. A clay tobacco pipe bowl in the form of a moulded face from F334

Pipe fragments were recovered from all the analysed features on TS187 and TS189, three (F620, 657, 672) on TS190, six on TS191 (F414, 478, 493, 510, 516, 550) and six on TS192 (F185, 186, 326, 334, 372, 374).

Toys

The toys recovered from the VRC site were analysed for a student project (Eising 2014) and so the data presented here is taken from this work. Dolls were the most common toy type found but miniature tea sets, marbles and a stuffed toy were also recorded.

The toys were distributed fairly evenly across the site. The glass eye from a stuffed toy was recovered from TS187 (F700), four dolls, two marbles and a toy tea cup from TS189 (F121, 313), one unidentified tea set component from TS190 (F620), ten dolls, two marbles and two saucers from TS191 (F375, 420, 430, 510, 516) and three dolls, five marbles and eight tea set components from TS192 (F186, 326, 374, 379).

Two styles of doll were recorded: one-piece Frozen Charlottes; and limbs from dolls that would have had fabric bodies. Parian, china and bisque fragments were identified and various facial, hair and clothing styles were noted (Eising 2014: 22).



Figure 87. A selection of toys recovered from the VRC site including marbles, tea set components and dolls

Both ceramic and glass marbles were present in the VRC assemblage. Seven of the glass marbles had been removed from Codd bottles, 23 were swirl, two were mica and one was a clearie. The ceramic marbles included six white bodied earthenware, three Bonnington's, a brown bodied earthenware, one variegated yellow ware, one crockery and one flint type (Eising 2014: 29). For a detailed description of the types see Gartley and Carskadden (1998).

Figurines

Four decorative figurines were represented in the assemblage. These included two fairings (one titled "trespassing" and the other an unidentified farm scene), a monkey wearing a suit and glasses, and another unidentified figurine. All were made of hard-paste porcelain and had painted polychrome decoration.



Figure 88. Examples of figurines collected from the VRC site: a fairing entitled "Trespassing" (left) and a monkey with glasses (right)

Military Artefacts

Military related artefacts were found in seven of the VRC site deposits and, because of the well documented occupation period of the stockades, these items can help suggest deposition dates for the assemblages in which they are found. Ammunition shells and cartridges are not included here as they could have been used in contexts other than military and most were not in good enough condition to identify them to type. There are also no reports of activity involving gun fire recorded at the site.

Buttons are the most common military related item among the VRC assemblage. This is likely due to their ease of loss and their ability to survive in the archaeological record. Four types were identified that relate to specific items of the military uniform: bone long-john, brass trouser, china shirt and brass or pewter jacket buttons (Figures 89 and 90). Long-john, trouser and shirt buttons were all of the one piece four-hole sew through variety, while the more decorative jacket buttons were two-piece and bear the regiment number embossed on the dome. Jacket buttons from each of the main regiments stationed at the nearby stockades (18th, 57th and 65th) were recovered.



Figure 89. Military uniform buttons. From left to right: bone long-john, brass trouser and china shirt button



Figure 90. Military jacket buttons from the 18th (left), 57th (centre) and 65th (right) regiments. The 65th example is pewter and the others brass

The pewter 65th regiment jacket button has a relatively precise date range. Prior to the Crimean war all 65th regiment jacket buttons were made of pewter but this proved a problem when troops encountered the conditions of a fierce Russian winter. In cold temperatures pewter becomes incredibly brittle so soldiers' clothes would repeatedly burst open as their buttons broke. The solution to this problem was to change the material the fasteners were made of, in this case to brass. This change came about in 1855 but those jackets which were still outfitted with pewter buttons may have been continued to be used, particularly in warmer climes such as New Zealand, until the fasteners were lost or needed replaced.

These artefacts act as a reminder of the huge part that the military played in the early days of the city of Whanganui.

Equestrian Artefacts

Humans were not the only residents of Whanganui and the VRC site that had close relationships with material culture. Horses played a huge role in Victorian daily life and were vital to the development of the settlement. Not only did they provide multiple forms of transport for goods and people, they featured in several recreational pastimes, sports and forms of entertainment. They were even a potential source of meat for other animal companions and almost certainly for some of the human residents at times. As expected, equestrian related artefacts were common in the VRC assemblage, most often in the form of horseshoes, although other items such as grooming brushes, harness components, spurs and even a horse blanket were also found.

Horseshoes

As previously mentioned these were the most common equestrian artefacts found at the site. In total eleven were recorded in the analysed sample of the VRC assemblage. Differences in the form and size of these artefacts can tell us what kind of horses were present on the site and what kind of work they would be doing. The horseshoe assemblage can be split into three categories according to the size and type of horse they would have been worn by: ponies, hacks and draught horses.

Ponies are defined as horses smaller than 14.2 hands high (hh), or 148cm. In the New Zealand colonial context ponies would have almost exclusively been ridden by children

and would not have been as essential for transport and industry as their larger counterparts. They would still have played a useful role in the preparation of children for a lifetime of interacting with horses and may have acted as transportation in rural areas, but their main role was a recreational one. Only one pony-sized shoe (120mm long and 105mm wide) was found amongst the VRC sample, which is not surprising given the central urban location of the site.

Hacks are horses taller than 14.2hh but of lighter build than draught horses. Hacks would have been used as riding or light carriage animals, filling a range of recreational and transportation roles. Seven hack shoes were recorded amongst the VRC assemblage, ranging in length from 120-135mm and in width from 120-130mm.

Draught horses are taller than 14.2hh and of heavy build. These horses were used for pulling large carts and farm work. Three draught horseshoes were included in this assemblage, ranging in length and width from 140-160mm. These shoes can be easily identified by their size but also often the presence of raised heels.

Saddlery and harness

Depending on the type of work they undertake, horses require various items of saddlery and/or harness. The most common materials for saddlery components are leather and metal (usually iron, brass or steel), both of which were present in this assemblage. Two large draught horse bits were recovered, one a curb bit with a straight shank and fixed jaw and the other a single jointed snaffle with full cheek pieces (Figure 91). A stirrup iron and an unidentified piece of leather harness or strapping are included in the VRC assemblage.

Other

The VRC assemblage also contained artefacts related to the care and upkeep of the horses housed (permanently or temporarily) at the site. Several grooming brushes were recovered, including a wooden backed dandy brush and three metal curry combs. The dandy brush (Figure 92) has rigid bristles embedded in a wooden back and is used for removing dirt and loose hair from a horse's coat prior to tacking up and the metal curry combs are used to clean this dirt and hair off the other brushes. As well as these grooming tools, fragments of a woollen horse blanket were found. This would have



Figure 91. Single jointed full cheek snaffle bit from F493



Figure 92. Dandy brush from F700, showing bristles (top) and wooden back (bottom)

been worn by a horse whilst in a stable rather than out in the paddock as it lacked any type of waterproof coating.

Farriers were an essential component in any equine related activity so they are unsurprisingly visible in the VRC assemblage. Part of a leather apron which would have been worn by a farrier during the shoeing process as well as a range of hoof files and horseshoe manufacturing chisels (half-round for cutting the heels and straight chisels for cutting the edges) were collected across the site during the excavations.

Spurs were another equine artefact found at the VRC site. Three were found in total, two of which were iron and the other brass. All are similar in form with short, blunt necks. This design is relatively gentle but could still have caused considerable discomfort to the horse if used severely.

Tools

A small collection of tools (other than those related to equestrian activities) was recovered from the site. Most tools were related to household or gardening tasks but some industrial or commercial tools were also identified. One complete and two fragmentary pairs of scissors and a hinged wooden ruler (Figure 93) were probably household items, while a complete pair of iron shears and the heads of an axe, a rake (Figure 94), a spade and a shovel are indicative of work in the garden or a stables. Two fragmentary chisels of unidentified types are less domestic in nature and were probably used for metal or woodworking, while a glass stirring rod was used for mixing pharmaceutical preparations. Four sharpening stones (one pumice and three sandstone) were also recovered which were used to sharpen the blades on a variety of tools. Five other unidentified tools were recovered in fragmentary condition.

Tools were found on TS187 (F700), TS189 (F121, 125, 313), TS190 (F656, 657), TS191 (F420, 478, 516, 550) and TS192 (F185, 186, 497).



Figure 93. Brass hinge of a folding wooden ruler found in F121



Figure 94. The head of a rake found in F420

Other

Some types of artefacts do not fit comfortably into the above categories but were found in multiple deposits. These are listed below:

- Seven bullet casings
- Two clocks (one shown in Figure 95)
- One piece of writing slate with etched lines, and six slate pencils
- 78 fragments of strip iron and three of steel
- Seventeen fragments of iron wire of various gauges



Figure 95. Internal workings of a clock found in F700

Unidentified

A proportion of the artefacts collected from the VRC site were unable to be identified. The majority of these were metal objects which were too heavily accreted to identify, but ceramic, glass, bone, wood and plastic artefacts were also included under this heading. The poor preservation of many of the unidentified objects was too poor to allow for an accurate NISP but in total they weighed 59.6kg.

This is often the point at which CRM reports leave the artefact assemblage description, with the exception of a few cursory references to the information for dating and context purposes in the concluding sections. For many small or heavily disturbed sites there is little more that can be done, and providing such a description fulfils the statutory obligations, but sites such as the VRC with numerous discrete deposits possess so much more potential than a broad and purely descriptive overview realises. A central aim of this research is to demonstrate how taking the next interpretive step and creating narratives around the material culture can aid in achieving this potential, which is what the following three chapters do. In a further deviation from the standard format of broadly summarising the data before (sometimes) picking out particular interpretative themes, the following section approaches things in the opposite direction, with three very particular and free-standing narratives which are combined

into an overview in Chapter 9. This is deliberately done in order to highlight the viability and strengths of a data-led approach to interpreting archaeological assemblages.

Chapter 6: The Gardener

The Williamson family (Henry, Margery and children) owned and occupied, sometimes part time, a portion of Town Section 189 from 1866 to at least 1875 when they moved to a farm in Kakaramea, near Patea (about 60km northwest of Whanganui). While Henry Williamson, and to a lesser extent his wife and eldest son, made regular appearances in the local newspapers these references are weighted towards Henry's business and the family's frequent entries in produce and horticultural shows. The history of this family, along with their material culture assemblage, allows us to investigate multiple dimensions of the Garrison period colonial experience. Even though this family had no direct link to the military it is obvious that their lives were heavily impacted by its presence, especially given their location nestled between the two stockades. The Williamsons' involvement in horticulture and pastoralism highlights a different aspect of the experience, showing the varied ways in which many of the early settlers attempted to shape Whanganui's physical, economic and social landscape into their vision of an ideal settlement.

Henry Williamson was born in Scotland in 1840, the same year that Whanganui was purchased by the New Zealand Company. He emigrated from Scotland to New Zealand as a child with his family in 1852 (Adam 2015: 10). By 1862 he was living just outside Whanganui with his brother James and running a farm. His first significant appearance in the historical record is in 1863 due to an incident which occurred in November of the previous year (*Wellington Independent* 3/12/1863, page 3). The two Williamson brothers were tracking down a runaway cow on their neighbour Mr Paterson's land when they crossed paths with another local young man, James Coughlin. Court proceedings show that what happened next is unclear but it appears that there was a serious misunderstanding or miscommunication which resulted in the Williamsons running for their lives while Coughlin discharged his rifle. The case made it all the way to the supreme court with Coughlin charged for "feloniously and unlawfully [shooting] at one Henry Williamson, with malice aforethought, to kill and murder him" (*Wellington Independent* 10/12/1863, page 3), although in the end it appears that the brothers had interrupted Coughlin on a pig hunt and he had not wanted to lose his

quarry. This encounter took place against a backdrop of escalating tensions regarding the Hau Hau and their spread into the Whanganui region and the seriousness with which this event was treated could be seen as evidence of that uneasiness. At the same time, however, Henry and James Williamson were still residing outside of the main settlement and at least attempting to run a successful farm, so they themselves must have been willing to look past the potential risks of such isolation.

By 1864 the Williamson brothers' farm was performing well enough for Henry to begin selling seeds on a national scale. The shipping news in the *Wellington Independent* (5/1/1864, page 2) includes four casks of his seeds being sent to Otago. That year he also married Margery Paterson, the daughter of his Presbyterian minister neighbour. Soon after their wedding Henry and Margery welcomed the arrival of their first child Alexander Henry Williamson. Margery was 29 when they married and she is described on their wedding certificate as a spinster, meaning this was her first marriage at a relatively advanced age for the time. Consequently, Margery lived longer in her parents' home than most middle class women and this probably allowed her more time to hone various skills other than housekeeping and child rearing. It appears that at least some of this extra time was spent in the kitchen as she was a regular (and successful) entrant in local Agricultural and Pastoral Association shows with jams and homemade bread (e.g. *Wanganui Chronicle* 6/3/1874, page 2; *Patea Mail* 28/2/1882, page 3; 22/11/1882, page 2). One of her prizes is particularly impressive: she won second place for a loaf of home baked bread at the Patea District show just two days before the birth of her second surviving son William in March 1877 (*Patea Mail* 24/3/1877, page 2).

In 1866 Henry purchased part of TS189 which included a six-bedroom cottage and moved his young family permanently into the centre of Whanganui. There were undoubtedly a number of reasons behind the Williamsons' decision to move into town but the safety promised by the military regiments now garrisoned there must have played a major role. While Henry had been content to live at a distance from the garrisons when it was just him and his brother, the security they provided, both in a physical and symbolic sense, must have been attractive for him and his wife, especially with their infant son.

Making a Home

The Williamson house was situated on part of TS189 that was not excavated during the main excavations. This part of the site was monitored in subsequent years (Bruce 2013; Jones and Woods 2014) but features were not recorded with enough accuracy to identify its footprint. The 1866 plan (Figure 11) shows a single structure on the north side of the section, and presumably this is the dwelling that Henry and Margery moved into that year.

Two deposits from features located at the rear of TS189 (rubbish pit F165 and well F313) were able to be confidently identified as being associated with the Williamson household (Figure 96). The features themselves can tell us about the types of activities and waste disposal practices being carried out by the Williamson family during their occupation of this part of TS189, and therefore the ways in which they were attempting to shape their new environment. F165 was a rectangular domestic rubbish pit which dated to the late 1860s or very early 1870s. It was capped with a layer of dark topsoil and had been cut by a later post hole and concrete beam. This means it was dug specifically for depositing household rubbish and is of a similar rectangular shape to many of the other rubbish pits recorded at the site. One bag of faunal remains was collected from this feature as well as the material culture, so F165 appears to have been a general purpose pit.

F313, unlike F165, was not initially intended to be used for rubbish disposal. As a well its primary function was to provide a source of water for the household, although it seems to have dried up or at least ceased to be used in this capacity shortly after the Williamsons moved into TS189 as most of the domestic material within it dates to the Garrison or early Recovery period (although it has not been possible to pinpoint exactly when this occurred). This forced the family to look elsewhere for potable water - typical sources in Whanganui being the river or collected rain water, neither of which were seen as an ideal solution (*Wanganui Herald* 24/6/1867, page 2). TS189's central position made it among the first properties in the fledgling town to be connected to a municipal water supply but Whanganui did not get this service until 1876 (*Wanganui Herald* 2/2/1876, page 2), by which time the Williamsons were living in Kakaramea.

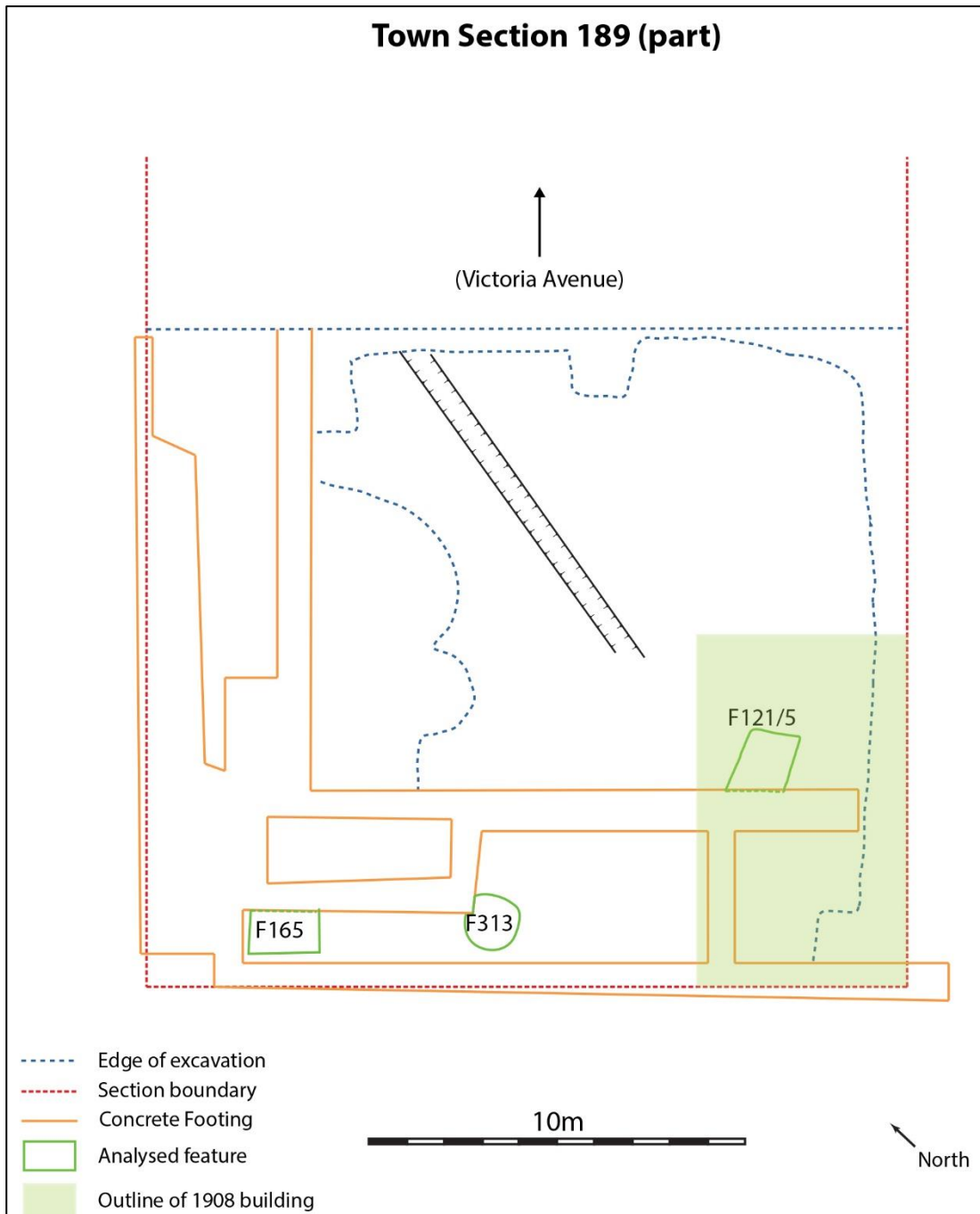


Figure 96. Excavation plan of the south portion of TS189 showing analysed deposits and features

None of the available historical photographs of the site show the Williamson house clearly enough to show whether or not they had an alternative system in place to collect water but evidence from surrounding properties provides evidence of possible solutions to this problem. One of the nearby cottages fronting Maria Place on TS191 had a set-up which allowed for the collection and storage of rain water (Figure 97). The spouting for this cottage directed rain into a large wooden barrel in which it was able to be stored until needed. Provided that the barrel was clean and remained covered

the water drawn from it would have been relatively clean, with the exception of any residues or dirt collected during its passage across the roof and through the spouting.

The only roofing materials found in the VRC assemblage were a large amount of zinc sheeting (Figure 98) and one piece of corrugated iron (found in F313), but photographs also show that most of the early cottages had wooden shingle roofs (Figure 96), which would not be problematic for water contamination. Two portions of building spouting were recorded, one of zinc in F185 (TS192) and the other of lead in F420 (TS191). Lead is water soluble and can have adverse health effects even in small amounts, but modern studies suggest that poisoning from water which passes briefly through lead pipes or spouting is rare (e.g. Kelsall et al. 2013). This material was a popular choice for water pipes from classical times to the early twentieth century due to the ease with which it can be bent and manipulated but little evidence of widespread lead poisoning has been found (Hodge 1981: 487). In any case, the water collected through this method was far superior to that from wells tapping into the stagnant water table of the recently drained swamp or from the river which became noticeably polluted quickly after Europeans settled at Whanganui.



Figure 97. Detail from ca.1870 photograph of Maria Place and St Hill Street corner showing water butt at rear of cottage (right side)



Figure 98. Zinc spouting (top) and roofing sheet (bottom) from F420

Wherever it was sourced from, some of the VRC site occupants took additional steps to purify their water before consuming it. Fragments from three stoneware water filters were collected during the excavations, two from Recovery period deposits on TS192 (F326 and F372) and one from F659 on TS190 which dates to the Depression period. The deposit dates of these filters fit with the introduction of the reticulated water supply (1876) and suggest that at least these three households felt the supply was of sufficient quality to no longer need filtering. This is further supported by the fact that one of the filters was deposited whole (the F326 example, shown in Figure 99). While these artefacts are not directly associated with the Williamsons they do reflect some of the practical challenges faced by them and other early Whanganui settlers, one of the most pressing of which would be securing a potable water supply. The securing of such a supply, which only truly occurred 36 years after the settlement was established, can be viewed as an important milestone in the transformation of Whanganui from a frontier outpost to “civilised” town, something which Henry Williamson was actively involved with as will be shown through other chapters in his story.



Figure 99. Salt-glazed stoneware water filter from F326

The Soldier Next Door

The Williamsons occupied part of TS189 for the last four years of the Garrison period so the military would have been a familiar sight, and interactions with various members of the regiments regular occurrences for the family. While none in the household had any direct ties to the military the Williamson assemblage does include artefactual evidence of its presence in the form of one brass jacket button (Figure 100). This example is of one-piece construction and bears a moulded wreath around the number “57” on the obverse. The 57th, or Yorkshire, regiment were stationed at the York stockade from 1861 to 1866, with this style of button being used for their entire stay in Whanganui (it was used between 1850 and 1872 (New Zealand Military History Society 2014). The year that this regiment left the town is the same year that the Williamson family moved into TS189, so the overlap in occupation of the area is short, and this particular fastener was found in the well so there is a chance that it pre-dates

the Williamson occupation or alternatively was found by a member of the household when they took ownership of the property. However, the men in all of the regiments stationed at Whanganui were well integrated into the community so it would not be surprising if Henry Williamson or the previous occupier of the house (one of which was Major Roche who commanded the 18th Regiment occupying the Rutland Stockade) entertained a soldier from the 57th who happened to lose a button during his visit.



Figure 100. Brass 57th Regiment jacket button from F313

Other Garrison period deposits (F435/KJ5, F448 and KJ10) have more evidence of the military presence in the town. Most of these remains are clothing fasteners relating to various regiments and uniform components. In cases where an assemblage contains just a single fastener from an outer uniform layer, such as jacket or trouser buttons, it would suggest that the original owner of the button was a temporary visitor to the property, whereas a deposit containing multiple buttons from several layers including underwear implies that a soldier was staying or living there. Soldiers garrisoned in Whanganui were given the responsibility of maintaining their uniforms, including buttons, and would be charged for replacements (Rudd 2015 pers. comms.) so it makes sense that the distinctive domed and embossed jacket buttons would be carefully

curated and searched for if the loss occurred at home. The plain white china shirt, pressed brass trouser and bone long-john buttons would have been less of a concern as they were far easier and cheaper to replace, but were also less likely to be lost during a social call to a neighbour or acquaintance as exposing them requires some degree of undressing.

On the other hand, in F186 on TS192, one trouser, one long-john and three shirt buttons were found which points towards a more permanent occupation by a member of the military. The part of TS192 in which F186 (a domestic rubbish pit) lay was occupied for 1866 by Captain O'Connell, leader of a company of the 65th Regiment (*Wellington Independent* 3/6/1848, page 3). Being an officer, he was able, and probably expected, to replace his basic uniform components before they got into a state of serious disrepair, and the loss of a few buttons would have been less of a concern than to a lower ranked member of his company. The fact that they were all found together in a rubbish pit also suggests that theirs was a deliberate deposition, perhaps along with old items of uniform that were no longer required and have since disintegrated.

We can compare this with F334 on the same town section (TS192) which contained two jacket buttons, one from the 57th and another from the 18th regiment. This feature was interpreted as a back doorstep deposit consisting of floor sweepings and items lost near the doorway, so most items which ended up here were lost or accidentally broken rather than deliberately thrown away. Most of the Maria Place facing cottages seem to have been let out to military officers and families during the Garrison period so soldiers were living in and visiting this part of the site regularly. F334 also contained fragments from at least fifteen clay tobacco pipes, seventeen complete wax vesta matchboxes and bottle glass fragments suggesting that social drugs were regularly consumed, potentially in a communal context, on or around the back doorstep of this cottage. Again, this would have affected the Williamson household due to its close proximity to their home, although complaints about revelry among the soldiers was usually aimed at the lower ranked individuals rather than the officers (eg. *Wellington Independent* 15/7/1862, page 3; *Wanganui Herald* 9/8/1867, page 2; *Taranaki Herald* 26/9/1868, page 3).

All of this was going on just over the fence from the Williamson household and so the family experienced the social side of military life second hand through this exposure,

as well as the visits they received themselves. It is also obvious that they had more exposure to the officers rather than the regimental soldiers who lived and spent much of their time in the stockades. This may have helped to personify the military presence in the town as military personnel were neighbours, customers and even friends. Whether this brought an extra degree of comfort to the Williamsons and allowed them to feel safer is impossible to tell through the artefacts or the available historical record but it does not seem too far-fetched a notion. The presence of military material in rubbish deposits would outlast the Williamson occupation and the Garrison period, with the latest military artefact (a 57th regiment officer's mess plate, discussed in Chapter 8) being deposited around the turn of the twentieth century. This illustrates the lasting legacy the soldiers had on the town, something which is still noticeable today.

Capitalising on the Fledgling Settlement

The 1868 Town Board rates records for TS189 show a marked increase in the rates value of the Williamson property, from 15d to £1 6s 2d, more than can be explained by simple inflation and noticeably greater than the increase in neighbouring properties. This coincided with the opening of Henry's seed and ironmongery business and is likely to be the result of him constructing a shop and seed warehouse on site. He had been selling seeds from the Williamson brothers' farm for years, but the relocation allowed him to augment that line of business with ironmongery, a service which would have been in high demand amongst the military and colonial population. His business was not the only thing to be growing, his wife gave birth to his second child, Margery Elizabeth Jane in the same year.

Henry also made his debut in local politics at this time. He was elected as a member of the Whanganui Town Board for a two-year term (*Wellington Independent* 26/12/1868, page 2). His term had its ups and downs; at one point around half way through the term the entire board announced their resignation in protest to a particular report, the contents of which are not clear (*Wanganui Herald* 29/10/1869, page 3). The tactic, whatever it was in aid of, apparently worked as the next meeting of rate-payers had a huge attendance and the motion to not accept their resignations was easily passed. Henry's Town Board career was limited to this single term but he would later join the Patea Harbour Board.

For the next three years the only mentions of Henry Williamson were his numerous advertisements in the newspapers for a wide variety of farm and garden seeds and plants. He offered many kinds of grass and livestock fodder seeds, some of which he imported but others he had developed on the Williamson farm, which his brother still ran on the outskirts of town. Alongside the agricultural seeds he offered a range of vegetables and flower varieties which he trialled on site, acting as a living advertisement for his business. The ironmongery side of his business supplied products including “bar iron... general and builder’s hardware, saddlery... and general grindery” (Atwell 2006: 32). The dark topsoil cap above F165 is evidence that once it was full, or began to smell too unpleasant, the pit was covered and one of Henry’s plant trial garden beds was positioned here. Placing a garden bed over such a deposit, deliberately or otherwise, would have had positive effects on the plants growing there as it introduced extra nutrients from the food scraps and improved drainage thanks to the ceramic and glass inclusions. This adds yet another dimension to the multi-faceted role of artefacts in the narratives of the Williamson family and the VRC site as a whole and serves as a reminder that material culture can still have an impact on people and sites even after the objects are broken and discarded.

Various members of the Williamson household engaged with the commercial environment in Whanganui in different ways during their time at TS189. Margery probably made many of the household purchasing decisions relating to food and homewares (di Zerega Wall 2010: 84), while Henry held multiple positions in the commercial/retail process as he grew produce and sold goods through his seed store and ironmongery but also purchased goods from other businesses. The two children Alexander and Margery Elizabeth had a more passive position in the system, not being old enough to purchase anything themselves but at the same time using and consuming products bought for them by their parents or other family members.

The only artefacts able to be confidently attributed to Henry’s store were 21 unused iron nails. These were in poor condition so it was impossible to retrieve much information from them. Only two were able to be identified to manufacture method: one wrought and one wire. Wrought nails are the earliest type of nails found in New Zealand and were most common during the first half of the nineteenth century after which they are largely replaced by cut nails. Wire nails are a slightly later invention

which first reached New Zealand in 1842 but were not in common use until the last quarter of the nineteenth century (Hamel 2002). Henry Williamson advertised that “Ewbank’s and wire nails” were available for purchase in his store from as early as 1868 (*Wanganui Herald* 16/7/1868, page 2). Ewbank’s nails were a common type of machine-wrought nail imported from Britain in large amounts from as early as 1847 (Isaacs 2009: 84).

A copper trading token (Figure 101) was also included in the Williamson assemblage which bears an image of Britannica on one side and “SHIPPING SUPPLIED J. HURLEY & CO WANGANUI NEW ZEALAND/CONFECTIONERS BAKERS AND GROCERS/ESTABLISHED 1855” on the reverse. J. Hurley & Co ran a general grocery store on Victoria Avenue from 1855 until October 1868 when they were taken over by the Flyger Brothers (*Wanganui Herald* 8/10/1868, page 1). This particular token was worth one penny and was issued around 1863 (Smart and Bates 1972: 176). Hurley and Co. were the only Whanganui business to produce their own tokens, but these coins were accepted by other establishments. Trade tokens were circulated in New Zealand from 1857 when a shortage of small denomination coinage became a problem. Forty-eight retailers around the colony issued tokens similar to this one that could be used in place of penny or halfpenny coins. The cost of producing these copper tokens was far less than their face value (Walton and McFadgen 2003: 194), making them a profitable undertaking for businesses, particularly as many were lost before they could be used again or cashed in. While they were never officially recognised as legal tender they were accepted by most businesses until as late as 1897 when the Imperial Coinage Act made British coins the official currency of New Zealand (Reserve Bank of New Zealand 2000).

Hurley & Co.’s store was a convenient place for Margery or Henry to purchase their everyday groceries and items that they did not grow or make at home. Tokens such as this one made it possible for them to continue to participate in the global economy and the myriad of trade networks which connected Whanganui to the rest of the world, even when legal tender was in short supply.



Figure 101. Copper trading token with Britannica on the obverse (left) and the mark of J. Hurley & Co on the reverse (right) from F313

Making a Mark on the World

The Williamson family's relationship with one particular type of material culture highlights the role of both Henry Williamson and the artefacts themselves as active agents in shaping the Whanganui landscape. This in itself emphasises the entangled nature of many person-artefact interactions and the difficulties encountered in trying to explain these using traditional archaeological data presentation. As a strong advocate of horticulture and pastoralism, Henry obviously had clear ideas surrounding how the new settlement and surrounding landscape should look and, as will be discussed below, he appears to have drawn some inspiration (and possibly had assistance) from ceramic vessels which almost all members of the population engaged with on a daily basis.

Henry Williamson's interest in horticulture seems to have been inherited from his father Alexander and uncle Francis. Francis Williamson was the first in the family to emigrate from Britain with his wife, two children and nephew (Alexander's eldest son) in 1847 and Alexander followed with his family, including a twelve-year-old Henry, five years later (Adam 2015: 10). The extended Williamson family remained close and all

settled in the Whanganui region. Francis brought with him a wealth of knowledge around horticulture and landscape design which he had developed back in Sheffield where he was the curator of the botanical gardens (*Whanganui Herald* 10/6/1891, page 2). He used this expertise to open Whanganui's first plant nursery in St John's Hill in the mid-1860s and became actively involved in the local horticultural community as well as the Town Board. One of his most notable legacies was the numerous trees he planted around the urban area as a beautification project. Alexander Williamson was also a prominent member of the Whanganui Horticultural Society so Henry was surrounded by passionate horticulturalists from an early age and was clearly inspired to follow in their footsteps. By the time Henry opened his Victoria Avenue seed warehouse in 1868, Francis' St John's nursery was already an established business and operated on a much larger scale than Henry's central premises allowed, although his success suggests that there was enough of a market to support multiple ornamental plant suppliers. This means that, even in Garrison period Whanganui, where the threat of raids and property destruction was omnipresent, many settlers were planning and creating purely or partly ornamental gardens.

Garden and landscape design follows fashions closely in a similar way to ceramic decoration styles. In Britain during the early nineteenth century Chinese themed gardens were in vogue (Beattie 2013: 243), with some wealthy landowners constructing large pagoda follies. Many of the early Whanganui settlers, particularly those with horticultural and landscaping backgrounds such as the Williamsons, emigrated from Britain during this period and would have been familiar with this garden aesthetic. In addition, the depiction of oriental landscapes made its way into pictorial and decorative traditions, appearing on wallpapers, fabrics, furniture, and, in a particularly important way, everyday ceramics (Samford 1997). The settlers, then, brought with them physical copies of a British interpretation of a Chinese garden in the form of their tableware, large proportions of which bore one particular *chinoiserie* pattern: Willow.

The Willow pattern (Figure 102) was first introduced by Staffordshire potter Thomas Minton in 1780 in response to demand by the masses for Chinese style crockery (Watney 1973: 121; Portonava 2008: 5). These ceramics were one of the first products

to be mass-marketed, with Minton fabricating a faux-Chinese legend to lend an air of authenticity and exoticism to the design (O'Hara: 1993).

By the time the Williamsons came to live at TS192 Willow pattern crockery was well established as utilitarian ware. Most of the Williamson Willow vessels are heavily marked with cutlery marks, chips, storage and display wear, which act as physical reminders of their heavy use by the family (Griffiths 1978: 68). Willow ceramics were not the ones pulled out to impress guests and yet almost every family owned some. This pattern was the second most popular UGTP design overall in the VRC assemblage, accounting for 12% of the UGTP vessels, beaten only by Asiatic Pheasants at 13%, and was the dominant pattern in the Garrison period ceramic assemblage, accounting for 22% of the UGTP and 14% of the total vessels (Figure 103). Although the pattern's dominance of the UGTP market diminished significantly in the following period it never slipped below being the second most common motif which is testament to its popularity. These were the plates and serving dishes used on a daily basis for family meals by both working and middle class households. Their decoration meant that even though they were in essence very utilitarian they were still ornamental enough to earn a place on the sideboard or shelf where they could be seen rather than stacked away in a pile, and their ubiquitous nature meant that matching replacements were easy to access if required, both factors of which aided the pattern's popularity. The distinctive blue and white design was thus inescapable in Garrison period Whanganui, whether in a house or retail premise where replacement Willow plates were sold. It is likely that most residents could have, if pressed, described the scene in reasonable detail, including the various trees and bushes. It is also possible that, if asked to picture a



Figure 102. Thomas Fell & Co 'Willow' ashette from F700

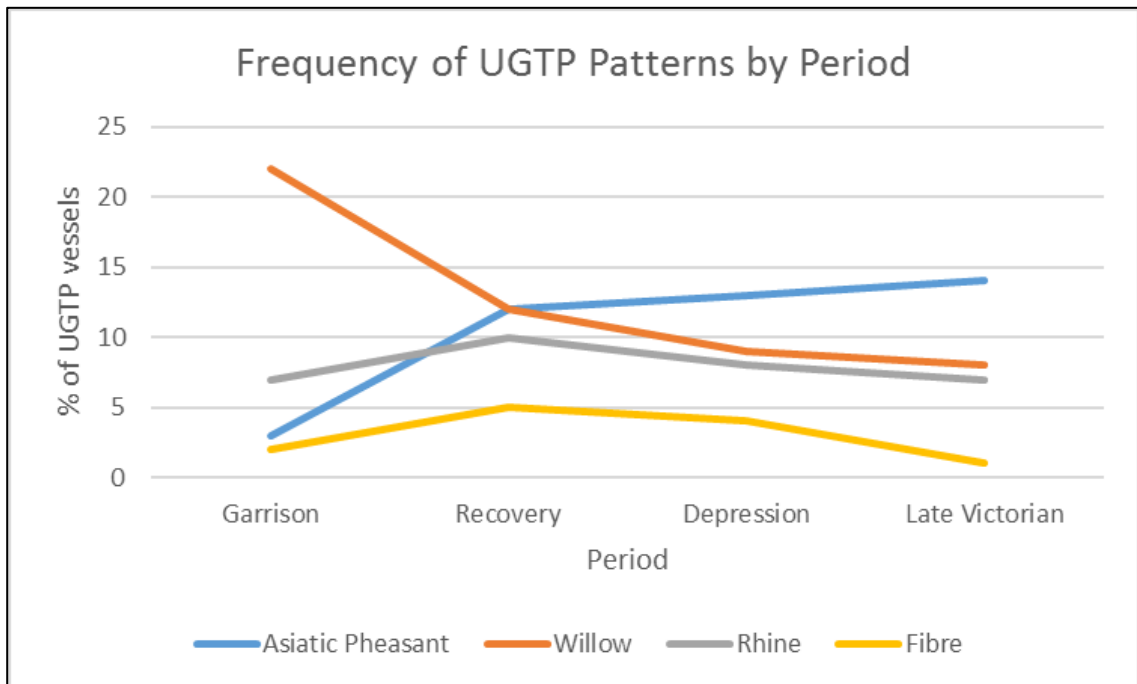


Figure 103. Graph showing the frequency of the four most common UGTP patterns found at the VRC site by period

garden, the Willow scene would have been one of the first images arising in their minds. After all, they had this particular garden in front of them for a period of time most days while they ate their meals, and the earliest settlers in Whanganui had few physical formal gardens for reference.

The Willow pattern and its garden's omnipresence in colonial Whanganui brings up an interesting question regarding whether settlers were influenced in their choice of garden plants by such archetypal imagery. One way to investigate this is to examine the plants being sold by seed retailers such as Henry Williamson. Henry Williamson's longest running newspaper advertisement, first appearing in July 1868, lists the same range of garden plants available for purchase at the seed warehouse: "silver and black wattle, blue gum, osage orange, weeping cypress, magnolia, acuminate [banana], abies, frazerii [both types of fir] etc." (e.g. *Wanganui Herald* 16/7/1868, page 2).

Only two of the trees that make up the Willow garden have been specifically identified, and even then their stylised nature has made these identifications contentious. The Willow tree in the centre of the image over-hanging the bridge more closely resembles a Buddleia tree in some examples of the pattern and a smaller tree to the extreme right of the design has been tentatively identified as either an apple or orange tree (Portanova 2008: 7). Most of the stylistic attributes of these trees are a result of the limitations of early UGTP methods rather than attempts to replicate specific plants, for example the pale trunks and simplified way in which most of the foliage is depicted. Despite this, every one of the plants listed in Williamson's advertisement except the acuminate (banana) could be substituted for one of the Willow pattern trees.

Even though there is no mention of actual willow trees in the advertisement, the drooping foliage of the titular tree can be replicated by the branches of the weeping cypress (*Cupressus nootkatensis*) (Figure 104). This smaller tree is also a much more sensible option for an urban ornamental garden where space is limited, as willow trees are fast growing and their roots have a tendency to undermine structures such as houses. Willow trees were, however, planted in abundance around Whanganui in the nineteenth century, thanks in part to Henry's uncle Francis Williamson. They grow well on the banks of the Whanganui river and even today lend the city a picturesque character.

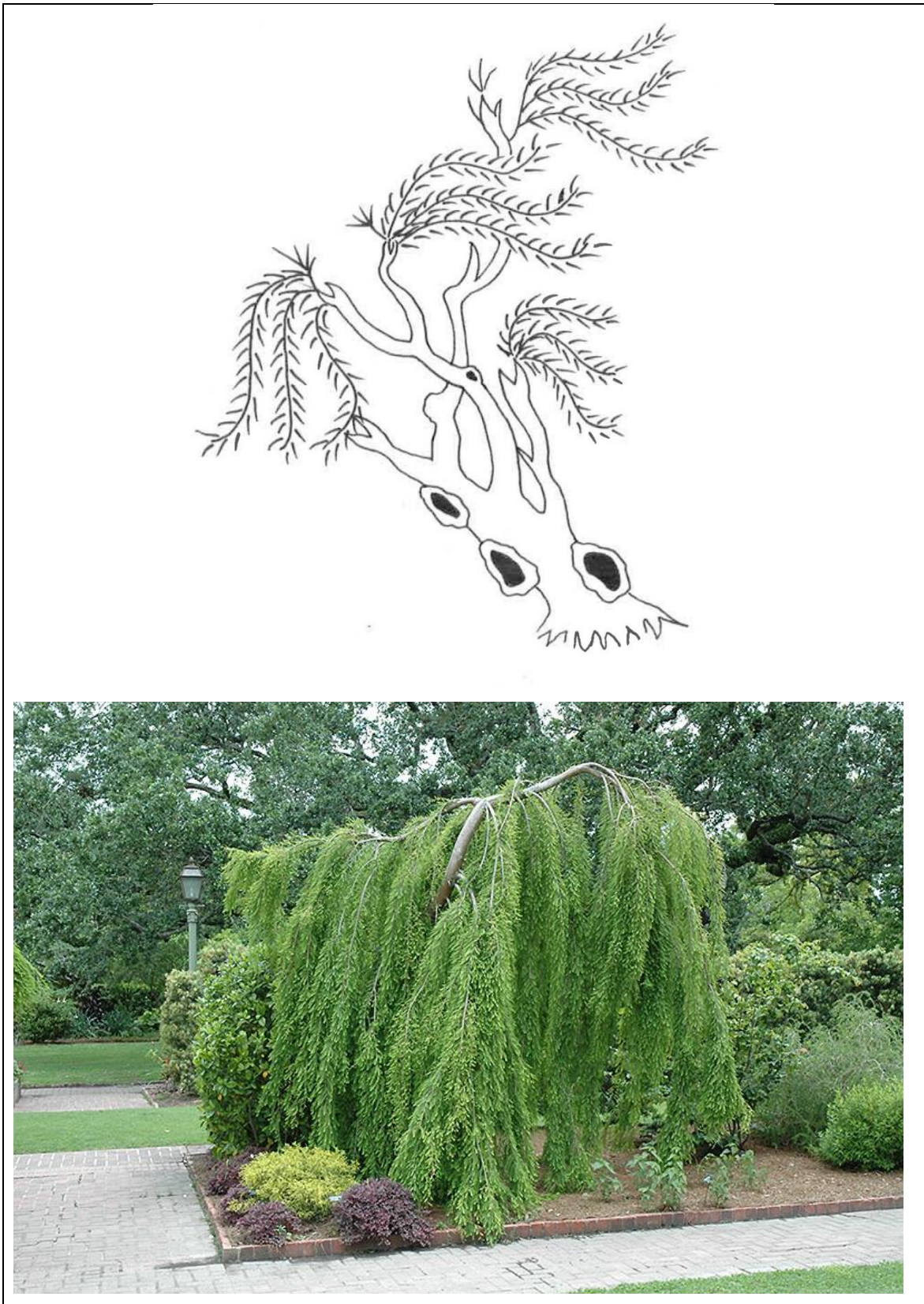


Figure 104. Willow pattern Willow tree (above) compared with a Weeping Cypress (below)

The other named tree, the “apple” or “orange”, lies on the other side of the pagoda from the willow and has distinctive round foliage or fruits which form a tightly bunched rounded triangle profile. Its form is similar to the Osage oranges (*Maclura pomifera*) (Figure 105) sold by Henry and the foliage/fruits resemble the spherical fruits produced by these plants. Of course, the same effect could be achieved by planting an actual apple tree (less so but still close with an orange), however Osage oranges have a number of favourable attributes for the ornamental gardener. Apple and orange trees take considerable time and labour to become established and start producing fruit, and the juvenile trees grow relatively sparse branches and leaves compared to the Willow pattern example. They are also extremely susceptible to pests and if not closely monitored most of an apple crop can be spoiled by birds, insects or unfavourable weather, or stolen by passing scrumpers. Osage oranges do not have these problems. Their foliage and branches are fast growing and tightly packed, even on young trees, and they lend themselves well to being pruned or trained into particular shapes. They also produce regular crops of spherical green fruits which loosely resemble oranges that nothing eats (*Lyttelton Times* 28/5/1853, page 5), meaning that each year the tree will maintain its globular bounty while nearby fruit trees are losing theirs. This is beneficial for those gardeners who are interested in aesthetics over function.

Behind the pagoda is the largest tree in the Willow scene. It has a pale trunk and small bunches of dark foliage along the branches and strongly resembles the blue gum (*Eucalyptus globulus*) listed by Henry (Figure 106). These trees are fast growing and require a lot of space so would have been of little interest to urban gardeners, but those with rural properties may have been able to house them.

On the left of the pagoda, close to the shore is a smaller tree covered in very small circular foliage. While these are probably intended to represent leaves they resemble the fluffy flowers of a wattle tree which form in tight bunches (Figure 107). Henry advertises two varieties of these trees (silver and black) which are small enough to incorporate into an urban garden but would be equally at home on a larger rural property.

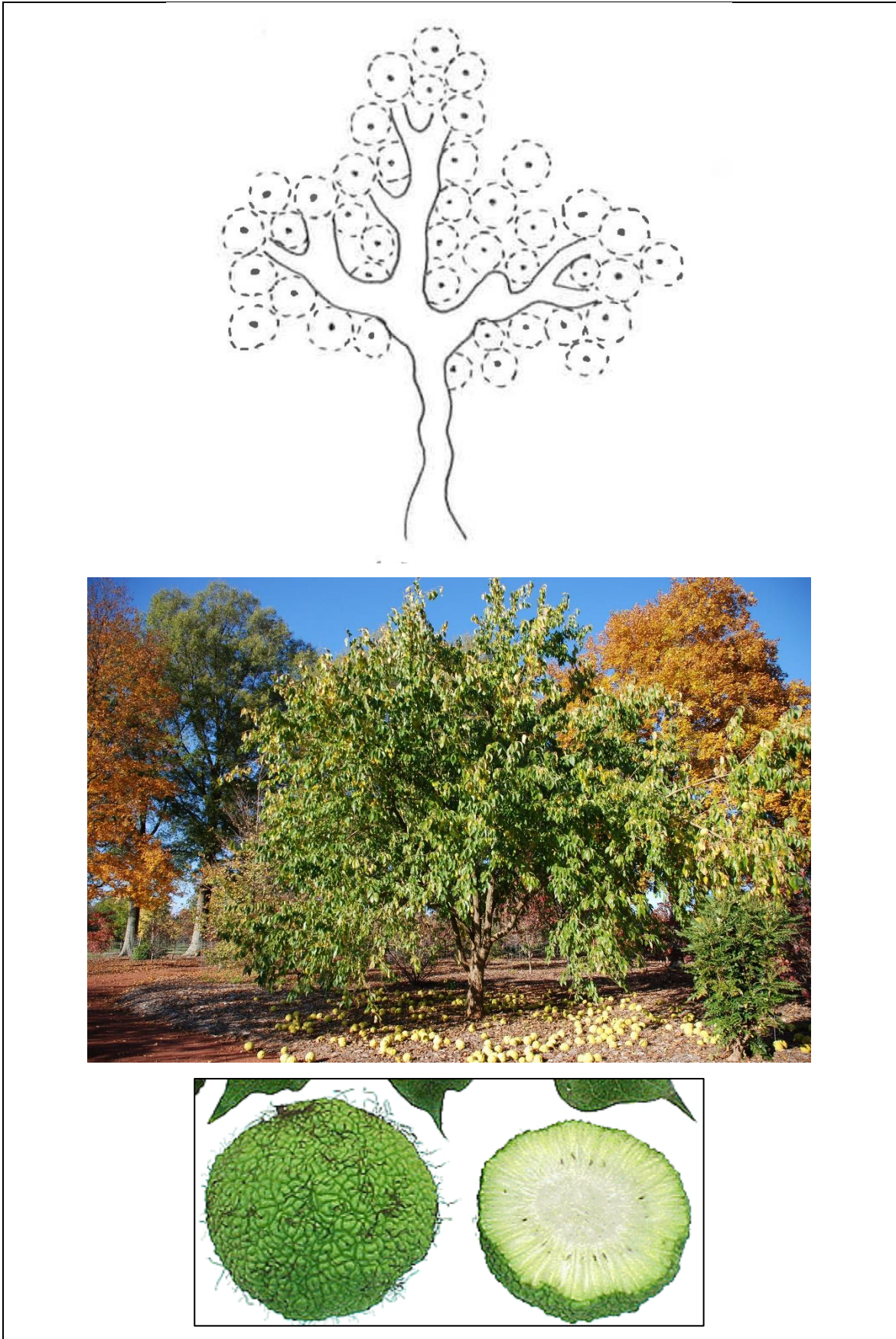


Figure 105. Willow pattern "apple" tree compared with an Osage Orange tree (centre) (image: Hugh Conlon) and fruit (bottom)

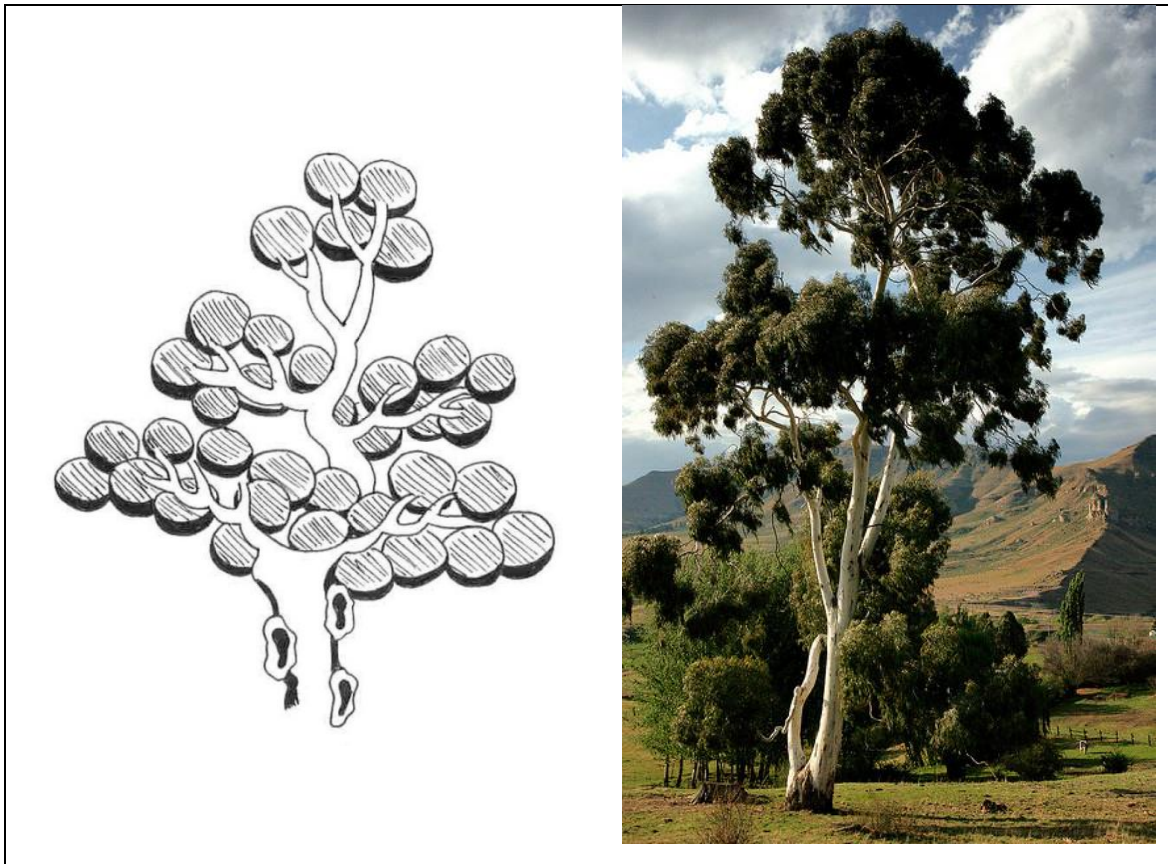


Figure 106. Large Willow pattern tree (left) compared with a Eucalyptus or Blue Gum (right)

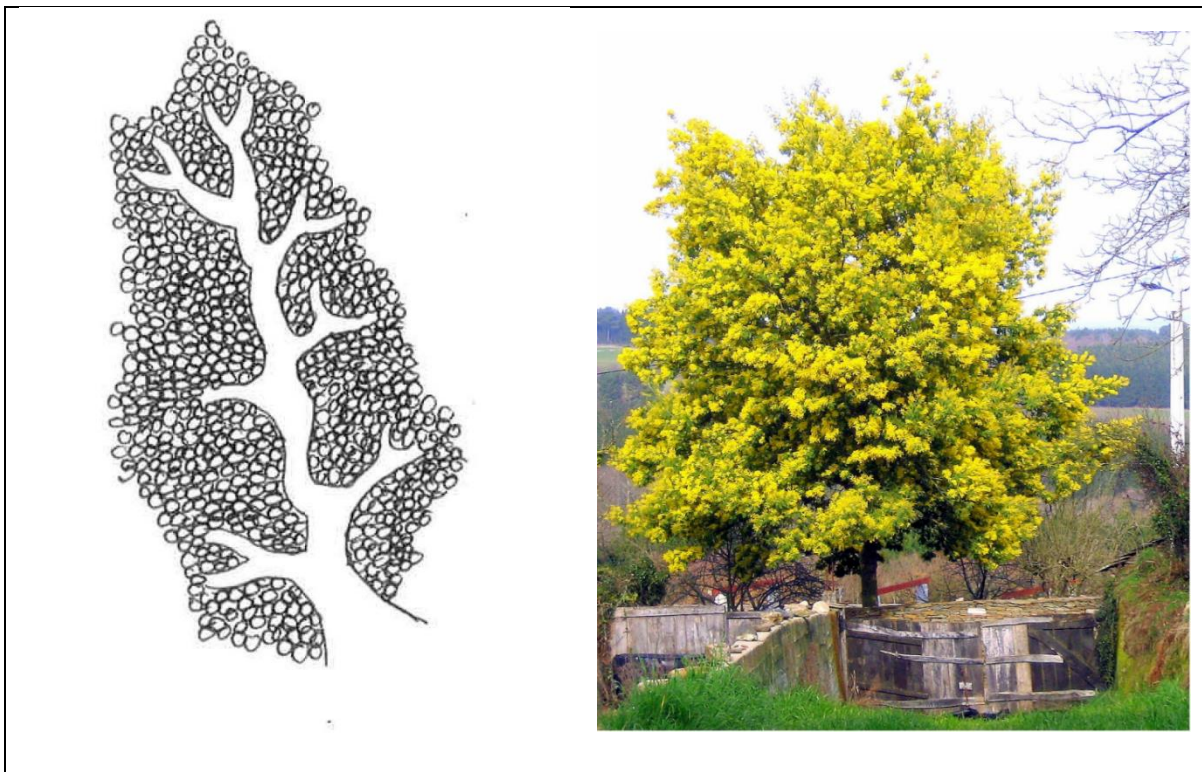


Figure 107. Small-leaved Willow pattern tree (left) compared with a Wattle tree (right)

To the far left of the palace garden is a tree which is not present in all examples of the pattern but which immediately catches the eye when it is. It has a pale, undulating trunk and branches which instead of leaves are covered in large flower-like shapes. Even without referring to Henry's advertised plant list this tree can be compared to a magnolia (Figure 108). These trees flower in the early spring before their leaves grow and their blooms can be very large. Over 200 varieties of magnolia exist and while Henry does not specify which types he has for sale it is likely he had versions compact enough for private gardens.

The background of most Willow pattern variations feature multiple triangular trees which are reminiscent of the tightly packed branches of the firs offered by Williamson. Several of these trees also display a two-tone effect, with darker centres and paler outer leaves. While in the print itself this is a vehicle for showing depth with the limited colour scheme, Williamson advertises a small type of fir tree ("frazerii" or fraseri) which grows in this way. The foliage close to the centre of this small fir is green while the extremities are a striking red colour. Even its overall structured form resembles the variegated, low-lying bush at the base of the "apple tree" in nearly every Willow variation (Figure 109).

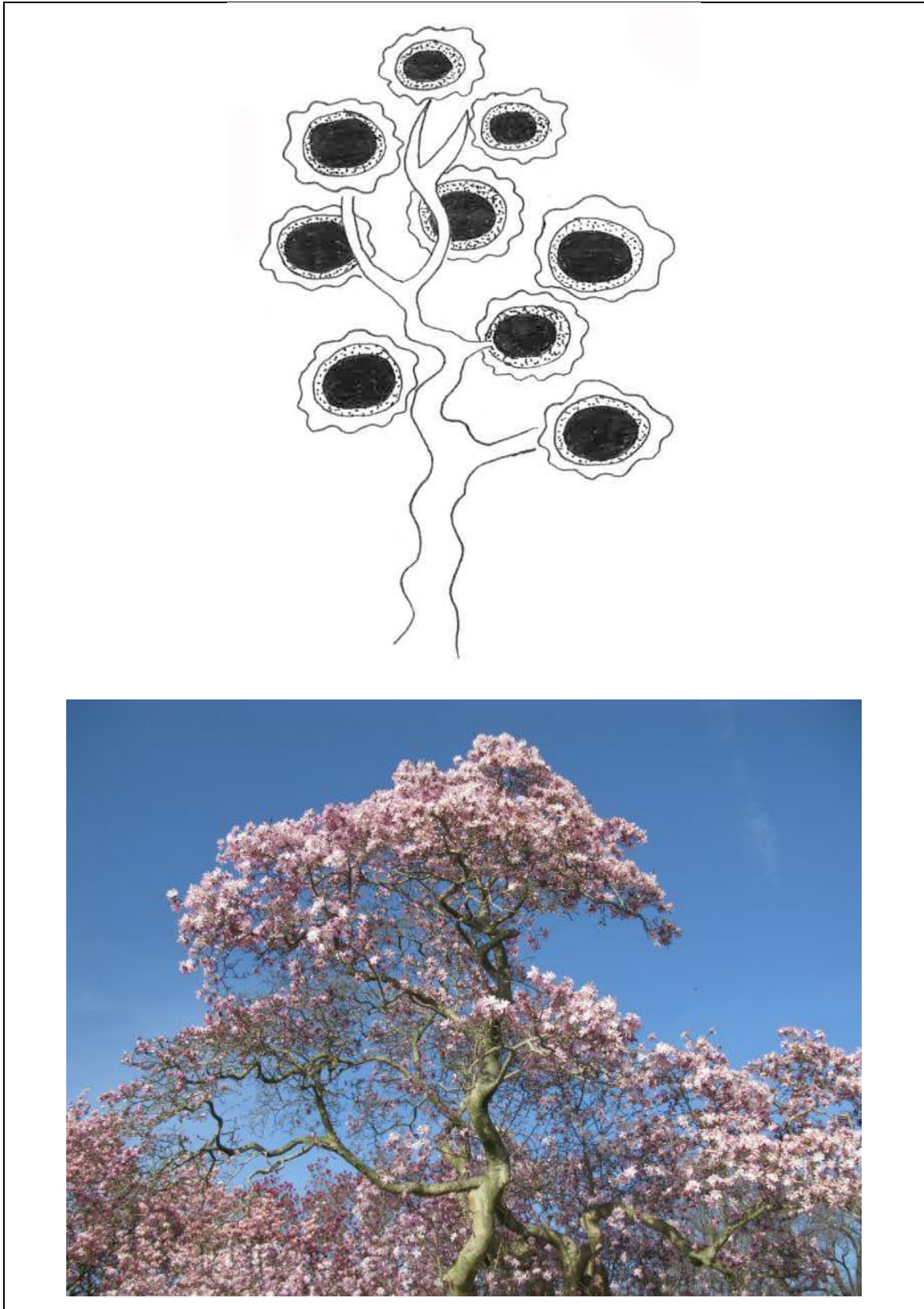


Figure 108. Flowering Willow pattern tree (above) compared with a Magnolia (below)



Figure 109. Background Willow pattern trees (above) compared to a Fir (below)

An additional and important note to consider about all of Williamson's plants is their origins. None are native to Britain or China (with the exception of some varieties of magnolia) and yet they are clearly integral parts of a British gardening tradition which valued a Chinese aesthetic. The blue gum and wattle trees are both native to Australia, the weeping cypress and Osage orange to small areas of North America, the firs to northern continental Europe and magnolias to parts of North America or South-east Asia, depending on the species. All of these places were important parts of the British

colonial trade network during the late-eighteenth and early-nineteenth century (Beattie 2013: 241). This behaviour is characteristic of British colonial culture in that they would take bits and pieces from areas newly absorbed by the Empire and appropriate them into a new British aesthetic. This in turn would be aspired to by colonists in other areas, morphing and evolving as it was picked up by people with access to different resources and materials, in this case plants. Although there is no mention of it in any of Henry's advertisements, native New Zealand trees and plants were part of this process and some, such as cabbage trees, make regular appearances in historical photographs of public and private gardens, both in New Zealand and back in Britain. Environmental historians have identified clear links between colonial New Zealand garden design and transculturation between New Zealand and Japan (Beattie, Heinze and Adam 2008) and China (Beattie 2011; Campbell 2011), and archaeologists have added to the discussion with limited investigations of Chinese market gardening (for example Adamson and Bader 2013). These scholars, however, have focused on direct trade links with these countries as explanations for transmission of ideas, plants and aesthetics and have not looked to material culture and archetypal depictions of gardens as potential inspirations.

Considering these similarities, it would then be possible for an 1860s resident of Whanganui to purchase all the plants needed to recreate their own Willow garden in a single visit to Henry Williamson's Victoria Avenue seed warehouse. This does not mean that this was the explicit reason for him advertising this specific range of plants, or that people visited his shop with this intention, but it does show that garden aesthetics were similar to those of ceramic decoration at this time. In fact, a brief review of contemporary photographs showing private Whanganui gardens demonstrates that residents were not turning their front gardens into replica Chinese palace grounds. None of the plants mentioned above are visible (Figures 110-112). The scenes instead more closely resemble British cottage gardens. One still has a significant portion dedicated to food production with only the bordering sections having ornamental plants and the others are distinctively unstructured. Part of that is almost certainly the scale; it would be near impossible to get the effect of an oriental palace grounds in a small cottage garden, and the resources required to maintain such a landscape would be outside the reach of most residents.



Figure 110. Typical Whanganui private ornamental garden, circa 1860s (Alexander Turnbull Library, ref: 1/1-000181-G)



Figure 111. Cottage garden, Whanganui circa 1860s-1970s (Alexander Turnbull Library, ref: 1/1-000162-G)



Figure 112. Combined vegetable and ornamental garden, Whanganui circa 1860s-1870s (Alexander Turnbull Library, ref: 1/4-050245-G)

If we extend the scale to that of public gardens, however, the situation changes. Almost next door to Francis Williamson's St Johns Nursery lay Virginia Lake. This body of water was earmarked for a town water supply early on in the town's development (*Wanganui Herald* 15/10/1867, page 2) although this process was not completed until the mid-1870s. By the end of the decade concerns were growing over potential pollution of the lake from domestic and agricultural activity and in 1880 the council first proposed designating the surrounding area as a public garden. The issue was regularly raised at council meetings until finally, in 1904, they decided to take things further and invited the general public to submit designs for the new gardens (Smart and Bates 1972: 271). This is significant as it means the layout and general appearance of the Virginia Lake reserve was not the work of a hired landscaper but of a Whanganui citizen (or citizens) and so the design is reflective of what the town residents thought a public garden should look like. In 1914 the Lake gardens were officially opened and proved exceedingly popular. A photograph of the gardens taken shortly after they were opened shows undeniable similarities to the Willow pattern, including the central drooping tree and bridge over a body of water (Figure 113 and as it looks today Figure

114). It must be remembered that this was 45 years after Henry was advertising a list of Willow aesthetic plants, and almost 20 years after his death. This suggests that Henry was tapping into the social consciousness of Whanganui residents and gardeners, and highlights the lasting legacy of the *chinoiserie* garden aesthetic.



Figure 113. Virginia Lake Garden, early twentieth century (Hocken Library, ref: c/nE6207/36)



Figure 114. Virginia Lake Garden, winter 2015 (Ian Smith)

The designer of the Virginia Lake garden was unable to be identified but the pervasiveness of the Willow pattern means it was someone who had grown up using the plates, seeing the pattern on a daily basis and probably hearing the story that went with it. Their design for this public place reflected the way they thought a garden should look, and the fact that this design was accepted and applauded by the general population suggests that most Whanganui residents agreed. The fact that this landscape seems to at least pay homage to the Willow scene suggests that this pattern and the artefacts it adorned had an active role in shaping the way in which people interacted with the world around them and in some ways acted as an archetypal garden, even though it never existed outside of a two-dimensional UGTP design.

In 1873 Henry advertised his, by now established and successful, seed and ironmongery business for sale (*Wellington Independent* 13/12/1873, page 4). Six months later he was asking for tenders to construct 160 chains of ditch and bank fence at a newly acquired farm (Spring Farm) in Kakaramea (*Wanganui Herald* 8/7/1873, page 3), a small settlement in the neighbouring Taranaki province. From then on he spent more and more time at Spring Farm and less in town. He quickly became a prominent member of Kakaramea and Patea society; in 1874 he was one of the founding members of the Patea, Wairoa and Hawera Agricultural and Pastoral Association (*Wanganui Chronicle* 29/7/1874, page 2), a cause to which he was of great value to with his horticultural and pastoral knowledge. Williamson's involvement in these associations in addition to his seed warehouse shows that he had a vested interest in developing horticultural and pastoral activities in the area and was proactive in pushing this agenda. This behaviour reflects the concept of "improvement" which underpinned much of Western society during the modern period and was a major motivation for the formation of planned settlements in the colonies such as Whanganui (Tarlow 2007; Fahey 2011: 97; Adamson 2013: 17). His brief stint on the Whanganui Town Board also acted as valuable experience for this new role.

The same year (1874) saw Henry enter into a partnership with William Douglas Shaw, an ironmonger, who took over the management of the Victoria Avenue business. This enabled him to focus on improving Spring Farm, including building a new house on the land. He and Margery welcomed another son in December of this year, but he died in infancy. There is no mention of a name anywhere and his next son, William Herbert, is

later described as his “second surviving” son (*Wanganui Chronicle* 24/7/1916, page 4). The birth is recorded as happening at Spring Farm (*Wanganui Herald* 11/12/1874, page 2) so it is clear that the family were in the process of gradually shifting to the Kakaramea property by this point. At this time Kakaramea had a population of 49 which was a major contrast to the bustling town of Whanganui, home to over 2,000 people (Statistics New Zealand 2013).

Acting the Part

The Williamson family interacted with other members of the Whanganui community on a daily basis during their time occupying their Victoria Avenue property, and some of these interactions can be thought of as social rituals which acted as arenas for displaying an individual’s status and ideology. Many were also strongly related to, if not driven by, particular types of material culture. The most obvious is entertaining guests over tea which was a hugely important part of middle class Victorian behaviour, particularly for women (di Zerega Wall 1991; Hayes 2011), but other rituals include the consumption of social drugs and religious activities.

The Williamson teaware assemblage is too small to draw any significant conclusions so the Garrison period teaware assemblages (from F165, F313, F334, F435/KJ5 and F448) were analysed together. This did not have a significant effect on the interpretation as all five deposits dating from this period were incredibly similar and all reflect the social environment in which the Williamsons existed and participated. With the exception of the earliest (F435/KJ5), all the deposits included a mixture of older and new styles. Particularly early vessels included two London shaped blue UGTP whiteware cups (Figure 115), a Pearlware blue UGTP slop or sugar bowl and two brown UGTP Norman whiteware side plates (Figure 116). These vessels were probably manufactured decades before European settlers arrived at the site, meaning they were brought over from Britain rather than purchased in Whanganui.

Several of the earliest ceramic vessels are decorated in a style which deliberately emulated Chinese porcelain while others bear gothic revival motifs. British society at this time was preoccupied with the idea of “escaping” the evils of contemporary society, whether by emigrating to a new colony or looking to past epochs and civilisations viewed as morally superior. China was seen as an ancient and wise civilisation (although Chinese immigrants were not always viewed as positively),



Figure 115. The base and handles from two whiteware London style tea cups found in a Garrison period deposit (F435/KJ5)



Figure 116. "Norman" pattern whiteware plate from F313

especially with regards to porcelain manufacture which had captivated British minds for centuries (Kara and Stevens 2002; Portonova 2008: 4). Gothic architecture and design characterised the Renaissance period of European history, and this was viewed as a time of moral purity and intellectual advancement with strong ties to the church (Brighton 2001: 23). As the nineteenth century went on, however, this mind-set changed significantly, setting its sights on an exciting new future rather than the safe pages of history. This is evident in the newer items included in the Williamson teaware assemblage. A sprigged Imitation Jasper bowl, Imitation Jasper cup and gilt Tea Leaf cup are typical of teaware favoured in the mid-nineteenth century and are far removed from the earlier UGTP designs with their expanses of unused white space and simple motifs. Interestingly, these two styles were manufactured in Britain but almost exclusively as export ware for the Americas, Australia, New Zealand and other colonies as they were unpopular within the domestic market (Godden 1988: 164). In the colonies they enjoyed huge popularity and are common sights in historical archaeological deposits. This perhaps reflects the fact that most colonists and settlers were the people who actively chose to leave Britain and were determined to distance themselves from the fashions and behaviours of the homeland. Once they undertook the choice to physically emigrate from Britain their concept of what constituted “Britishness” began to morph into an artificially homogenous identity (Marshall 1996: 320), and this in turn acted as a model for the new settlers to compare their own developing identity around (Lawrence 2003a: 6). According to Smith (2008: 373) the 1860s saw the emergence of the “Kiwi” identity and so this change in teaware styles could potentially be a reflection of the beginning of the Williamson family’s transformation from Scottish immigrants to New Zealanders.

Social drugs, in this case alcohol and tobacco, were the focal point of many social gatherings and rituals, especially those involving men. The Williamson assemblage contains some evidence for their use but the house on TS189 was clearly not a site of heavy indulgence. Twenty fragments from at least eight clay tobacco pipes are clear evidence that someone in the household partook in tobacco, although this is not the deposit of a heavy smoker (Gojak and Stuart 1999). The estimated life span of a clay smoking pipe is between two days and two weeks so an assemblage of eight does not

suggest an established habit. Three of the pipes bear a stamp which reads: "140/W. White Glasgow/The Meerschaum," two have "T W & CO/EDINBURGH" embossed and another has "...& CO/EDINBURGH" incised, which provide a country of origin (Scotland) but unfortunately are of limited use for dating as both complete marks were used for a long period of time (Brassey 1991). Meerschaum pipes were common in Whanganui and were regularly given as prizes for a variety of contests. Seventh place in rifle shooting (*Wanganui Herald* 4/11/1875, page 3), winning the 150 yard Māori foot race (*Wanganui Herald* 23/12/1873, page 3), or getting the highest score for the week at Frank's American Bowling Saloon (*Chronicle* 23/3/1875, page 3) would mean you went home with a Meerschaum. The stem of one pipe is moulded with a floral motif, which is in keeping with Henry's passion for horticulture. It is interesting that most of the Williamson clay pipes could be explained as prizes or gifts, since there are none of the more generic, unmarked types that are commonly found in other historical sites. This suggests that Henry was not usually a smoker, but still had the necessary accoutrements on hand in case they were required for social occasions.

The glass bottle assemblage tells a similar story. Only two definite alcohol bottles were identified: a cognac (Figure 117) and generic spirit bottle. A further sixteen were generic bottles (dark olive round cross-sectioned and Bordeaux bottles) which may have contained alcohol but could also have contained non-alcoholic drinks. Five torpedo bottles show that soda was being consumed, probably as much as, if not more than, alcohol. Four Bristol-glazed stoneware porter bottles were also found in F313 but are not included in the Williamson assemblage as it was not possible to confidently identify them as domestic rather than commercial. The heavy duty nature of these stoneware bottles made them prime candidates for being re-used once the initial porter contents had been consumed. Although they are slightly different in form from the traditional ginger beer bottles commonly made of this material, it is possible that they were used for home-brewing this popular beverage.

As previously stated, the Williamsons were only living here part time towards the end of their occupation of the site, and the young nature of the family would suggest that Henry, and possibly Margery to a lesser degree, were the only ones who drank alcohol with any regularity. The children may have been given small amounts on occasion as alcohol was viewed as medicinal at least until the turn of the twentieth century. It was

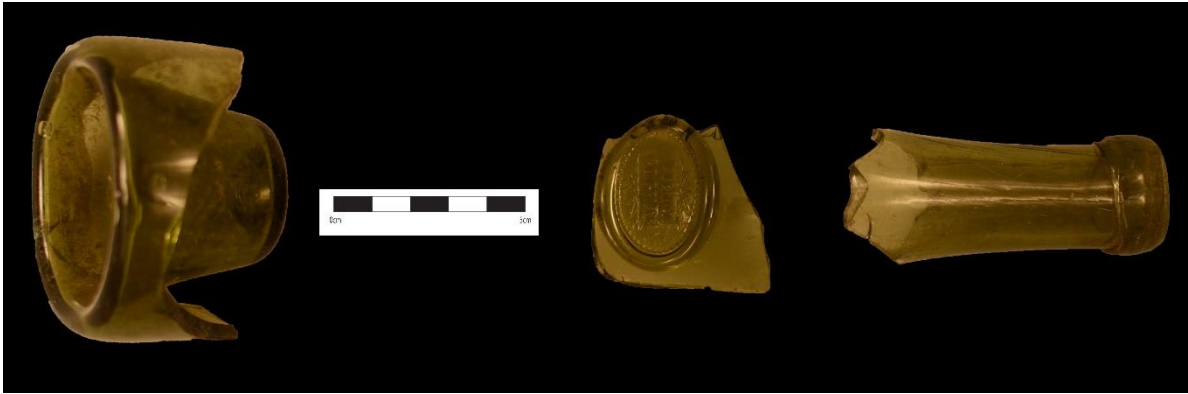


Figure 117. Cognac bottle with prunt found in F165

thought to act as a stimulant as well as be nutritional and beneficial for a wide range of complaints (Eldred-Grigg 1984: 60). Lady Barker (1871: 266) includes a piece highlighting the part that alcohol played in medicine during the period in her story of a New Zealand Christmas, describing the protagonist's relief upon remembering she had "a medicine bottle full of brandy" with which she could restore her lifeless pet duck which had been attacked by a dog. She describes administering "such a tremendous dose of the stimulant" that Betty (the duck) became noticeably drunk. This would suggest that the usual amount given for medicinal purposes would generally be much smaller than that required to produce any intoxicating effects.

Even taking these factors into account, as well as the possibility that at least some of these bottles contained non-alcoholic contents, the Williamson alcohol bottle assemblage is not one of a heavy drinker. Although Whanganui in the mid to late-nineteenth century, as with most New Zealand centres at that time, was notorious for drunkenness, there was also a vocal portion of the community who viewed intoxicating beverages in an extremely negative light. A Temperance Association was established by members of the Wanganui Band of Hope in October 1867 at a meeting which saw the Odd Fellow's Hall "nearly full" of supporters (*Wanganui Herald* 8/10/1867, page 2). While neither Henry or Margery appear to have been avid supporters of the association (which called for total abstinence from any alcoholic drinks), they would have been aware of the arguments against intoxication and it is possible this had something to do with their apparently moderate tastes. Eldred-Grigg (1984: 78) suggests that New Zealand was becoming more temperate overall by the 1870s, possibly partly influenced by these more extreme movements. It is also possible, of course, that the lack of alcohol bottles in this domestic deposit resulted from the

members of the household, or more specifically Henry, doing their drinking at places outside of the home. A review of the contemporary newspapers reveals that there were at least ten hotels operating in central Whanganui at the time this feature was filled in, so he had plenty of choices if he wished to escape family life for an evening, especially due to the young ages of his two children during their time at TS189. The closest establishment was the Victoria Hotel just across Victoria Avenue from the Williamson home. Co-incidentally, the Victoria Hotel would later become the Chavannes Hotel after it was purchased by Charles Huddell Chavannes (occupier of part of TS191) in 1879. Henry's involvement in numerous committees and boards would have occupied many of his evenings and were likely located at establishments such as these.

When considered together, the alcohol bottles and clay tobacco pipes paint a picture of Henry Williamson as a man of moderation, at home at least. This suggests that the roles of alcohol and tobacco were limited in the Williamson home to social interactions and rituals rather than being consumed on a daily basis. This interpretation has limitations which need to be considered, however. The Garrison period was early in the history of Whanganui so supply lines had only had a short time to become established. To add to this, the events which characterised the period caused regular disruptions to these lines and limited access to many products and resources. Of significant importance for understanding archaeological assemblages dating to this period is the access of the Whanganui population to bottles. New Zealand did not produce its own glass bottles until the twentieth century so prior to that manufacturers of bottled goods relied solely on imported empty bottles from overseas for their containers. This process was expensive and meant that most beverage companies jealously guarded their bottles, usually leasing them to their customers and offering a partial refund for their return so they could be re-filled. This means that a glass bottle would potentially only end up entering the archaeological record after multiple rounds of use. Consequently, the number of glass bottles in a deposit, especially during the earlier periods, is not necessarily representative of the amounts being consumed by a household.

There are also aspects of intra- and inter-family interactions recorded in the historical record that are invisible in the artefact assemblage but which are still important to note. Religion clearly played a major role in both Henry and Margery's lives, Henry was

an active member of the Presbyterian Church and Margery was the son of a Presbyterian minister, and they undoubtedly passed this on to their children. None of the artefacts deposited by the family relate directly to this part of their lives, however. Presbyterianism is characterised by a dislike for extravagance which extends to a lack of physical embodiments of religious belief with the exception of a bible and possibly a private confessional diary (McKinlay and Mutch 2015: 244), neither of which would usually appear in the archaeological record. The Presbyterian relationship with God was almost entirely an individual and internal one, but one which still influenced behaviour and worldviews.

In 1877 Henry used some of the capital he had accrued to secure land, along with Andrew Hunter and Rev. John Paterson (his father-in-law), for a new Presbyterian church and manse in Kakaramea (*Whanganui Chronicle* 26/2/1877, page 2). This long standing connection with the Paterson family (including his marriage to Margery) also highlights the tight-knit nature of the early settler community in Whanganui. The trend is further evident in many primary sources from around New Zealand, especially contemporary letters, several collections of which have been subsequently compiled and published (eg. Drummond 1960; Henning 2012; McIlrath 2009). Many of the families knew each other before, or met during, their journey to New Zealand, and they would often take plots of land beside or near to each other upon arrival. This is also a common theme in early New Zealand literature, with several stories and novels centring on such groups of families (eg. Campbell 1864; Kingston 1872).

Social interactions and rituals such as those referred to above were important for networking and, particularly in a middle class context, for defining and maintaining a household or individual's place in society. This would have been a paramount concern for many Whanganui residents during the formative years of the settlement as they could not necessarily rely on the established social networks and relationships they had been accustomed to back in Britain. For some this created a feeling of vulnerability and isolation but for others it could have been seen as an opportunity for upwards social mobility that was otherwise out of their reach. The middle class obsession with social climbing made Whanganui a paradise for some, and attractive enough for them to ignore the risks posed by settling in such a tumultuous region.

Henry Williamson last appears as occupier in the Town Section 189 rates records in 1874. Their new home at Spring Farm was complete by this point, although Henry still owned part of Town Section 189 for at least two years after he moved out. There is a small gap in the records but sometime between 1876 and 1879 he sold the property to William D. Shaw. It is probable that this coincided with the Williamson and Shaw partnership dissolving in September 1876 (*Herald* 5/9/1876, page 3), after which Shaw took complete control of the seed store and ironmongery business. Henry was then able to turn his full attention to Spring Farm where he grew crops and raised sheep, both of which regularly won awards at local Agricultural and Pastoral society shows (eg. *Patea Mail* 24/3/1877; page 2).

After moving to Kakaramea Henry Williamson's health began to deteriorate. His obituary states he was struck down with a "mental malady," which appears to have actually been epilepsy. In an attempt to seek treatment, he returned to Scotland in 1882 but died on the 24th November 1885, aged just 45, without returning to New Zealand (*Wanganui Herald* 12/1/1886, page 2), leaving an estate valued at £6,589 (*Herald* 1/11/1886, page 2). For that month, Henry Williamson's estate was the third largest in the colony, surpassed only by Mr Robert Gillies of Dunedin with £50,429 and Sarah Jane White of Auckland with £8,009 (*Auckland Star* 26/10/1886, page 3). His love of horticulture lived on through his widow and children: Margery and Alexander Williamson were still winning prizes for their produce and flowers at shows as late as the 1890s.

Henry Williamson perfectly embodies the pioneering spirit of Whanganui's earliest civilian settlers, from his dogged determination to remain on his rural property until forced to retreat to the centre of town with his young family to his obsession with shaping and 'improving' the landscape according to prevailing cultural ideals for the benefit of future generations. His story, as told through the combination of the archaeological and historical records, reveals a plethora of details about everyday life in the new settlement, in particular how the civilian population was affected by the military presence, the practical challenges faced by the early inhabitants in regards to basic amenities, and the social rituals which held the community together. Within those rituals the beginnings of the transformation from people who identified as British immigrants to New Zealanders are visible, although there is still a strong

reliance on the “homeland” for resources, guidance on ideological concerns and, as shown by Henry’s fateful trip back to Scotland at the end of his life, medical knowledge.

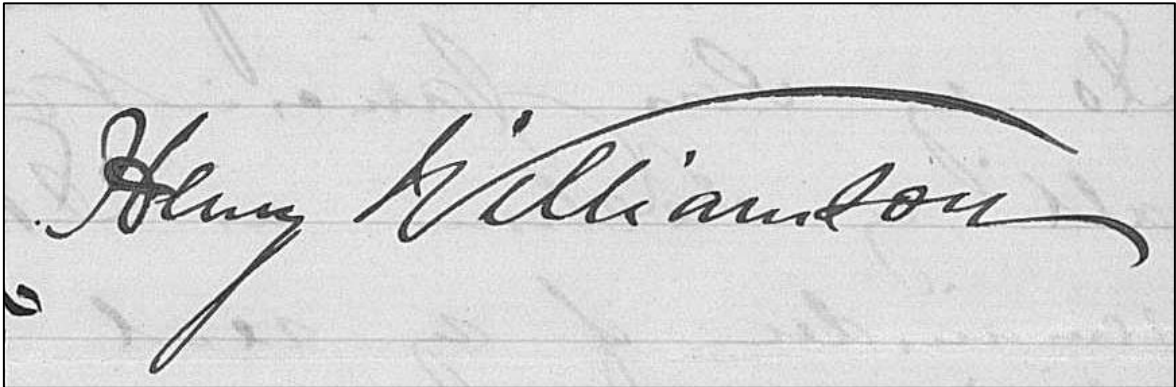
A black and white photograph of a handwritten signature in cursive script. The signature reads "Henry Williamson" and is written on lined paper. The ink is dark, and the handwriting is fluid and elegant. The signature is positioned in the upper left quadrant of the image.

Figure 118. Henry Williamson's signature on his will (FamilySearch 2016)

Chapter 7: The Widow

The Byrnes were an Irish Catholic family who came to Whanganui at least as early as 1851. The original household consisted of Mary Byrne, her husband John and their four children: John, Michael, Patrick and Mary Ann. This household's occupation of the site spans the Garrison, Recovery and Depression periods and is represented by nine artefact deposits found on TS191 (Figure 119) and one on TS190 (KJ10). These features and the artefacts recovered from within them tell a story of high expectations followed by a string of disappointments and poor fortune, and of struggles faced by many residents of Whanganui. On another level they reveal the ways in which changes in the make-up and dynamics of a household impacted on social life and behaviour, the importance of tea in feminine social rituals and, as with the Williamsons, the early signs of a developing colonial and "Kiwi" identity.

No records were found of the Byrnes' original arrival in New Zealand but they were living in Whanganui by 1851. In June of that year Mary Byrne was recorded as travelling to Sydney via Wellington with "two children" (*New Zealander* 25/6/1851, page 2). The purpose of this trip is not recorded but it demonstrates that the household was able to afford a return trans-Tasman voyage. By the time the rates records begin in 1863 John Byrne (senior) is listed as the owner and occupier of TS190 and TS191. By the following year he also owned part of TS189 and claimed 60 acres "adjoining Native Reserve No 3" in Waitotara (30km up the coast from Whanganui) which he had previously been issued under the Naval and Military Settlers Act 1860 (*Wellington Independent* 8/11/1861, page 2; 28/1/1865, page 6). This allotment of land gives a clue as to why the Byrne family ended up in Whanganui. The Act (Anon 1860) entitled retired military or naval servicemen to apply for land grants from the Crown, with the intention of encouraging settlement of particular areas, especially the Whanganui and Taranaki regions (Anon 2009), meaning that John came from a military or naval background. As he was in Whanganui by 1851 he must have come with one of the first battalions, either the 58th or 65th Regiment. The York stockade was used to house married members of the 65th once the rest of the regiment was moved into the larger

Rutland Stockade in the late 1840s, so the Byrnes were probably housed on the Patupuhou sand hill during John senior's service.

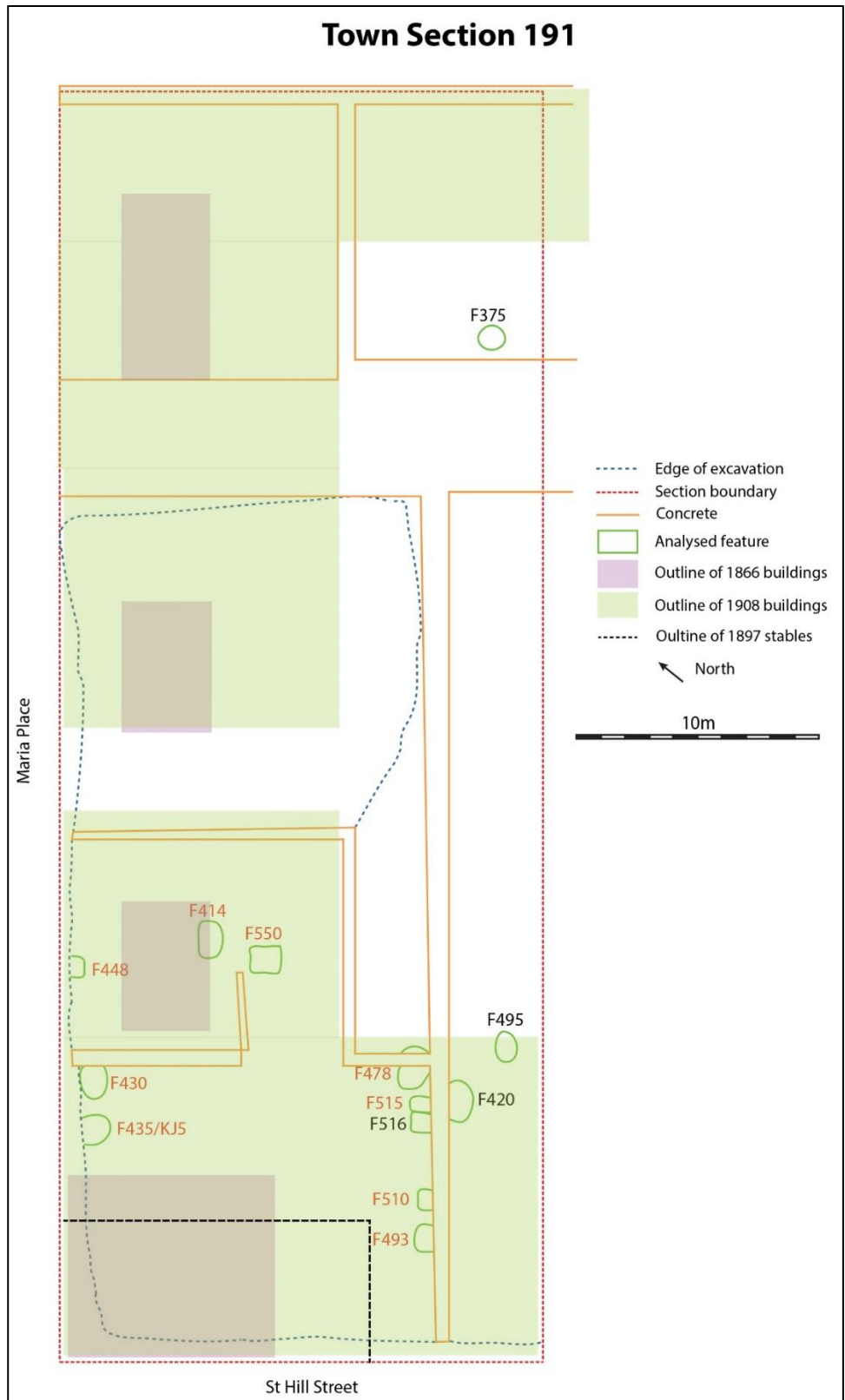


Figure 119. TS191 excavation plan showing deposits associated with Byrne household in red

An optimistic new start

The earliest feature identified at the VRC site during the main 2010 excavations (F435) contained a variety of different military uniform components, some of which were only found in this rubbish pit. The feature appears to be 1850s or early 1860s in date and its location along the Maria Place street front suggests that it predates most of the rest of the occupation on site. An 1855 map of the town (Figure 120) shows that TS191 was not owned or occupied by anyone at this time, but a photograph dated to around 1860 (Figure 121) shows a single cottage lying on the northern end of TS191. By 1863 the rates records identify the owner and occupier of this property as John Byrne, so it is likely that he was responsible for this building. The Patupuhou sand hill on which the York Stockade stood was still encroaching part way up Maria Place at this time so the F435 pit would have been dug at the base of it. Amongst the faunal remains, glass and ceramic fragments were two Albert pattern shako plates which originally adorned 65th regiment light infantry helmets (Figure 122). Both have “65” in the centre with a surrounding wreath made up of laurel and oak branches and a crown on top, which in both cases is present but has been deliberately snapped off as part of the decommissioning process. The reason for deliberately breaking the plates before discarding them remains unclear but was common practice, with examples being found in at least one other New Zealand site (Clough and McFadgen 2009). It is possible that it stopped them falling into civilian or enemy hands who might wear or use them to their advantage somehow, or it may be related to removing any value they might have held, but no concrete explanation was encountered.

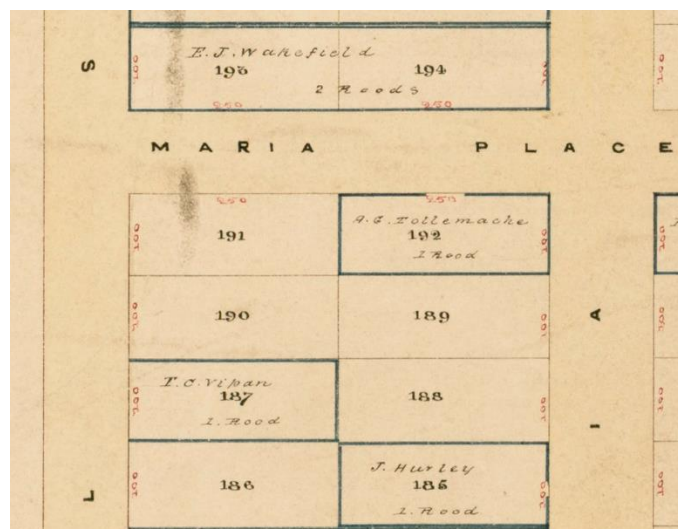


Figure 120. Detail from 1855 map of Whanganui showing VRC site

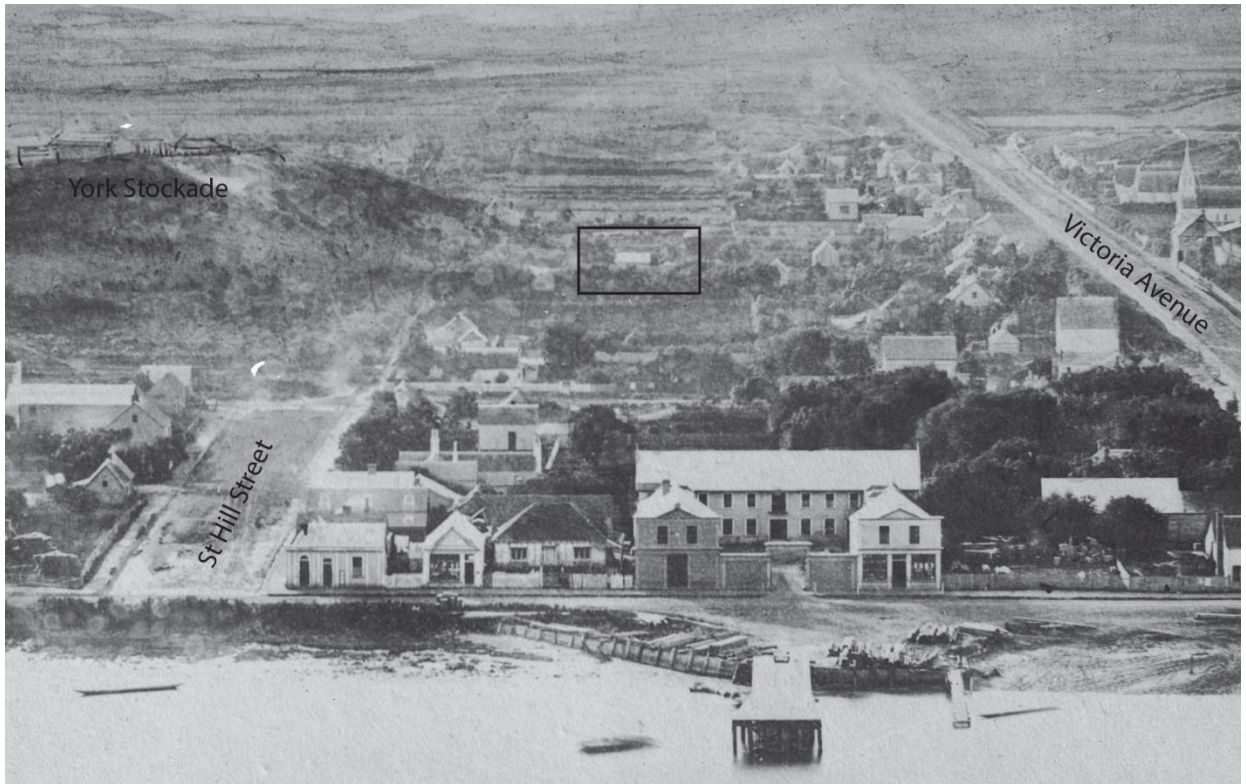


Figure 121. Detail of late 1850s photograph of Whanganui taken from across the river showing cottage on TS191 in black box



Figure 122. 65th Regiment shako hat badges and pewter jacket button (centre) from F435/KJ5

This was not the only dump of out-dated 65th regiment uniform in the vicinity. A feature excavated during the 2014 monitoring phase (KJ10) was roughly located close to the St Hill Street and TS191 corner of TS190 (Jones and Woods 2014) and dated to a similar time as F435. Even though the context and location were not recorded with

the same level of accuracy as in the 2010 excavations, KJ10 can be attributed to John Byrne and family with some confidence. He owned this and the neighbouring section during the time this feature was created, was ex-military and made similar deposits close by. The deposit was made up of domestic rubbish including early nineteenth century ceramics and glass vessels, but of particular interest was a pewter 65th regiment jacket button (Figure 122). Several other 65th buttons were found at the site but all were brass rather than pewter. This change in material reflects events which were occurring on the other side of the world, namely the Crimean War (1853-1856). Pewter buttons were standard for most British troops leading into this war, including those sent to Whanganui in the late 1840s, but the freezing conditions of the Crimea revealed a fatal flaw in the material. Upon being exposed to extremely cold temperatures pewter has a tendency to become brittle and so British soldiers were losing buttons during military engagements and, presumably, becoming distracted by loose items of uniform. A decision was subsequently made to replace all pewter buttons with brass (Rudd 2016 pers. comms.) and this decision extended to regiments stationed all over the Empire. The 65th regiment was no different, even though they had only ever been stationed in temperate and sub-tropical locations, and so by the late 1850s pewter buttons had been all but phased out of Whanganui.

These two deposits of military uniform components reflect John Byrne's participation in the very earliest military activity in colonial Whanganui and connect him to the 65th regiment rather than the 58th. By the time the Byrne family moved into the property John senior's time as a soldier had ended, so these deposits can be thought of as him hanging up his military hat (and buttons). The location of these pits is also significant, as they all lay at the base of the Patupuhou sand hill upon which the York Stockade (where John had been garrisoned) stood. There is almost a ritual aspect to the deposits, leaving the physical remains of John's military past close to where that activity was based, marking his departure from both the stockade and that chapter of his life. This is particularly noticeable with the deliberate breaking of his hat badges prior to their careful deposition. Furthermore, the fact that these items were spread around multiple rubbish deposits is a metaphor for the gradual process of moving on and returning to civilian life, as opposed to an immediate transition signified by a single cache.

The 1866 plan of the area (Figure 9) shows three cottage-sized structures along the Maria Place frontage of TS191, a larger square structure on the corner of Maria Place and St Hill Street, and another cottage at the St Hill Street end of TS190, all of which were constructed and owned by John Byrne. The large square structure on the corner must have been short-lived if it was ever completed at all, as it does not appear in the archaeological record or any historical photographs of the area and there are no significant fluctuations in the property value noted in the rates records. The largest of the three Maria Place cottages is the structure visible in the 1860 photograph. This was the house in which the Byrnes family lived for the first part of their occupation of the site. The smaller two cottages on Maria Place and the TS190 cottage fronting St Hill Street are very similar in appearance with bare weatherboards (Figure 123), brick chimneys and shingle roofs, and seem to have been built around the same time.



Figure 123. Detail from ca. 1870 photograph of the Maria Place and St Hill Street corner taken from Patupuhou/Cooks Gardens showing the Byrne house and three new cottages in the foreground

Many of the early occupants of these cottages were military officers, which supports the hypothesis that John Byrne built these as lodging houses for officers and military personnel who brought their families with them, just as he had done. The location of

the site between the two stockades made this an ideal spot for such accommodation. The York Stockade was used to house married members of the 65th and their families once the rest of the regiment had moved to the larger Rutland Stockade (Prickett 2016: 185), and the experience of living in such conditions may have inspired John senior to construct more comfortable and private accommodation for military families. By 1867 John had also built a four-bay stable towards the back of TS190 and was advertising it for use in training racehorses (*Wanganui Herald* 16/9/1867, page 3).

There was more construction and site modification occurring around this time than just the erection of the cottages and stables, and evidence of some of it is apparent in the archaeological record in the form of F414 and F550. At the back of the southern-most Maria Place cottage a large barrel is visible in Figure 122 (for a closer view see Figure 96 in Chapter 6). The spouting from the cottage roof is directed into this barrel allowing for the collection and storage of fresh drinking water. When full, the barrel would have been extremely heavy so measures had to be taken to prevent it sinking into the swampy sand matrix which underlies most of the VRC site. In this case John Byrne or someone under his direction used broken glass bottles, 88% of which were dark olive round cross-sectioned bottles, to provide some added structural support. This required at least 51 bottles in total which was a considerable amount during the late Garrison period when supplies were somewhat limited, but perhaps reflects the absolute necessity of a clean water supply.

At the time F414 was created this cottage was being let out as a lodging house, so this modification was probably seen as an investment which would improve the value and desirability of the accommodation. Whatever the reason behind this choice of construction technique and material, it was repeated in F550, just over a metre to the southeast of F414. The original purpose of this feature was similar to F414 in that it acted as a strengthened base for a heavy item, in this case a new chimney for an extension to the cottage. This appears to have been constructed shortly after the barrel was installed in the late 1860s, and is visible in a photo dated to the mid-1870s (Figure 124). None of the other chimney base features excavated at the VRC site were constructed on a bed of broken bottles which suggests that the same person or people were responsible for both F414 and F550.

John Snr's choice of construction material for these products is unusual, especially given the value of complete glass bottles in Whanganui at the time. During the Garrison period trade links with the outside world were at constant risk of being interrupted and as all glass bottles used in New Zealand until the 1920s had to be imported this meant that most beverage businesses encouraged their customers to return empty vessels for re-use. One of the torpedo bottles found in F414 in particular helps to illustrate the volatility of the glass bottle market during this formative period. This bottle has embossing along the body which reads "[GOWE]R'S/ [SO]DA WATER/ [WANGA]NUI" which attributes it back to George Gower, the town's soda manufacturers, who along with fellow soda and lemonade manufacturer Robert Evans, employed novel measures early in their careers to keep their factories stocked with bottles.



Figure 124. Maria Place viewed from Patupuhou/Cooks Gardens ca.1875 showing TS191 in lower right with extension to the closest cottage visible (Alexander Turnbull Library, ref: 1/2-011853-F)

Seven torpedo bottles with etched letters (Figure 125) on the body were found in four features across the site (F313, F326, F373 and F374) dating from the Garrison through to the Depression period and bear the marks of three people. One, found in F374, has “Xg” neatly engraved in cursive script, a mark known to have been used by Gower during his early career (Luff 2008: 9). This is the hand of a well-schooled man who smoothly and elegantly engraved his mark onto this bottle, presumably with a diamond engraver. The other bottles, however, paint a different picture. They are all etched with a single capital “E” which lacks the finesse of Gower’s mark. There was also more than one person marking these bottles as the style varies considerably. Two have serifs while the other five lack this feature, but even within these two types there is variation. The most elaborate “E” has a double line along the spine and ostentatious triangle serifs, while the other has much simpler perpendicular lines of identical length for serifs. The sans-serif examples also vary slightly, but this variation seems to be more the result of an unsteady hand rather than necessarily a different person. On each of these the upper and lower arms of the “E” are also longer than the central arm. This mark has been identified as that of Robert Evans, another Whanganui aerated water pioneer from the 1860s who collaborated with Gowers for a time, although they never went so far as entering into a partnership (*Wanganui Herald* 18/22/1870, page 3) so clearly there is a degree of horizontal cultural transmission of behaviour going on here.

Little is known about the Evans business but the torpedo bottles suggest that it was more than just a one-man establishment. The VRC Evans torpedo bottles, along with similar examples recovered from the Wanganui Hotel site (Campbell, Gumbley, and Hudson 2009: 218), make it clear that manufacturing aerated water during the Garrison period in Whanganui was not without its difficulties. As for every business using glass bottles, procuring empty vessels was expensive and the trade routes could be unreliable and limited. Robert Evans seems to have got around this by collecting other businesses’ bottles and etching his name on them. This is particularly evident on one of the Whanganui hotel examples on which he, or one of his employees, has scratched a characteristic “E” over the body of a bottle embossed with the mark of a Hokitika soda company, Mace & Dixon (ibid), and the wide variation in form of all of his bottles hints that this was not a one-off. This behaviour is especially ironic given Evans’ aggressive reminders in the newspaper for patrons to return his bottles or pay a fine, but is perhaps how he was able to employ the extra hands which roughly

branded some of the VRC bottles. His thriftiness was not enough to keep his business successful for long, however, and he was out of business by the mid-1870s.

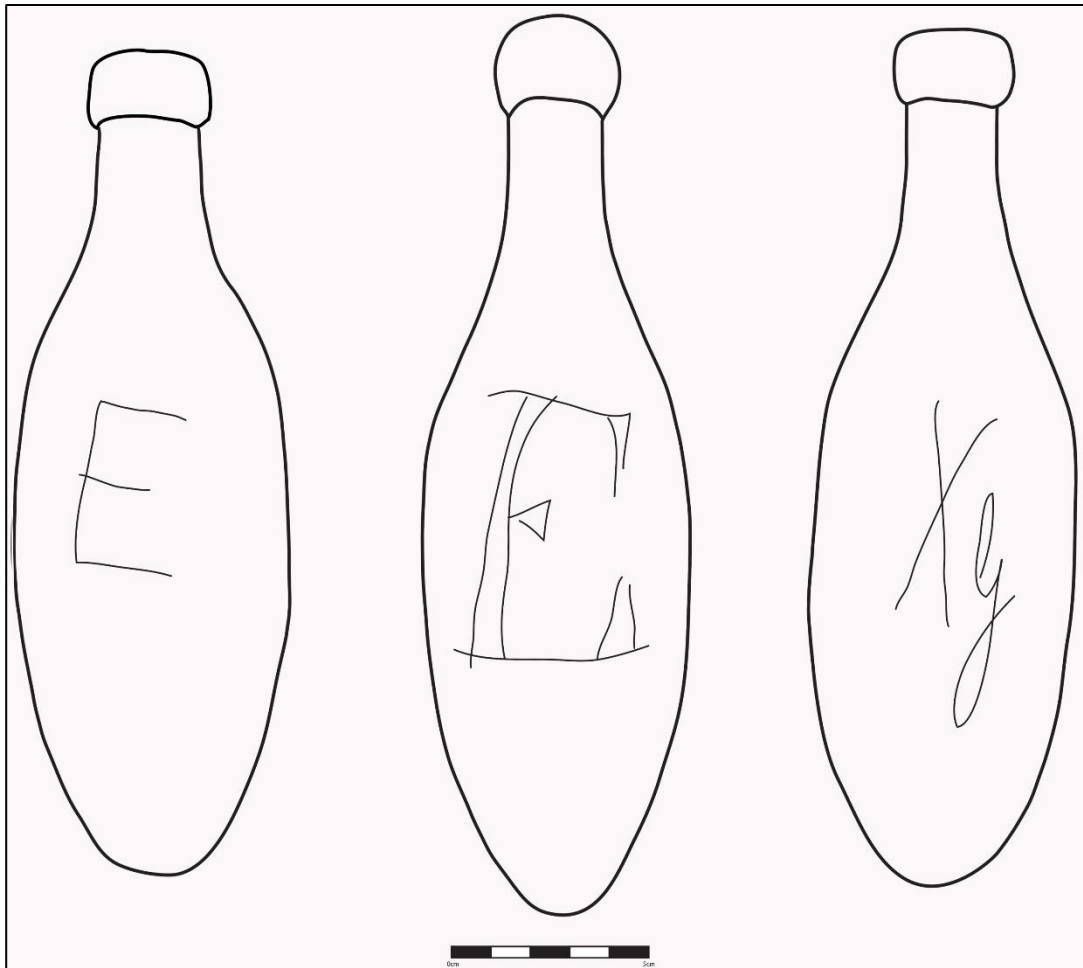


Figure 125. Examples of hand-etched torpedo bottles from the VRC site

This was clearly a period of optimism for the Byrne household, with considerable investment being put into their Maria Place property. They presumably saw the value of and demand for their lodging houses continuing if not increasing for the foreseeable future. This optimism is visible in the earliest Byrne artefact assemblages, particularly in the teaware vessels. F435 and F550 both contain vessels that were discarded intact. In F435 these were two Canova UGTP saucers and in F550 two whiteware cups, one with gilt Tea Leaf decoration and the other purple UGTP (Figure 126), and all are accompanied by partial matching tea set components. This suggests that during their first years at the VRC site the Byrnes were financially comfortable enough to throw away the remainder of the tea sets when one or more components was broken, even if they were still usable. Little did they know how quickly their fortunes would change.



Figure 126. Complete "Canova" saucer from F435, and purple UGTP (bottom left) and Tea Leaf (bottom right) cups from F550

Tragedy strikes

In 1868 John Byrne Snr passed away at home at the age of 52 (*Wanganui Herald* 3/10/1868, page 2) and two years later was followed to the grave by his eldest son, John Byrne Jnr, aged just 21 (*Wanganui Herald* 20/12/1870, page 2). This placed John senior's property in town and Waitotara under Mary's charge, and also gave her the responsibility of finding tenants for their cottages. In May 1871, Mary's daughter married John Burke (*Wanganui Herald* 26/5/1871, page 2) and left the family home

for his farm in Karakamea, leaving just Mary and her youngest son Michael who was then in his mid to late teens. It is unclear what role her other son Patrick had, as the only record of him is Michael Byrne's 1892 probate record (FamilySearch 2016) where he is listed as a horse trainer from Kakaramea, but he does not appear to have as strong a relationship with his mother as Michael. Unfortunately for Mary, these losses coincided with the end of the Garrison period and the departure of the last of the troops. This in turn meant an end to the high demand for short term accommodation such as the Byrne's cottages provided. An insight into the effect the growing stress had on Mary can be found in an account of a court case for which she was a witness in 1870. She is recorded as causing "some sensation" by vehemently refusing to swear an oath upon taking the stand "on the grounds that she had never sworn or been in the habit of taking oaths" (*Wanganui Herald* 1/6/1870, page 2).

In order to support herself and her son, Mary began to sell off portions of the Byrne property, beginning with the whole of TS191 and TS190 upon which four cottages were situated. As part of this process an old long drop or earth closet located in the north corner of the empty corner section (F430) was filled in. The TS187 side of TS191 appears to have sold but the rest remained with Mary Byrne. She attempted to sell the corner portion of TS190 again the following month (*Wanganui Herald* 11/7/1870, page 3) but there was still no interest. The 1870s were a period of welcome peace and growth for Whanganui so most property buyers were interested in purchasing land in the surrounding hinterland and what would eventually become the suburbs, areas which were now safe, rather than small pockets of inner city real estate with pokey cottages. The next year the corner section with a two-roomed cottage and the remaining portion of TS191 with a four-room cottage were put up for sale again, this time as a mortgagee sale. After three months they had still not sold and were placed up for auction twice but the corner section and smaller cottage were passed in on both occasions (*Wanganui Herald* 29/12/1871, page 3; 29/2/1872, page 3; 4/5/1872, page 3). After several further attempts to sell her town property (*Wanganui Herald* 30/7/1878, page 4; 9/6/1879, page 3), Mary eventually found a buyer for the largest of the cottages (at the TS192 end of the section) in 1875 and the smaller middle cottage shortly after, leaving just the St Hill Street end of the section in her possession.

Widowhood

Changes in Mary's disposal patterns, particularly for teaware vessels, reflect this change in circumstance. Whereas previous deposits included intact vessels discarded simply because their matching items were broken, resulting in deposits full of matching vessels, the deposits dating to after John's death contain very few matching vessels and none were thrown away intact. The shock of losing her husband and eldest son combined with the increasing difficulty of filling and then selling her Maria Place cottages clearly forced Mary to re-evaluate her economic habits. Her behaviour change does not, however, appear to have extended to glass bottles. Six bottles were recovered intact from F430 and another fifteen were complete but smashed, presumably during their deposition. During the early 1870s, when this feature was first filled, glass bottles were still a valuable commodity in Whanganui, although trade links were beginning to strengthen now that the Garrison period had ended. This apparent hoarding may have been the work of John Snr with the intention of adding to the buildings on site, especially as there is existing evidence of his using old glass bottles during construction projects. The enigmatic large square on the corner of TS191 in the 1866 plan (Figure 9) and the planting which respects this area visible in a photograph dating to the late 1860s (Figure 122) suggests that he was planning on building something here before his untimely death, presumably using the same methods which had proven so successful on his other structures.

In 1874 Mary's youngest and only surviving son Michael moved out to Hawera to set up a business as a saddle and harness maker (*Wanganui Herald* 25/6/1874, page 2). Mary appears to have followed, living with him on the family's Waitotara property where she became a "well-known resident" of the region (*Hawera & Normanby Star* 28/9/1885, page 2). Mary herself does not appear to have sought employment, instead relying on Michael's income, her land and perhaps some savings to support her diminished household. Although Michael was the key breadwinner Mary remained very much the head of the family, as shown by their shared homes being referred to as *hers* rather than *his* (*Wanganui Chronicle* 30/12/1882, page 2; *Hawera & Normanby Star* 28/9/1885, page 2). This is not unusual for an Irish widow and is thought to reflect their characteristically strong motherhood styles, although it is unusual that Mary left the bulk of the income earning to her son and did not attempt to find paid work (Kelleher 2001). This may reflect the influence of the Irish Catholic Church which were

known to be strong advocates of assimilation with Anglo-Victorian ideals and behaviour, especially in immigrant communities (Yentsch 2011: 204; Brighton 2001: 23).

Aside from the advertisements listing various portions of her property for sale, the only mentions of Mary Byrne in the local press for the 1870s and '80s were her admittances to hospital in Whanganui (*Wanganui Chronicle* 7/4/1877, page 2) and New Plymouth (*Hawera & Normanby Star* 27/6/1883, page 2). The locations of these hospital visits hint at a division of Mary's time between Whanganui and Waitotara during this period, which would explain the relative lack of material culture deposited by her at the VRC site between the early 1870s (when the F430 long drop was first filled in) and late 1880s. According to the rates records there were no other occupants at the Maria Place cottage during this time, although some of this period coincides with a gap in the records. A funeral notice for a Mrs Mary McDowell in 1882 also describes the funeral as leaving the "residence of Mrs Byrnes, Maria Place," (*Wanganui Chronicle* 30/12/1882, page 2) so it seems as though she still used both homes. Her reoccurring health problems, combined with a major fire which destroyed her Waitotara property (*Hawera and Normanby Star* 28/9/1885, page 2), may have been what drove her to finally return to the cottage on the corner of Maria Place and St Hill Street in the late 1880s.

An integral part of Mary's social life in both town and country would have been visiting and being visited by friends to have tea together. While her time at Waitotara is not represented in the VRC material, there will be portions of the assemblage which travelled with Mary, particularly after her house burned down, and she probably kept up a similar routine in both locations. The Byrne assemblage overall shows a relatively higher proportion of teaware than those assemblages associated with households that included adult men, supporting the argument made by some that tea was a distinctly feminine ritual (Hayes 2011: 39; Mitchell 2009: 151) and that women were largely responsible for creating a household's teaware collection (di Zerega Wall 1991; 2010).

This association of teaware with female dominated behaviour is especially evident when Mary Byrne's deposits are compared with other domestic assemblages at the site. The mean proportion of teaware in domestic ceramic assemblages was 39% and this remains reasonably stable across each of the periods relevant to the Byrne's

occupancy (Figure 127), while the mean proportion of teaware in assemblages associated with Mary Byrne as the head of her household is 46%. She is also the only widow recorded as living on the excavated portions of this block, meaning hers was the only household without a significant adult male influence.

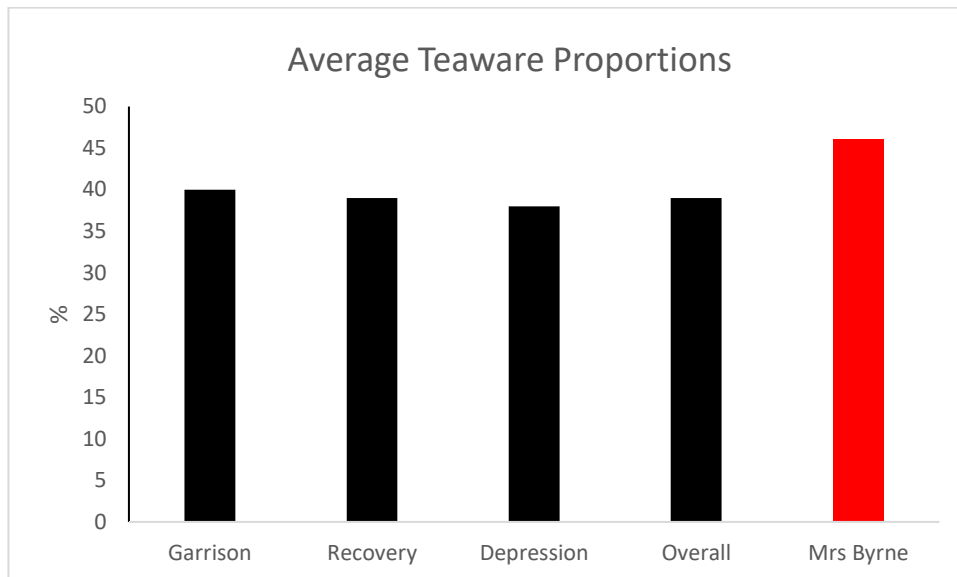


Figure 127. Graph showing the mean proportion of teaware in VRC deposits dating to each period compared with those associated with Mary Byrne

The process of tea preparation and consumption has been thought of as a ritual for centuries, particularly in eastern cultures. In Japan the tea ceremony involves a plethora of rules regarding the correct gestures (*temae*). More importantly, rules govern the order in which gestures are performed, with the intention of encouraging inner peace (Mayuzumi 2006: 9). In China tea consumption rituals are used as part of family celebrations such as weddings or for mending damaged relationships as a symbolic gift which can be shared (Ludwig 1981: 369). Importantly, these tea rituals have a deep rooted spiritual grounding and are as much about internal reflection as social interaction. Even though tea lost most of these connotations upon its introduction and absorption by British and subsequently colonial culture, it can still be considered as having a pivotal role in social rituals. The main purpose of the colonial tea ceremony was the establishing and reinforcing social networks and relationships, and the focus shifted from the quality of the tea to that of the material culture used in the process, ie. the teaware. For households with an entrepreneurial, usually male, head, some of these ceremonies may have been related to business partnerships and deals, but for a widow like Mary Byrne they served as important avenues for social

interaction, with an occasional minor role of supporting her remaining son's social and business networks. The social standing of the guest(s) relative to the host dictated which tea sets were brought out and their style scrutinised by the visitor with regards to quality and fashionability.

Unlike back in Britain and Ireland, hiring household staff was rare for middle class residents of Whanganui, particularly during the earliest periods. Census data reveals that only around 3% of the New Zealand population were employed as domestic servants in 1861 (Whanganui specific data was unavailable) and this remained consistent well into the 1870s. This means that only the top couple of percent of the population employed domestic staff, and it is unlikely that Mary Byrne was among them given her desperate attempts to sell off her property. Without servants Mary had complete control over every step in the tea process, from the purchase of relevant material culture and the tea itself, to the preparation of it in the kitchen and presentation to guests.

At the centre of the ceremony was a teapot, three of which were found within Byrne deposits and these too tell us something about Mary's repeated changes in circumstances. The earliest teapot was a black slip decorated refined red earthenware example represented by two rim sherds (Figure 128). It was recovered from F550, which dates to before her husband's death, and has moulded shoulder decoration which is reminiscent of Wedgwood's prestigious Black Basalt ware. Black Basalt was a high quality (and expensive) stoneware first produced by the Wedgwood pottery in the mid-eighteenth century and regularly imitated by other manufacturers in lower quality body materials throughout the first half of the nineteenth century (although it is still produced in much reduced amounts today) (Noel Hume 1970; Brooks 2005: 27; Miller 2000: 10). Its presence in F550 suggests that the Byrne family had serious aspirations of upward social mobility, or at least wanted visitors to their house to think of them as already established members of the middle class. F550 was dated to the mid-1860s and by this time Black Basalt would have been seen as old fashioned. It is possible that the Byrnes, and more specifically Mary, wanted new acquaintances to think that they were of "good stock" as opposed to the *nouveau riche* who were beginning to emerge around the colony. When pouring their guests tea out of what appeared to be a Black Basalt teapot they communicated their standing as respectable

members of the landed establishment. This is at odds with the mind-set of many of the new settlers, including Henry Williamson, who appear to have been using their teaware to show how up-to-date and forward-thinking they were.



Figure 128. Faux Black Basalt teapot sherds from F550

Regardless of the tea set Mary chose to use, a matching set would have been preferable. Her teaware assemblage contains components of at least eight sets, in Canova, Fibre, Tea Leaf, unidentified green and purple UGTP patterns and blue, red and green banded ware (Figure 126). Individual vessels decorated with two sprigged patterns (Imitation Jasper (Figure 129) and Chelsea Sprig), a red and black sponged design (Sponge 2), edge-moulded porcelain and unidentified black and brown UGTP designs were also recorded. For the higher quality of these (the sprigged and edge-moulded examples) single replacements could have easily been procured from one of several crockery retailers in Whanganui to complete the sets due to the popularity of their patterns. Commercial ceramic deposits associated with crockery retailers Robert McLean and Edwin Moulton and bonded warehouse owner Andrew Tod all contain gilt teaware vessels in whiteware, Bone China and European porcelain, so customers could buy replacements for their tea seats regardless of budget. A similar situation existed for sprigged vessels. Examples of both whiteware and Bone China teaware vessels decorated with true sprigging were recorded from the commercial dumps as well as at



Figure 129. Bone China Imitation Jasper jug from F448

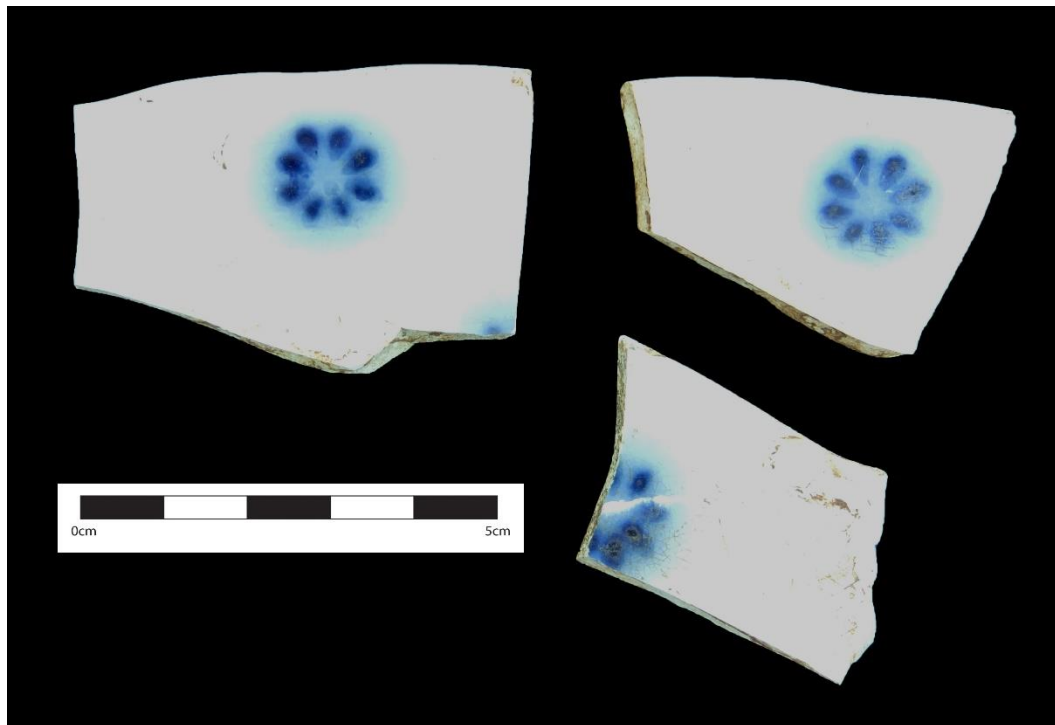


Figure 130. Whiteware saucer with sponged "sprigging" from F435

least two UGTP and one sponged whiteware vessel with imitation sprigging (Figure 130). The cheaper vessels, in particular the sponged and banded vessels, were not the sort that would usually be presented to visitors by anyone above working class (Casey 2005: 104), so it is likely that these were used by Mary when she was not entertaining, and as such may have been used as part of a mismatching tea service.

The second teapot deposited by Mary Byrne also has something to add to the story. Like the one found in F550, it also imitated a higher quality product. F478 dates to the 1880s, just after she permanently returned to town from Waitotara. In this rubbish pit Mary disposed of another refined red earthenware teapot but this example was decorated with a silver lustre coating (Figure 131), the intention being for it to resemble silverware. This vessel would have been used by Mary during many of her social interactions as a widow and perhaps testifies to her impressive determination to deflect from her financial worries. A lustre decorated teapot is a much less convincing replica than her previous faux-Black Basalt example, but still held similar connotations of good taste. In presenting this teapot to visitors Mary was showing that although her financial situation may not be as strong as it once was or she wanted it to be, she still possessed a sense of class and refined taste. By the time the teapot was discarded her social networks and relationships were well established and everyone knew where she fitted into the community, reducing her need to make elaborate displays of her status.



Figure 131. Silver lustre teapot rim found in F478

A fragmentary porcelain figurine discarded by Mary in F515 signals her (presumably reluctant) abandonment of her country home aspirations. With her Waitotara home destroyed and a lack of funds or energy to rebuild she clearly resigned herself to passing the foreseeable future at her Maria Place home. Given her prolonged and persistent attempts to sell the property it appears that this is not somewhere she would have chosen to live if she could help it, but there were ways in which she was able to bring a little bit of the rural life she so longed for into her cottage. Miniatures and figurines were incredibly popular among Victorians from all classes and backgrounds and were readily available ways of displaying your hobbies, interests, beliefs or even sense of humour. The example found in F515 is part of what appears to be a farm scene, with grass, a water trough and a wall or hedge (Figure 132). Mills (2015: 249) argues that miniatures such as this one may have been attractive to consumers as they were a way for them to act out fantasies which were otherwise out of their reach, and this makes sense in Mary Byrne's case as it epitomises her ideal lifestyle. It is tempting to imagine her being heartbroken the day it was knocked from the shelf or mantelpiece and broke, but on the other hand she would have been able to go out and replace it with ease.



Figure 132. Fragment of a miniature porcelain farm scene from F515

The end

These would turn out to be the last few years of Mary's life as she died at home in March 1891, aged 65 (*Wanganui Chronicle* 18/3/1891, page 2). One of the Byrne assemblages recovered from F510 dates to this time and is dominated by a range of pharmaceutical products, giving some sense of Mary's deteriorating condition. When compared with two other domestic deposits which date to approximately the same time as F510 it is clear that there was a disproportionate number of pharmaceutical bottles in this rubbish pit (Figure 133). F657 was a latrine fill deposit and F659 was a purpose-dug rubbish pit located at the rear of TS190 and each date to the late 1880s or early 1890s. Both are associated with the Tod household. Andrew Tod was a prominent figure in nineteenth century Whanganui and was about the same age as Mrs Byrne. He occupied TS190 and TS187 from the mid-1880s until 1893 when the family moved just across the Whanganui river to Kaukatea. During their time at the VRC site Tod and his wife enjoyed good health, it was not until the mid-1890s that Andrew was struck down with an undisclosed illness which confined him to bed, caused issues with his memory and would eventually kill him in 1897 (*Wanganui Herald* 3/5/1897, page 3). The two Tod deposits contemporaneous with F510, however, show no signs of his imminent poor health. Pharmaceutical bottles account for 14% of the F657 and just 5% of F659's glass vessel assemblage, compared to 28% in F510. This difference is also noticeable when F510 is compared with the earlier Byrne deposits, three of which (F430, F515 and F550) contained one pharmaceutical bottle and the other three (F435, F478 and F493) none. Mary Byrne was first recorded as being admitted to hospital in 1877, so most of these deposits date from a time before her health became an issue. The F510 deposit dates to the early 1890s, coinciding with Mary's death in 1891. This classification as a death clear out event is supported not only by the large proportion of medicinal bottles but by the fact that most of them were recovered intact. This suggests that whoever (probably her son Michael) dumped them here had no use for them, in this case because they had belonged to the deceased Mary Byrne.

The types of medicinal products these bottles held can provide some evidence for what Mary Byrne was going through. Three of the bottles held patent pain killers from America. Two of these contained St Jacob's Oil (Figure 134) which was applied externally for relief from rheumatism and other aches and the other held Davis' Vegetable Pain Killer which was a popular syrup taken internally. The other product



Figure 133. Selection of complete pharmaceutical bottles recovered from F510



Figure 134. St Jacob's Oil bottle found in F510

identified was Kruse's Fluid Magnesia which is an antacid from Australia. Antacids such as these help in the relief of indigestion, acid reflux and stomach ulcers. The remaining pharmaceutical bottles were unbranded but could be attributed to local chemists. Four belonged to H B Williamson & Co and one to Wakefield & Hogg and each would have been filled with specific prescriptions or over the counter remedies prepared by one of these businesses. Many of these generic bottles would have been returned and refilled once they were empty, particularly for regular prescriptions. In addition to the prescription and patent medicines, the assemblage also contained a hop bitters (Figure 135) and six soda water bottles. Hop bitters were regularly marketed as an herbal tonic for the relief of a variety of ailments, while soda water was commonly used to ease mild discomforts by Irish inhabitants of other colonial communities,

particularly New York (Bonasera and Raymer 2001). The range of remedies sourced from multiple grocery and chemist shops makes it clear that there were several dimensions to Mary's suffering and her ailment(s) were clearly affecting her quality of life towards the end.



Figure 135. Hop bitters bottle found in F510

It is also interesting to consider the origins of these medicinal products. All are sourced from New Zealand, Australia or North America and none were produced in Britain. This is perhaps more evidence of the emergence of a colonial culture which was not necessarily dependent on the “homeland”. Whereas Henry Williamson had returned to Scotland ten years previously to seek treatment for his affliction, Mary Byrne was looking to the colonies for relief. Even if she was not actively choosing colonial over British products the fact that the chemist's stock was dominated by American, Australian and local pharmaceuticals suggests that these forces were at work on a scale above that of the individual. North America at the time was coming to be seen as the epitome of modernity and progress so it makes sense that those consumers looking for up to date and effective remedies would show bias towards American made products.

Evidence of Mary's worsening state of health is also present in the teaware assemblage. An analysis of the proportion of teaware vessels in ceramic assemblages associated with the Byrne household over time (Figure 136) shows the building optimism of the Byrne's first years at the site, followed by a dip caused by the soldiers leaving. Of most interest here, however, is the clear increase in teaware vessels after John Snr's death and then the decline during Mary's last few years. This pattern supports the hypothesis

proposed above that high proportions of teaware vessels indicate a female-led household. Those features which date to before John Byrne Snr died (F435, F414 and F550) contain noticeably less teaware than those from Mary's time as a widow, the features with the highest proportion of teaware relate to the early part of Mary's widowhood (F430, F515 and F478), and the visible late period decline in F493 and F510 coincides with her retreat from social circles towards the end of her life.

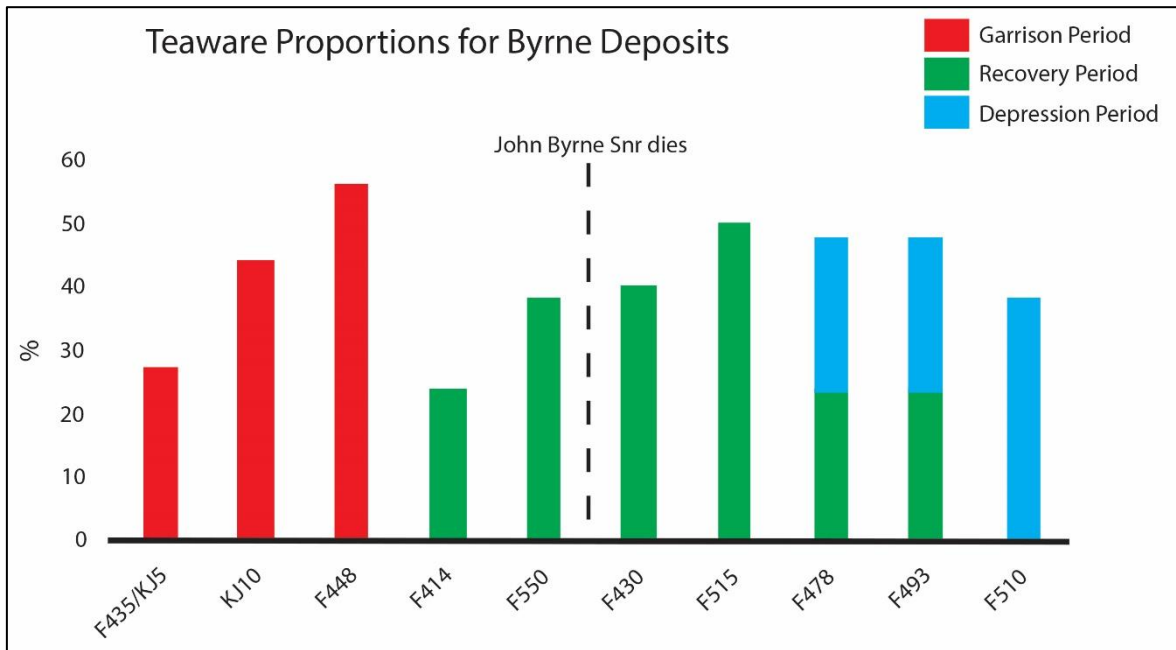


Figure 136. Teaware proportions for Byrne deposits with deposits organised chronologically

The last of the three Byrne teapots was also recovered from F510, and epitomises Mary's decline. Unlike her previous teapots, this example was not an attempt to emulate a higher quality vessel but was instead the most unassuming and utilitarian teapot available. The moulded body and blotchy manganese glaze (Figure 137) is immediately recognisable as a style known as Rockingham which was a common sight in most New Zealand kitchens by the 1890s. These teapots were the staple product of many pottery manufacturers in Britain and the colonies (including New Zealand) and so was readily available to anyone. They were not necessarily intended as pieces to show off but were practical and cheap. This move away from distinctive and expensive looking teapots simultaneously reflects Mary's retreat from society as her health worsened and also the decline of the formal tea ritual. Tea consumption was still a vital part of colonial culture but the formalities surrounding it were beginning to ebb by the late 1880s.



Figure 137. Rockingham teapot handle from F510

It seems fitting that Michael Byrne buried this group of artefacts, which epitomised major parts of his mother's life, close to where his father carried out a similar act for his own military regalia. Both actions brought significant chapters of the Byrne's family story to a close at the site which had acted as a home for the Byrnes for around 40 years.

A year after his mother's death Michael once again put up the corner portion of TS191 for sale (*Wanganui Herald* 8/1/1892, page 3). He would, however, soon die at Karakamea, before a buyer was found (*Hawera & Normanby Star* 12/3/1892, page 2), and the property became part of his estate. The estate administrators continued to have some trouble selling the property until Charles Huddel and Mary Ann Chavannes purchased it in 1895.

Mary Byrne's slow demise, from military wife and entrepreneurial property owner, to a pain riddled widow living in a run-down cottage, is inseparable from the role of the military in the story of Whanganui. When she and her family first occupied the southwestern corner of the VRC site they set about building homes for the officers and those soldiers with families, offering sanctuary from the overcrowded stockades. This was in the height of the Garrison period when the military were vital to the settlements

survival and ex-military settlers such as the Byrnes were highly respected for their part in its protection. The family banked on this, however, when the military left in 1870 Mary (by this time a widow) began to struggle as demand for short term housing in the centre of the settlement diminished. Her property, household and even the houses in which she resided continued to shrink over the next two decades as Whanganui recovered from the wars and struggles through a nation-wide depression. Her death just as the depression lifted fits perfectly with the town entering the Late Victorian period, an era characterised by a fresh new start and ultra-modern mind-set.

Mary's story highlights just how precarious the Whanganui economy was during its formative decades and how this affected many of the early settlers. While some, like Henry Williamson, were lucky with their investments and business plans, the Byrnes were not. This does not mean, however, that they were forced to live in poverty or even give up on their middle class ideals and behaviour, it simply meant that they needed to adapt to their new circumstances, something which in Mary Byrne's case at least, is clearly evident in the material culture left behind.

Chapter 8: The Power Couple

The Chavannes occupied part of TS191 from 1895 to the 1930s. This family has a complicated and colourful history, much of which is documented in the local newspapers, and had a significant influence on the settlement of Whanganui during their time there. During excavations at the VRC site three artefact deposits and several structural features were recorded which relate to their time occupying the Maria Place property (Figure 138). The archaeology of their household sheds light on a variety of colonial experiences, including how colonists interacted with the physical remains of the past; changing attitudes to animal welfare; and how colonists portrayed themselves as successful and global citizens. While these themes may seem varied they are all integral to the changes in society that were occurring at the end of the Victorian period and set the scene for the emergence of a “modern” Whanganui (and New Zealand) identity. The Chavannes are the perfect family to illustrate this transitional period in Whanganui’s history as they were instrumental in driving it just as much as they were being taken along on the ride.

The Chavannes Story

Charles Huddell Chavannes was born in Australia in 1854 to Mary Agnes and Charles Radford Huddell who had emigrated from Canada the previous year under suspicious circumstances. Charles junior’s sister Margaret was born during the voyage and given her mother’s surname (Fotheringham), suggesting the pair were unmarried prior to their arrival. During their time in Australia Charles Radford became involved in various criminal activities and appeared in court at least once for assault (*Geelong Advertiser & Intelligencer*, 28/3/1856, page 2). Mary, perhaps because of this behaviour, divorced him and left with Charles and his sister to make a new life in Whanganui in 1859 (*Hawera & Normanby Star*, 7/11/1923, page 5). Charles senior’s life continued to go downhill after the departure of his family, being repeatedly charged with vagrancy until he was admitted to a Benevolent Asylum at the age of 71 (*Wagga Wagga Advertiser*, 30/5/1885, page 3; 19/11/1895, page 2).

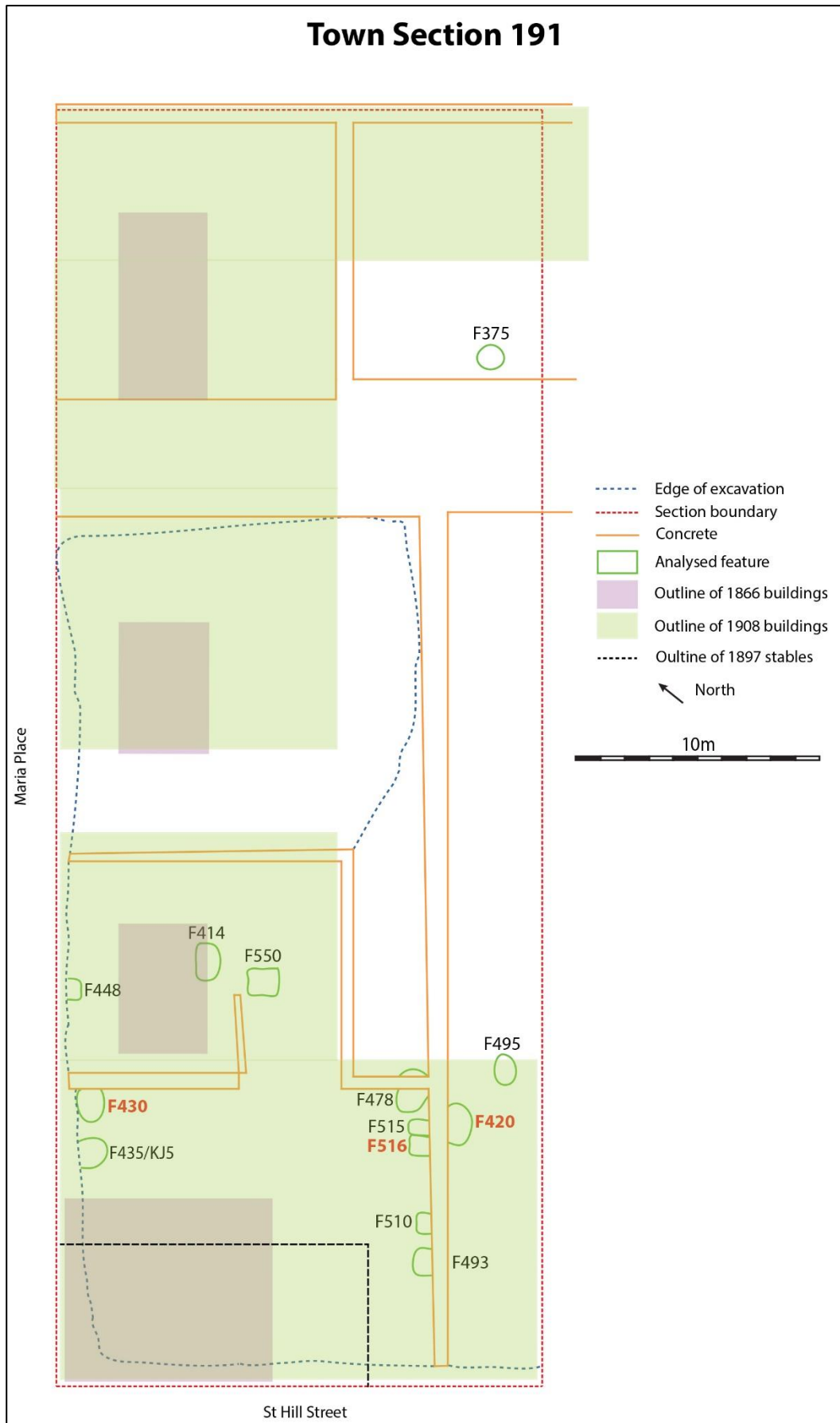


Figure 138. Excavation plan of TS191 showing features containing Chavannes deposits in red

In 1863 Mary married a Jamaican immigrant, Pierre “Peter” Chavannes, in Dunedin’s First Church. This is a significant choice of venue as all other references to Mary’s religion suggest she was Wesleyan, not Presbyterian (the denomination of the First Church). This may be related to the Wesleyan church’s negative views of divorce which could have forced Mary to move outside her usual religious network to enable her to re-marry. She definitely returned to the Wesleyan church after her marriage and was active in the Whanganui Wesleyan parish (*Wanganui Herald* 18/12/1872, page 2). Charles’ sister also stayed involved with the Wesleyan church but it does not appear to have played an important part in his own life.

Charles married his first wife Emily Davidson (a devout Catholic) sometime during the 1870s. In order to marry her he would have had to re-align his religious affiliations as the Catholic Church held strong negative views on marriages outside the faith. Their daughter Hilda Isabella Chavannes was born in 1879, the same year that saw the loss of both his mother and stepfather. His mother passed away in Wellington after a three-year long battle with cancer in August (*New Zealand Herald* 14/8/1879, page 2), then his step-father died two months later from a severe bout of bronchitis (*Evening Post* 28/10/1879, page 2). His parents had become prominent members of both Whanganui and Wellington society due in part to their position as publicans. They ran the New Zealander Hotel in Wellington for a period in the 1860s (*Evening Post* 20/5/1868, page 2) before returning to Whanganui and purchasing the Rutland Hotel, which they ran until 1874, turning it into “the most comfortable of hostelries” (*Wanganui Herald* 14/8/1879, page 2). Upon their deaths they were honoured with formal and lengthy obituaries in the local and regional press (*Wanganui Chronicle* 12/8/1879, page 2; *Wanganui Herald* 14/8/1879, page 2; *Evening Post* 28/10/1879, page 2) and Peter Chavannes was given a full masonic funeral which was reported on around the country (*Star* 28/10/1879, page 2; *Manawatu Herald* 31/10/1879, page 2; *Otago Witness* 8/11/1879, page 20). Charles followed in his parent’s footsteps and took over Whanganui’s Victoria Hotel in 1879 (*Wanganui Chronicle* 13/11/1879, page 2).

Emily Chavannes died when she was just 25 years old in 1881, leaving Charles to run the Victoria Hotel and care for their three-year old daughter alone. Her religion was one of Emily’s lasting legacies with her daughter; Hilda attended the Catholic Sacred Heart School, where she performed well enough to win at least one academic prize

despite being “very short sighted” (*Wanganui Herald* 21/12/1889, page 2). From an early age she was a regular attendee of dances and balls in Whanganui and Hawera (*Hawera & Normanby Star* 19/6/1894, page 2), and the efforts put into her clothing were commented on in the local society columns. As a ten-year-old the “yachting costume” she wore to a fancy dress dance at the Fire Brigade Hall proved popular (*Wanganui Herald* 17/12/1889, page 2), and she kept up with the fancy dress well into her twenties when she was commended for her fortune teller outfit at the Irish Rifles fancy dress ball held in town in 1903 (*Wanganui Herald* 17/10/1903, page 2).

Four years after the death of his first wife, Charles married Mary Ann Rapley (*Manawatu Standard* 25/4/1885, page 2). Mary Ann came from a Catholic family (*Wanganui Herald* 14/8/1878, page 2) and her parents ran the Prince of Wales Hotel in Whanganui so had a similar background to Charles. The pair went on to become successful and popular publicans, later renaming the Victoria Hotel on the corner of Maria Place and Victoria Avenue, opposite to the study site, the Chavannes Hotel (Figure 139). A year into their marriage they welcomed a son, Charles Huddell Chavannes (junior), commonly known as Charley.



Figure 139. Chavanne's second hotel, on the site of Victoria Hotel, Whanganui (Alexander Turnbull Library ref: 1/1-000122-G)

Flashes from the past

In 1895 the Chavannes bought and moved onto the southern portion of TS191. They continued to run the Chavannes Hotel but steadily improved the TS191 property by renovating the house (previously occupied by Mary Byrne) and building a two-storey, eight stall stable block in 1897. This building is visible in a 1905 photograph (Figure 140) of the corner and had a sloped roof clad with zinc sheeting, and weatherboard walls. The footprint of the stables was detected as a set of post-holes during excavation, as can be seen in site photographs and on the excavation plans (Figures 138, 141). Within two years the Chavannes had transformed the property from the tired and unwanted lot left by the late Byrnes into a comfortable and valuable piece of real estate. From the historical and archaeological evidence, it seems that Mary Byrne's small cottage was incorporated into the Chavannes home, as there is no record of its demolition while other building projects on the site do appear in the newspapers and rates records. During the course of the other improvements undertaken on the section an old long drop initially filled in by Mary Byrnes around 1870 (F430) was capped with demolition material, probably when the small shed visible in previous photographs (Figure 124) was removed to make way for new buildings. The filling in of F430 marked the moment the final observable marks left by the Byrnes on the site were removed, although it is unlikely that the Chavannes were aware of this.

This is not the only evidence we have of the Chavannes engaging with the area's past. In particular, the archaeological remains include echoes of the military activity that characterised the settlement for so long. Charles himself was no stranger to the military, although in a much different setting to those early troops. During the 1880s he had been part of the Alexandra Cavalry, a volunteer force based in Whanganui who took part in the Parihaka operations, holding the position of Quartermaster-Sergeant (*Wanganui Chronicle* 19/10/1906, page 7). Around 1890 he applied for a £30 land claim under the Naval and Military Settlers' and Volunteers' Land Act but was declined as he had not served for the required five years (Anon 1894). The controversial Parihaka campaign was short lived and less violent than the previous wars which affected the region (although still incredibly unpleasant for many of those involved) and for those, such as Charles Chavannes, who had only experienced this entirely one-sided form of military action, would have been a completely different experience to that of the preceding decades. The events at Parihaka also would have gone some way



Figure 140. Maria Place from Cooks Gardens, circa 1905, by Muir & Moodie studio (Te Papa C.012658) (the stables are just visible in the bottom centre)

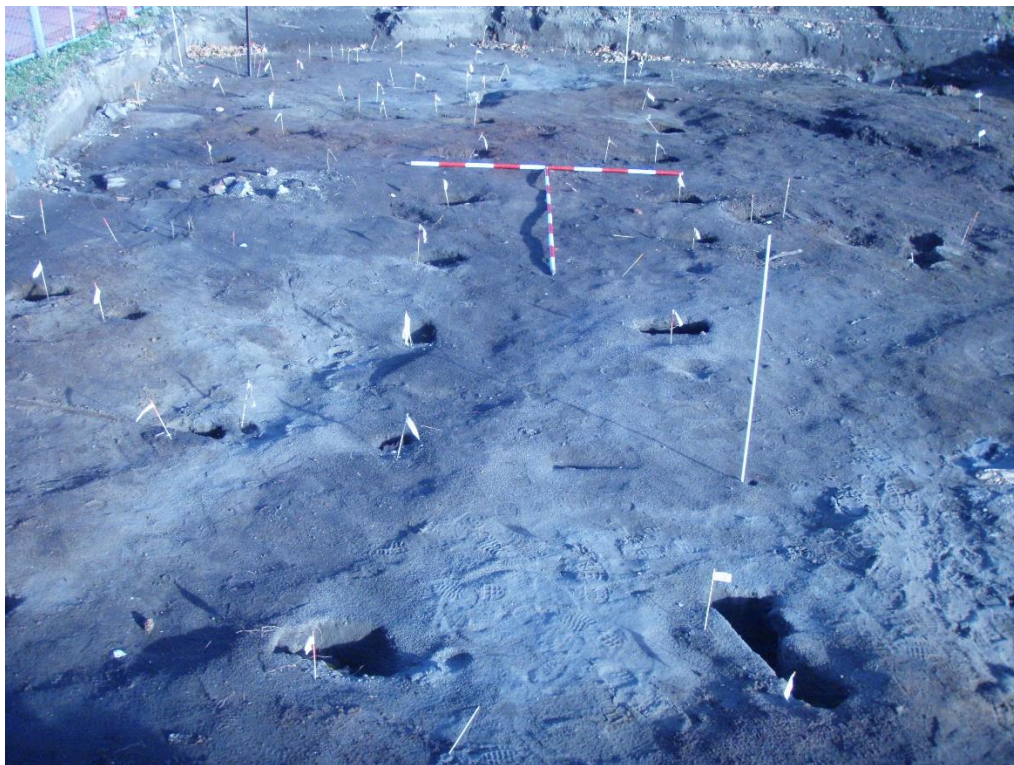


Figure 141. Chavannes stable posthole alignments exposed during 2010 excavations, looking towards Maria Place (Sian Keith)

to changing how the New Zealand wars were viewed and collectively remembered for many of the colonial inhabitants of Whanganui at the time, potentially contributing to the romanticising of the period and a re-valuing of the town's military past. Also of note is that the Alexandra Cavalry Volunteers were a branch of the New Zealand army while previous regiments had been British. This must have made for a different dynamic amongst the troops, who were now fighting for the country in which they resided and identified as "home," as opposed to many of their predecessors who were shipped out from Britain to fight on the colonial frontier. Parihaka itself went on to become a symbol of passive resistance to some people, both Maori and Pakeha, around New Zealand and eventually the world (Petchey and Brosnahan 2016: 30), however its true importance is only just now being recognised and addressed. The intricacies of Parihaka and land disputes are, however, well outside the scope of this research and as such will not be addressed further.

The Chavannes lived at TS191 over a decade after the final imperial troops had left the town but part of the Rutland Stockade building remained standing and smaller remnants of the military past could still be found around the town. One such memento was discarded in the F420 well amongst the Chavannes material: a brown UGTP 57th regiment dinner plate (Figure 142). This heavily worn piece of ceramic has a wreath topped with a crown (similar to the shako plates discarded by John Byrne) surrounding the number 57 and the word "ALBUHERA." The battle of Albuhera was fought in 1811 as part of the Peninsular War (1807-1814) and helped earn the 57th Regiment their nickname of the "Diehards" due to their ferocity. Plates such as this one were commonly used in officer's mess halls or tents (Rudd. Pers comms). The 57th regiment were stationed in the York Stockade above Maria Place from 1861 to 1866, so were long gone by the time the Chavannes deposited their material in F420. Neither Charles nor Mary Ann were old enough to have been involved directly with the regiment, and while Mary's father was a member of the 65th, neither had family ties to the Diehards. This, along with the fact that only this one small piece of the plate was included in the F420 deposit, reduces the chance of this pottery sherd representing a family heirloom. A more likely explanation is that one of the Chavannes children, Hilda or Charley, came across the piece during a visit to the open spaces on and around the Patupuhou sand hill on which the York stockade had stood. Cook's Garden was a reserve by the 1890s and would have been a popular place for local children to play

and remains of the previous military occupation of the site, including refuse from the mess halls, would have still been present as this area had seen little development or modification by the turn of the twentieth century. This particular fragment frames the regimental insignia almost perfectly, as well as the maker's mark on the reverse, so it could easily have caught the eye of a curious Charley who then brought it home to show his parents and ask the story behind it. Archaeologists excavating the F420 well in 2010 would repeat this behaviour and carefully place the sherd into its own bag, separate from the other ceramics, and place it in a "special finds" box, hoping that it would tell an interesting story once it reached the lab for analysis.



Figure 142. Fragment of "Albuhera" 57th Regiment plate found in F420

This behaviour being repeated by one of the Chavannes and then the archaeologists themselves reinforces the argument that the military aspect of Whanganui's history was, from a relatively early stage, romanticised in the town's collective memory and continues to be up to the present day. This is a common process in post-colonial communities which have events such as this in their past, and, whether knowingly or not, acts to legitimise the actions and position of the colonising population (Olick and Robbins 1998: 110; Igartua and Paez 2013: 81). Strikingly similar processes have been observed in South Africa's Eastern Cape where the first wave of British immigrants who arrived in the 1820s have been bestowed hero status in the area's social consciousness, often to the detriment of historical fact and the indigenous community (Winer and Deetz 1990). Ellen Hewett (1914) can be said to be engaging in this process of re-constructing the past in her memoirs which paint the New Zealand Wars as a

traumatic period full of sacrifices (including her husband) but one which was necessary for the creation of New Zealand as we know it. Whether or not this process had positive outcomes for all those involved in the wars and the consequences of them, it has certainly had an effect on how New Zealanders view themselves and their national history, and the presence of this mess hall plate fragment amongst the Chavannes assemblage suggests that it was well in motion at the turn of the twentieth century.

Straight from the horse's mouth

In addition to the military and hospitality industry, the Chavannes were heavily involved in numerous sporting pursuits. Charles Chavannes was touted as the “best in the colony” at billiards (*Press* 6/2/1897, page 4), was a trans-Tasman champion gun club shooter (*Manawatu Times* 19/6/1903, page 2) and had a keen interest in bowls (*New Zealand Herald* 18/5/1934, page 12). A group of his acquaintances even put up a £1000 challenge to “any person in the Southern Hemisphere” who could beat him at a combined pigeon shooting and billiard competition (*Manawatu Herald* 27/4/1899, page 2). While there is no mention anywhere of Mary's skills behind a billiard cue, she did share his love of shooting, and in 1919 she was presented with the first female life membership of the New Zealand Gun Club Association for her services (*Free Lance* 16/7/1919, page 29). Charles was also an avid cyclist and was the founder and president of the Wanganui Cycling Club (*Wanganui Herald* 7/8/1884, page 3; *Manawatu Times* 23/9/1884, page 2). Hobbies such as these were usually associated with the upper classes back in Britain but by the late nineteenth century members of Whanganui's middle class were becoming wealthy enough to join in and, in doing so, attempt to align themselves with the social elite.

Alongside the shooting and billiards, Charles senior and Mary had a long-standing interest in horses, hence the construction of a large stable, and were heavily involved in the racing circuit. Both owned racehorses which they entered in trotting (eg. *Wanganui Chronicle* 13/3/1882, page 2), gallop (eg. *Hawkes Bay Herald* 9/8/1895, page 4) and steeplechase races (eg. *Wanganui Chronicle* 4/8/1881, page 4) around the country. Charles held the prestigious position of starter for the Wanganui Jockey's Club for many years (eg. *Wanganui Herald* 30/12/1897, page 2) and was responsible for introducing mechanised starting gates, although reports suggest he preferred the old

fashioned way of using a flag. He even produced at least one horse that went on to be a successful rodeo steed (*Wanganui Chronicle* 17/11/1905, page 7). Mary Chavannes also appears to have been an accomplished equestrienne in her own right; she could regularly be seen driving her own horse around town in a buggy (*Wanganui Chronicle* 25/1/1878, page 2).

The Chavannes stable would have housed hacks used by the family for everyday transport, be it under saddle or in harness, but it could also have held racehorses on occasion. The last record of a named racehorse owned by the Chavannes is from 1895 when Mary owned a bay mare named Ulster, but she was sold and was racing in Dunedin by February 1896 (*New Zealand Herald* 24/2/1896, page 4), so never resided in the TS191 structure. By the time the stables were constructed the Chavannes seem to have retired from competing in races, but Charles was still active as a starter at the Whanganui racecourse, a position that required him to be on horseback. An account of his duties is given in the *Wanganui Herald* (30/12/1897, page 2) telling of how he had ridden down a bolting horse and subdued it. During the attempt to corral the horse the girth on Charles' mount snapped and he fell. The reporter refers to his horse as "bucephalus" but this was not its actual name, instead being used as an amusing comparison between Alexander the Great's mount, who was famous for his devotion to his master, and this particular horse who seemed completely uninterested in the fate of his fallen rider.

Four horseshoes, the head of a metal curry comb, fragments from a woollen horse blanket and a brass harness buckle provide physical links to the equine inhabitants of the Chavannes stable. Three of the shoes (examples shown in Figure 143) are the same size (about 120mm wide and 130mm long) and one slightly bigger (130mm by 140mm) so represent at least two horses. They are heavily accreted so limited information can be taken from them as to their exact form, but they appear to be used (although not heavily). It is impossible to accurately calculate a horse's height from its foot measurements, but these shoe sizes are usually found on light hacks rather than ponies or draught horses, much like Charles' "Bucephalus." The other equestrian artefacts found in the Chavannes deposits relate to the maintenance and care of the horses when they were not being ridden: the metal curry comb is used for cleaning hair off bristled grooming brushes and the wool blanket (Figure 144) would have been

worn by one of the stable's occupants on cold nights. The buckle (Figure 145) is utilitarian in form and could have come from either a harness or an item of saddlery.



Figure 143. Two of the horseshoes recovered from F420



Figure 144. Fragments from a woollen horse blanket found in F420



Figure 145. Utilitarian brass harness buckle from F420

Overall the Chavannes' equestrian artefact assemblage is that of people obviously concerned for their horses' welfare. The shoes are only lightly used, suggesting these horses were re-shod regularly and not forced to carry heavy loads. This is in contrast to a draught horseshoe found in F375 at the northern end of TS191 which has a severely worn toe (Figure 146). This wear pattern is not the result of a horse's natural gait but reflects a consistent and prolonged straining motion on hard surfaces, probably in an attempt to move a cart carrying a considerable weight. Such wear can be exacerbated by the horse lacking enough energy to properly lift its toes with each stride, indicating that it may have been overworked.



Figure 146. Draught horseshoe from F375 with a heavily worn toe

Potential harsh treatment of other equine visitors to the site is evident in three spurs found in deposits associated with bonded warehouse owner Andrew Tod on neighbouring TS190 and a severe curb bit (Figure 147) found in one of the 2010 features (KJ13) on TS189. Both these saddlery items amplify the aids given to the horse by the rider - in the case of the spurs to encourage more forward movement, and, in the case of the bit, to slow the horse down and control the head position. When used by a sensitive rider these can be effective training aids but when used in a more heavy-handed manner they can cause serious discomfort and often physical injury to the horse. The spurs and curb bit were found in features which slightly predate the Chavannes stable, and the absence of these in the later deposits associated with the family may reflect a heightening awareness of animal welfare which had been building around the colonial world since the mid-nineteenth century. In Britain, female authors such as Elizabeth Heyrick, Susanna Watts and, most famously, Anna Sewell, began to write novels highlighting the plight of abused animals, with great success. Sewell's *Black Beauty* was published in 1877 and quickly went on to become one of the most popular books written in English (Ferguson 1994, 35). One of the main evils in *Black*



Figure 147. Curb bit from KJ13

Beauty was a particular piece of harness (the bearing rein) which was used to force carriage horses' heads into an unnaturally high position extremely detrimental to their wellbeing, and the book is credited with playing a large part in the banning of these reins (ibid: 43). This growing feeling of empathy for the equine population extended to Wanganui, where "Pauvre Cheval" (French for "poor horse") wrote a heartfelt letter to the Wanganui Herald:

'Although only a visitor to your town, I cannot leave without protesting against the inhuman cruelty to horses practised by some drivers of vehicles. I allude more particularly to the carters of wool. The method employed cannot be called driving; the horses are simply lashed until by accident they can stumble on what is required of them. By the time even an empty cart is backed up to the doors, the horse is panting and quivering with agony. The language used is absolutely disgraceful, and would not be allowed in any other town; but that sinks into insignificance in comparison with the intense cruelty one is compelled to witness. What are the police about? And why is there no branch of the Society for the Prevention of Cruelty to Animals in Wanganui? Is this our boasted nineteenth century civilisation? Earnestly asking your help in this matter, I am etc. PAUVRE CHEVAL' (17/1/1899, page 2)

This letter dates to two years after the Chavannes built their stable, so, although there were obviously those that still saw horses as commodities to be used until they wore out, there was a portion of the population that did care for their equine friends. As well as caring for their own horses, the Chavannes were supportive of improvements in equipment which would reduce equine suffering, for example hosting a free public demonstration of Professor Lichtwark's "Patent Improvement in Harness- for the prevention of cruelty to animals" (*Wanganui Herald* 21/3/1894, page 3). This evidence of their concern for not just their own animals but the animal population of Whanganui as a whole, suggests that the Chavannes would have been at least sympathetic to, if not actively involved in, the drive for the establishment of a Whanganui branch of the Society for the Prevention of Cruelty to Animals (SPCA), a fight which began in the 1880s but did not come to fruition until 1901 (*Wanganui Herald* 1/8/1901, page 2). This is supported by the fact that Mary was an active member of the Wanganui Women's Political League (*Wanganui Chronicle* 9/4/1900, page 3). The main aims of the League were "1. To promote the political education of women generally; 2. to improve the economic position of women; 3. to take up questions affecting women as they arise" (*Wanganui Herald* 4/8/1899, page 2), however, they were also active supporters of the SPCA (*Wanganui Herald* 25/4/1895, page 2).

Dedicated followers of fashion

The Chavannes' material culture assemblage and the historical record are both filled with evidence of one of the most obvious and talked about middle class behaviours: conspicuous consumption. Mary Ann's probate record reveals a hoard of fine jewellery collected throughout her life which she left to her granddaughters and housekeeper, including four diamond rings, two gold bangles (one with diamonds), a twenty-dollar medallion brooch, a turquoise cross and a gold watch, all of which were intended to make a statement. Archaeologically speaking, this behaviour is most evident for those artefacts intended to be seen by others, namely their occasional tableware and the buildings they constructed during their time at TS191.

No artefact, or set of artefacts, in the Chavannes assemblage screams "fashion" as loudly as one of the partial dinner sets they disposed of into F420 (Figure 148). The set in question is ivory-dyed whiteware which was a popular ware during the 1880s intended to resemble Japanese pottery. Japan, which had previously been notoriously



Figure 148. Cairo pattern plate from F420

insular, was opened to the West in the 1860s and as a result there was a sudden influx of Japanese commodities into European markets. The novel quality of Japanese aesthetics and culture proved immensely popular, and soon most of the colonial world became obsessed with all things Japanese. Whanganui was no different, with the settlement playing host to “lectures” involving descriptions of the country, people and cultural practices alongside demonstrations and photographs (*Wanganui Herald* 26/4/1869, page 2) as well as exhibitions of “Japanese curiosities” (*Wanganui Herald* 18/11/1870, page 3). The Japanese aesthetic remained popular for the next two decades at least. Japanese ceramics inspired the ivory-dyed whiteware body produced by some pottery manufacturers during the 1880s, and the Chavannes household owned a six-person dinner set in this material. The interesting thing about this particular dinner set is that, despite imitating a Japanese ceramic body, the vessels are

decorated with an Egyptian themed green UGTP pattern (Cairo). The pattern consists of an Egyptian style geometric border and multiple pots accompanied by foliage and birds, and was produced by George Jones & Sons. While the Staffordshire potteries were somewhat behind the times in their attempts to emulate Japanese ceramics over a decade after that trend first took hold, their choices of UGTP designs were often extremely topical and up to date. The 1880s saw multiple large scale and highly publicised archaeological investigations in Egypt, including those directed by Flinders Petrie who would go on to develop a hugely influential method of dating archaeological assemblages through seriation. For this work he relied upon ceramic vessels, similar to those depicted on the Chavannes' Cairo plates, and although his official findings and interpretations were not properly published until the late 1890s (Petrie 1899), images and accounts from his excavations would have been seen around the world, including in New Zealand (eg. *Evening Star* 4/10/1884, page 1; *New Zealand Herald* 4/9/1886, page 2; *Hawke's Bay Herald* 14/11/1888, page 4; 30/1/1890, page 4; *Otago Witness* 4/1/1889, page 32; *Auckland Star* 26/11/1892, page 12; *Bruce Herald* 23/5/1893, page 3). This overlap of ivory-dyed whiteware and discoveries of antiquities in Egypt may have inspired George Jones & Sons to combine the two aesthetics, the result of which clearly caught the eye of (probably) Mary Chavannes. By presenting dinner guests with these plates and ashettes, the Chavannes were displaying just how up-to-date and worldly they were, and these vessels were so obviously different from the usual white bodied tableware that they could not fail to be noticed.

It is not just the topical nature of this Cairo dinner set which hints at conspicuous consumption, however, but the condition of the items and when they were discarded. The Chavannes material was distinguished from the commercial waste through a presence-absence use-wear analysis, and most of the Cairo fragments do exhibit marks caused by metal cutlery. When the use wear on these vessels compared to others in the same deposit, however, it is clear that this dinner set was not used intensively. This would make sense if it was an occasional set only brought out to impress visitors. Also of note is that, assuming the set was designed for six people, almost every vessel is represented in F420 and surrounding deposits. Twelve vessels in total were recorded, including two ashettes, six dinner plates and four side plates, and most of these were represented by between 50-100% of the individual vessel. This suggests that the set was discarded because it was no longer wanted rather than that it had come to the end

of its use-life. This is also not the only partial dinner set present in the Chavannes' ceramic assemblage, an Asiatic Pheasants set is represented by at least seven vessels (an ashette, a tureen [Figure 149], three diner plates and two side plates), although this set is considerably more fragmentary and more difficult to separate from the commercial dump due to the high popularity of this pattern.



Figure 149. Asiatic Pheasant patterned tureen from F420

The Chavannes assemblage is the only domestic example analysed for this research that contained a dinner set, let alone two, and their presence reveals not only evidence for typical middle-class behaviour amongst this household but also, especially when considered alongside other ceramic types, changes to long standing social rituals as the new century began. As was apparent in both the Williamson and Byrne assemblages, teaware and the ritual surrounding it was one of the main arenas for public interaction within the home. This resulted, particularly in the case of Mary Byrne, in high proportions of teaware vessels in the assemblages, with an average of 40%. The Chavannes assemblage, however, is only 25% teaware overall and is instead dominated by dinnerware vessels (53%), hinting at a shift from entertaining over tea to having dinner parties. This is obviously skewed by the uncharacteristic deposition of two nearly complete dinner sets, but similar behaviour was observed with teaware sets in the earliest Byrne deposits where they disposed of whole matching tea sets when a single component was broken rather than continuing to use them or seeking a replacement, so the situations are comparable. Dining and entertaining practices were undergoing considerable changes during the nineteenth century, with the traditional dining style of “à la Française” (where meals consisted of set courses consisting of

between five and eleven elaborate dishes brought out together, many requiring their own specific serving vessels) giving way to “à la Russe” (a style closer to modern service where smaller numbers of dishes are brought out sequentially) amongst the upper classes (Gray 2015). This new way of dining meant fewer specialised serving vessels were required and placed dinner parties within the reach of middle (and sometimes working) class hosts where previously they had been too expensive (ibid).

This change in emphasis is evident in the homogenisation of teaware decoration styles towards the end of the nineteenth century, as gilt, Tea Leaf and banded decoration became the styles of choice (Brooks 2005; Smith and Woods 2014). The Chavannes teapots tell a similar story: four were recorded from their deposits but they were all of the ubiquitous Rockingham style. We have already seen through Mary Byrne how important teapots were as status symbols earlier in the century, although she too eventually ended up settling for a Rockingham teapot in her final years.

Only two other Late Victorian period domestic deposits were analysed and both were attributed to the same household. Walter Edwards was a farrier who occupied part of TS192 from 1885 until 1918 but he replaced the house on his property with a larger forge in 1905 and moved to Purnell Street with his second wife Isabella whom he wed that same year (*Wanganui Herald* 12/1/1905, page 4). The two features from which these deposits were recovered (F185 and F186) appear to have been filled in as part of a clear out event during a demolition and construction phase as they lie inside the footprint of the forge in the 1908 insurance plan (Figure 150). These two deposits both contain re-deposited material from elsewhere on the site but also some unique material which has been interpreted as belonging to the Edwards household. The Edwards assemblage contains a relatively high proportion of teaware vessels (48%) which makes sense when considering the circumstances surrounding these depositions. If the growing trend was for dinner entertaining rather than over tea, then the demolition of the family home would have been a perfect opportunity to get rid of all the old teaware that was no longer required. The introduction of a new female member into the household in the form of Isabella would have also encouraged this behaviour, given that teaware was a feminine realm of expression she may well have seen this as a chance to remove the most obvious traces of her predecessor from the home and apply her own stamp to the household. This process of wiping out material

traces of the previous head-female in a family through replacement of tea and tableware has been observed elsewhere in New Zealand (Campbell and Furey 2007; 2013), and implies that although the tea ritual was losing importance in social workings of the household overall, it was still an important part of female socialising, albeit perhaps in a much less formal setting.

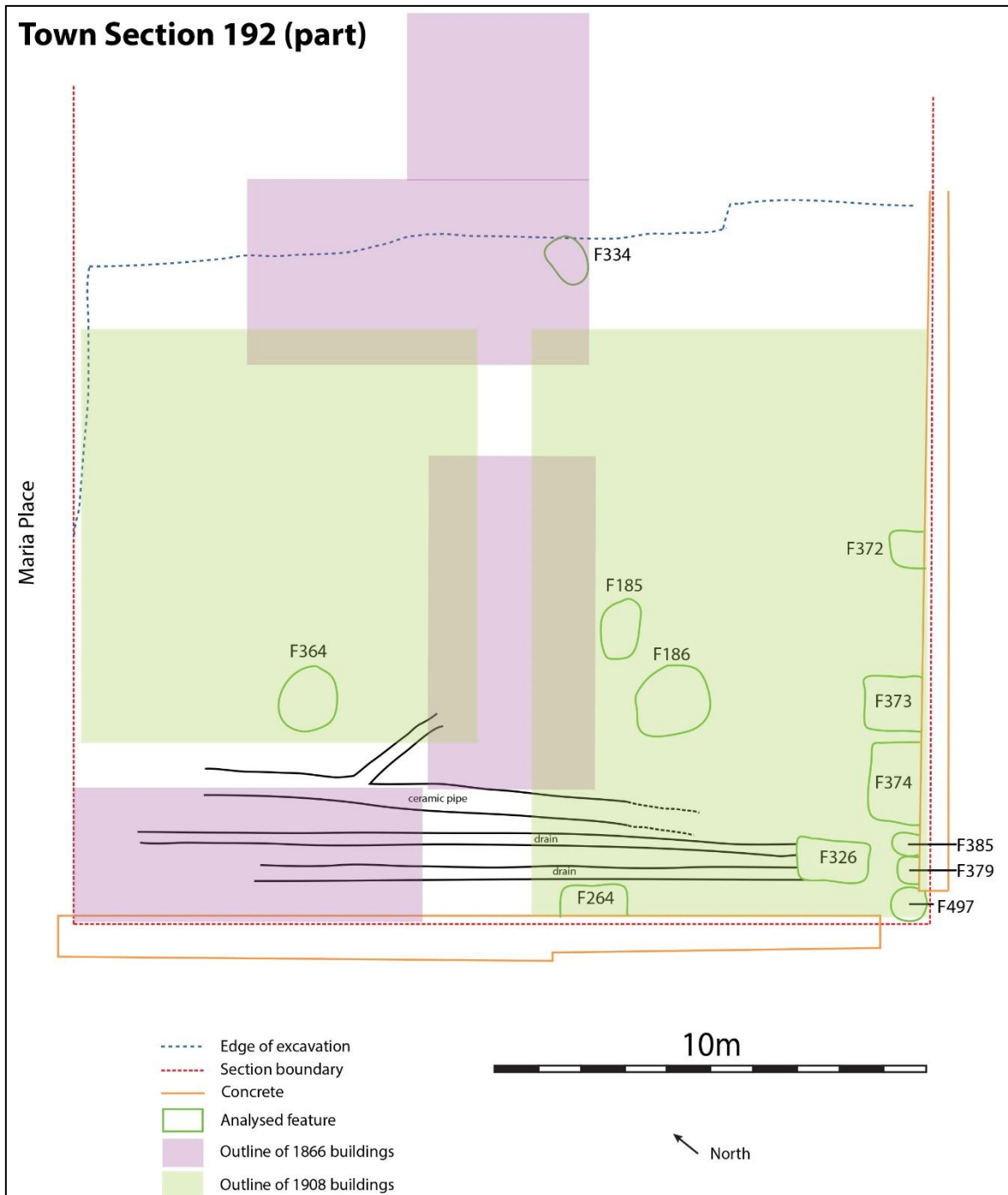


Figure 150. Excavation plan of the southern end of TS192 showing location of F185 and F186 within the footprint of a 1908 structure

This shift in emphasis from teaware to tableware has also been recorded among Irish immigrant assemblages in New York (Brighton 2006). Brighton (2006: 202-205) argues that as Irish immigrants become more involved in colonial American culture and society their ceramic and glass assemblages become more aligned with American born households, in particular owning significantly more table and serving ware than teaware vessels. This change reflects the adoption of new dining and entertaining behaviours and, as Brighton describes it, the transformation from Irish to American. The fact that this pattern is evident amongst late nineteenth and early twentieth century archaeological assemblages in both North America and New Zealand hints at the potential emergence of a more globalised “colonial” culture rather than, or as well as, immigrants becoming “American” or “Kiwi.”

The Chavannes’ ostentatious displays of material wealth do not stop at portable artefacts, they expanded the scale of their behaviour to that of buildings on their property. This is most obvious in the case of the stables they had constructed in 1897 on the St Hill Street corner of TS191 (Figure 139). The stables were built to house up to eight horses, which is far more than is required for a small family of four. It is possible that Charles and Mary rented out these stalls to other people, some of which may have been clients of the Chavannes Hotel across the road, although there is no evidence of this service being advertised in the newspapers. Participation in equestrian sports, as well as the horses themselves, would have been an easy and highly visible way of showing off your wealth in the nineteenth century, and the Chavannes were heavily involved in multiple recreational equestrian circles. Building a private stable which held twice as many horses as there were members of your household would have made a brazen statement. Even more blatantly flippant was the choice to demolish this structure in 1906, only nine years after it had been first built, and use a portion of the materials to level out the section rather than sell them for scrap. The building which replaced the stables was described as being of “handsome” brick (*Progress* 1/9/1906, page 14) and would have been almost as ostentatious as the cars it was built to house, especially given its location amongst single storey wooden houses (Figure 151).



Figure 151. The Chavannes garage, early twentieth century. (Alexander Turnbull Library, ref: 1/1-016363-G)

Accounts of events which occurred at the Chavannes Hotel suggest that this pattern of behaviour was well established by the time the family moved to the site. Alterations to the establishment in the early 1890s included an elaborate “umbrella jetted” fountain in the centre of the bar in which aerated waters and soda were placed to keep them cool (*Wanganui Herald* 6/10/1892, page 3), and upon completion of the works the individual in charge of the project (Mr N Meuli) was presented with a “massive gold albert chain and pendant” as a token of thanks from the couple (*Wanganui Herald* 11/10/1892, page 3). Mary and Hilda Chavannes were also regular attendees at social events and regularly earned special mentions for their resplendent outfits (eg. *Wanganui Herald* 17/12/1889, page 2; 4/3/1892, page 2; 10/3/1893, page 3; 6/7/1895, page 3; *Wanganui Chronicle* 12/7/1894, page 2). Even in their gift-giving the Chavannes were extravagant enough to gain mentions in the local media: they gave an elegant silver egg cruet at the Foster-Parson wedding in Christchurch which in itself took up most of the section regarding this wedding in the *Wanganui Herald* social column (22/9/1898, page 2).

Spiritual matters?

One particular artefact recovered from F420 and associated with the Chavannes is special in that it is the only physical evidence of the religious persuasions of any of the site's inhabitants. The artefact in question is a partial string of wooden rosary beads (Figure 152), probably the most common item of personal Catholic material culture aside from a bible. Rosary beads have been used by Catholics since at least the fifteenth century (Thurston 1901) as physical aids for reciting and meditating on a particular arrangement of fifteen prayers (in recent years the number has risen to 20). These prayers, also known as "mysteries," each focus on a particular event in the lives of the Virgin Mary and Jesus, with the option to progress through the entire rosary or to focus on a portion which suits the question or trial facing the devotee. As the practitioner progresses through the rosary they pull the beads through their forefinger and thumb, usually of their right hand, and pause on each to recite a prayer (Carroll 1987, 491). The beads themselves come in a large and small size, with the smaller beads grouped into five sets of ten (known as "decades") separated by a single large bead. When a small bead is encountered a "Hail Mary" prayer is said and on the larger beads an "Our Father" repeated, and during each of the decades one of the mysteries is supposed to be reflected on during these recitals. The Chavannes rosary beads are represented by one complete decade, an "Our Father" and three "Hail Marys" from a second decade. Due to the cyclical and interchangeable nature of the rosary it is not possible to link this section with a particular mystery.

Whereas some aspects of Catholic worship were social, for example communion and confession, the rosary is most often acted out privately. In some cases, the prayers may have been meditated upon in a family group setting but this would most often have been done silently. This means that the wear on these rosary beads is a direct result of internal meditations, whether forced or voluntary, of one of the Chavannes family, something which is rare to definitively identify in the archaeological record. While it is impossible to tell what exactly the meditations were regarding or even which mystery they involved, the beads can still be classified as an incarnation of religious beliefs and associated behaviours amongst the Chavannes.



Figure 152. Wooden rosary beads from F420

There is not enough evidence to definitively attribute these rosary beads to a particular member of the household, however it is tempting to project Hilda's experience and ownership onto these beads as she seems to fit the profile of a regular rosary user best out of the household. Her mother appears to have been a fairly devout Catholic, it was presumably for her which Charles senior converted, and she named her daughter after an important female Catholic saint. Emily Chavannes died when Hilda was just three so she would have had limited memories of her mother but appears to have kept her in her heart, probably with help from her father. This is supported by the fact that she would go on to name her only daughter Hilda Emily Brown in an obvious nod to her mother. Hilda's childhood was strongly entwined with the Catholic faith thanks to her father enrolling her in the local Sacred Heart school where she would have been

educated in many aspects of the religion, including how to pray the rosary. It is also possible that some of her early memories of her mother included the use or presence of these beads due to their prominence in catholic practice. In this way, Catholicism could have been Hilda's way of connecting to her deceased mother and regular use of rosary beads would have formed an integral role in this, as well as presumably acting as a vehicle for communing with a higher power.

From a different perspective, rosary beads are often used in Catholic schools as a form of punishment; children will be sent to recite a certain number of "Hail Marys" felt to be proportional to their sins or misbehaviour, so these beads could partly reflect Hilda's time at Sacred Heart school and their deposition an act of rebellion upon her leaving. This scenario could also potentially fit and Hilda was sixteen when the family moved to TS191 and coming to the end of her school career.

Charles' second wife Mary was also Catholic, however, and so also holds potential responsibility for the beads. There is limited evidence of Mary being heavily involved in the Catholic Church other than her marriage to Charles but this does not mean she did not follow some of its teachings, including the rosary. Even for someone who was only nominally Catholic, being brought up in the faith may have instilled certain habits, and few religious practices are as habitual as running rosary beads through your hands while stressed or reflective.

The Chavannes rosary beads are an example of an artefact which we know to have multiple layers of meaning but at the same time show how their presence in an archaeological deposit could be a result of several conflicting intentions and attitudes, none of which we can definitively prove based on the available evidence. In addition, they highlight one of the dangers of interpretive archaeologies and the temptations to make the artefactual evidence fit with whichever interpretation makes the best story. This does not mean, however, that the possibilities should not be presented. By presenting the possibilities the dynamic and multifaceted nature of the human-artefact relationship can be emphasised. The ritual surrounding this unassuming string of plain wooden beads could have been seen as a punishment, a source of comfort in stressful situations, or as a way of connecting the individual with God and the universe at the largest scale possible. It is also worth noting that the Chavannes were not the only Catholic family to occupy the site (the Byrnes were also members of the faith) and yet

Catholic paraphernalia was only found in one deposit associated with them. This acts as a reminder that absence of evidence is not evidence of absence, particularly for things as ephemeral as religion.

A change in pace

For the first four years of their time on site the property was listed in the rates records under Charles' name, but in 1899 this changed and everything was technically owned by Mary. This appears to have been a clever move on Charles' part just prior to him taking a huge financial gamble and would have safe-guarded the property had his grand plans not worked out. The couple retired from hospitality in 1901 (*Wanganui Chronicle* 15/6/1901, page 2) and in 1904 Charles imported a Cadillac motor car (*Wanganui Chronicle* 26/10/1904, page 4). This automobile is described as being "8 ½ horsepower" which was half a horse more powerful than the full capacity of the Chavannes stable block, and would have caused considerable interest upon its arrival. By 1906 they had demolished their stables (*Wanganui Herald* 24/4/1906, page 4) to make way for a "motor warehouse" from which he planned to sell and repair cars (*Progress* 1/9/1906, page 14). Luckily for the Chavannes, cars were the way of the future, and by 1907 they were the largest New Zealand importers of motor vehicles outside of Wellington and Auckland, obtaining cars direct from manufacturers in both America and England, including Cadillac, Rover, Argyll, Scott and Reo (*Wanganui Chronicle* 15/2/1907, page 2). The garage was run as a family business and Charley was heavily involved before his premature death in 1924 (*Hawera & Normanby Star* 23/7/1924, page 7).

This change in focus from horses to cars, visible in the archaeological record as the replacement of horseshoes with tyres and stables with a garage, perfectly embodies the changing nature of Whanganui (as well as New Zealand) society as the twentieth century dawned.

It is impossible to tell when Charles first decided to move away from horses towards cars, but the historical record offers some clues, particularly around when he began putting his thoughts into motion. The first time a car was seen in Whanganui was as part of the 1902 coronation celebrations held for Edward VII (Smart and Bates 1972, 267). This timing is significant as it coincides with the official end of the Victorian and start of the Edwardian period and heralded in a new, "modern" New Zealand. By the

start of 1904 Charles was actively involved in the Whanganui automobile scene, and his exploits were reported on in the local media. In January of that year the *Herald* reported that Charles and Mary had travelled to Palmerston North in a motor-car in a day (13/1/1904, page 5), and a year later they drove their Cadillac from Whanganui to Wellington in the same time (25/1/1905, page 4).

The beginning of the end of the horse-drawn transportation age was preserved in the archaeological record across TS191 in the form of structural material from the Chavannes stables, demolished in 1906. This includes 4kg of roofing zinc (Figure 98), a length of lead spouting, a selection of equestrian related artefacts (described above) and multiple interior fixtures of the building, all of which were used to fill in various features (F420, F430, F516, F495) in order to level out the ground surface. In the most literal sense the Chavannes stable provided the foundations for the emergence of the Whanganui motor industry.

It seems logical that the automobiles of the nineteenth century emerged directly from and were inspired by horse-drawn vehicles and were simply replacing the horse with an engine, but it is not as simple as this. While horse-drawn transportation undoubtedly had some influence on the development of these machines, they also owe a significant amount to another Victorian (and Chavannes) obsession: the bicycle. Charles was instrumental in establishing Whanganui's first Cycling Club in 1884, acting as its first "captain," hosting meetings at his hotel and dictating a number of rules which included the use of lamps at night and not riding on the footpath or around the CBD. The first meeting of this club also resulted in a uniform of "blue serge knickers and blue hose" being imposed (*Wanganui Herald* 17/8/1884, page 3). A bespoke badge was added at the next meeting, made of "white worsted on blue cloth, consisting of a bicycle with the letters W C C underneath" (*Manawatu Times* 23/9/1884, page 3).

By the time the Wanganui Cycling Club came into being bicycles had already been present in the town for fifteen years, albeit in earlier and far less practical forms than the "safety bicycles" these riders would have used. An example of one such early bicycle was found on a different part of the VRC site and, although it was not brought to the site until the late 1880s, it provides a window into the settlement's first forays into cycling (Woods 2016). A rubbish pit on TS183 (F23) contained the twisted iron frame of a velocipede belonging to Walter Armstrong who was a renowned Whanganui

blacksmith and engineer. Velocipedes such as this one were popular for a very brief period at the end of the 1860s and were the first two-wheeled self-propelled vehicles to gain widespread popularity in New Zealand. The Armstrong velocipede is also very obviously homemade, with several unique characteristics such as a rear footrest, curved handlebars, and a lack of brakes, implying that at least some of Whanganui's residents at this early date were experimenting with their own designs rather than simply importing a French or American commercial model as was the norm (ibid). Improvements and developments of the velocipede led to the creation of the penny-farthing, or ordinary bicycle, in the 1870s and then, with the introduction of gears, the safety bicycle was born. The VRC site's association with cycling was continued when the Captain of the Wanganui Cycling Club moved into TS191 in 1895, and further strengthened when Henry Turner opened a bicycle dealership at the northern end of this same section in 1907 (Taylor and Sutton 2009, 14). In the 1930s the Wanganui Cycling Club got a new home when a velodrome and clubrooms were constructed at Cooks Gardens (Patupuhou). They remain there today, only a short distance from their birthplace at the Chavannes Hotel on the corner of Maria Place and Victoria Avenue.

Automobiles first gained widespread popularity, similarly to bicycles, in France, and this is no coincidence. Although it is often thought that the inspiration for automobiles came from horse-drawn vehicles, most of the earliest examples were in fact based on bicycles and tricycles and were even constructed using the same components (Reid 2015, xiii). In 1896 Paris authorities allowed petroleum powered cars to act as cabs alongside their horse-drawn counterparts, in a move which the global media followed with interest (*Manawatu Herald* 10/4/1896, page 2; *West Coast Times* 21/10/1896, page 4).

Despite the huge part automobiles played in the lives of the Chavannes during their time at their Maria Place property, minimal artefacts relating to this type of activity were recovered. One small section of thin rubber tyre (Figure 153) was recovered from F420 and appears similar to those used on the cars visible in the early twentieth century photograph of the Chavannes garage. Another fragment of tyre was found during the 2014 monitoring at the site but was not collected. This tyre was considerably thicker and had much more prominent tread than the F420 example (Figure 154) so presumably relates to a time after the period covered in this research

as well as to a heavier vehicle. It acts as a reminder that although the period covered by this research stops here, the Chavannes story continued on at the site, and the age of the automobile was, in fact, only just beginning.



Figure 153. Section of rubber tyre found in F420.



Figure 154. Early twentieth century car tyre found during 2014 monitoring of VRC site.

Charles and Mary continued to live on site until their deaths in 1934 and 1936 respectively. In them and the material culture they left behind we can see several key

differences in their behaviour and outlook to the previous two families which are extremely telling of the transformations taking place in Whanganui and New Zealand society around the turn of the twentieth century. The way in which the new generation of Whanganui settlers viewed the town's past, particularly its military aspect, was changing and becoming more and more romanticised as they had their own military experiences as part of the recently formed New Zealand army at Parihaka and the horrors of the imperial garrison period faded further into the past. A perhaps more positive change can be seen in attitudes towards animal welfare, something which both Charles and Mary Ann Chavannes appear to have been passionate about. The most obvious and over-arching transformation, however, is in the desire of the Chavannes to portray themselves as *global* citizens rather than adhering to British behaviour and fashion. While the household initially involve themselves in traditionally British upper-middle to upper class pursuits, such as recreational equestrianism, shooting and billiards, in an attempt to maintain their social status, they begin at the turn of the century to look more to America and Europe for inspiration. They become involved in the very French world of cycling and soon after abandon their horses in favour of American motor cars, both of which were the height of modernity at the time. This marks a major shift from a society which valued its British roots and ideology to one which has turned its gaze from the "homeland" to the wider world and, as a result, to the future.

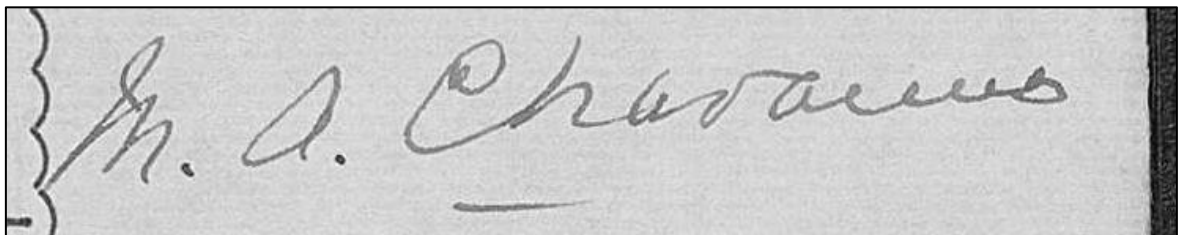
A close-up photograph of a handwritten signature in cursive script. The signature reads "M. A. Chavannes" and is written on a light-colored, slightly textured paper. The ink is dark, and the handwriting is fluid and connected.

Figure 155. Mary Ann's signature on her 1935 will (FamilySearch 2016)

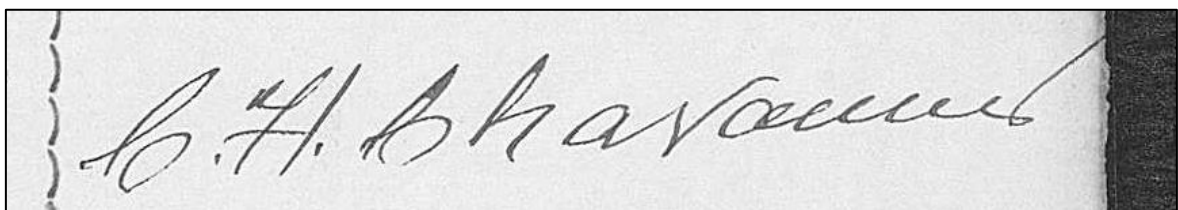
A close-up photograph of a handwritten signature in cursive script. The signature reads "C. H. Chavannes" and is written on a light-colored, slightly textured paper. The ink is dark, and the handwriting is fluid and connected.

Figure 156. Charles' signature on his 1932 will (FamilySearch 2016)

Chapter 9: Discussion

In Chapter 1 two specific research questions were introduced. The first (*Can archaeological material collected from CRM contexts be used to construct narratives about the past that are academically sound?*) has been conclusively answered by the three family narratives presented in the preceding chapters, with the answer being a resounding yes; CRM material can form the basis of rich and varied narratives which are strongly grounded in empirical evidence and modern archaeological theory (thus fulfilling two of Hall's (2011:296) criteria for successful archaeological interpretations), but at the same time address themes that are of broad public interest, presented in a relatable way. This does require a slight deviation from the traditional positivist research methodology, however, in that it is difficult to begin with a specific hypothesis or research question, and instead favours a data-led approach in which the overarching themes reveal themselves as the research progresses. The implications of this include a potential for narratives to at times seem to lack direction, or stories that do not appear to refer to all of the evidence gathered from the material culture assemblage(s). Both of these concerns could potentially be applied to the preceding chapters at first glance, but when considered in more detail it becomes clear that the interpretations presented could not have been confidently asserted without significant input from all of the data collected. Furthermore, a new story emerges when the three narratives are considered together that does not necessarily make itself immediately apparent within each chapter, and links the lead characters into networks which act at a national and global scale in keeping with Orser's (2008) arguments surrounding the strengths of household level interpretations.

Weaving the threads together

Each of the narratives presented in the previous three chapters have told the individual stories of three households during their time at the VRC site through data gleaned from both the archaeological and historical records. Using this approach has allowed for the exploration of multiple perspectives (or "voices" in keeping with Bakhtin's (1981) concept of *heteroglossia*) on what life was like in Whanganui during the nineteenth and

early twentieth century and highlights the vast differences between people's experiences of the same cultural environment. This has gone part of the way towards answering the second research question (*What do household level narratives/micro-histories tell us about the experiences of individuals in nineteenth century Whanganui, and how do these experiences relate to the wider colonial world during this period?*). All three households were middle class, first generation colonists of Western European descent and all lived within the same small area but each had a completely unique story. Despite the differences in their narratives and the themes that emerged throughout each, these three families present a wealth of information about the wider processes with which they were engaging at the local, national and even global scale, and enables the second part of that question to be addressed. The following section places the Williamsons, Byrnes and Chavannes (along with their material culture) into the wider cultural context, with particular emphasis on the emergence of a global colonial culture, and is structured around the periods outlined in Chapter 2.

Pre-European

As previously stated, no archaeological features or artefacts relating to this period were uncovered during the excavations at the VRC site. This could be the result of a number of factors, including the incomplete nature of investigations at some parts of the site, which may have missed the earliest and more ephemeral remains. However, this seems unlikely given the lack of evidence in the areas where excavation was completed down to the natural substrate. A more likely explanation for the lack of evidence of Pre-European occupation here is the fact that the area was a swamp when the first New Zealand Company settlers arrived. This made it an undesirable place to live or cultivate crops compared to the wealth of alluvial soils and raised sand hills surrounding the site. The stratigraphy observed can tell us something about changes to the site over its extended history, however. The iron pan found in most areas was, at least initially, not the *result* of the swampy conditions but the *cause* of them, and formed as acidic leaf litter collected on the floor of a forest that must have covered the site at some point. Kauri forests are especially adept at creating pans such as this one (Dawson 1988), which go onto reduce the drainage capabilities of the soil and in turn create a swamp. However, without paleo-botanical data it is impossible to comment on the type of forest that once existed here.

Wakefield

Again, no artefacts or features were identified as belonging to this period of Whanganui's history, which is unsurprising given an 1855 plan shows that only one section was occupied by this date (and well into the next period). The area on the river side of Maria Place was still a swamp for the entirety of the Wakefield period, and part of the VRC site lay under the north-eastern edge of the Patupuhou sand hill. The layout of central Whanganui itself, including St Hill Street, Maria Place and Victoria Avenue, along with the town section boundaries, are the only remnants of this period as it was during this period when they were surveyed, but even these tell a story. The original Whanganui town plan was typical of all New Zealand Company planned settlements and consisted of a grid. This was a deliberate attempt by Wakefield and company to project a sense of order and control onto the fledgling settlements and distance them from the evils of unchecked urban sprawl which was plaguing cities back in Britain (Forrest 1964: 10). Wakefield's determination not to deviate from the classically inspired grid layout so noticeable in some of his other settlements (perhaps most notably Dunedin with its impractically steep streets and huge expanses of reclaimed land (Woods 2013: 137)) is visible at the VRC site. Throughout this and well into the Garrison period parts of St Hill Street and Maria Place existed only on paper, with parts lying well under Patupuhou and other areas being impassable bogs. It is this same tendency towards obstinacy which caused so many of Wakefield and the New Zealand Company's problems surrounding the supposed purchase of the settlement and would eventually result in the Crown forcibly taking control of Whanganui in 1847.

Garrison

It is during this period that the VRC site and its occupants really begin to contribute to Whanganui's story. John and Mary Byrne were among the first to set up home here, purchasing three of the town sections in the late 1850s/early 1860s. They thus began the gradual process of shifting from military to civilian life and constructed multiple lodging houses to fund their own slice of the colonial dream on their Waitotara property. This process involved improving their property, not just by building three new cottages, but through the addition of glass bottle bases to the soil in an attempt to stave off the, at best, partially drained swamp's attempts to reclaim some of their heavier structures.

In 1866 a new neighbour moved into the site with his young family: Henry Williamson. Williamson also embarked on a series of property improvements geared towards capital gains, but in his case this entailed the construction of a seed warehouse and ironmongery business. He too took measures to improve the soil on his property to better suit his needs, but in this case it was to add organic matter to facilitate his horticultural pursuits. Williamson's desire to improve Whanganui's environment did not stop at his own property however, he used his business to spread his ideas about ornamental landscape design and encouraged customers to create their own perfect "British" style gardens, the archetype for which appears on the plates from which he and his family (along with the rest of the settler population) dined off every day. His grand ideas do not seem to have been implemented by the majority of Whanganui private gardeners, with most favouring an easier to maintain cottage garden aesthetic. Despite this, his business continued to go from strength to strength and saw the Garrison period out as a well-known and respected Whanganui establishment.

The Byrnes were not so lucky. The last two years of the Garrison period saw the death of John and their eldest son, leaving Mary a widow with two children unable to yet bring in an income. She was forced to sell off her town property in the hopes of sustaining her country home in Waitotara. This process put her aspirations of cementing her status among the upper middle class of the region into serious jeopardy and forced her to drastically change her consumption patterns, although she still put considerable effort into having a respectable tea-service. By prioritising her teaware she was able to send out a clear message that even though her economic situation may not have been as comfortable as it once was, she still adhered to the traditional ideals and etiquette of her chosen social group. In doing this she deviated from the expected path for most Irish widows, both at home and abroad, which was to take over the role of breadwinner (Kelleher 2001). Instead she aligned herself more closely with the dominant Anglo-Victorian ethos of her new home and set to work preparing a strong set of social networks which would hopefully benefit her surviving son when he came of age. Again, her teaware was central to this process, and in that way could have been considered a sensible investment for her son's, as well as her own, future.

The site itself changed considerably in appearance throughout this period. A large section of Patupuhou, or Cook's Gardens as it was beginning to be known, had been

removed allowing for the formation of the remaining section of Maria Place and St Hill Street. This caused several changes in the spatial organisation of the site, particularly TS191 on the corner, forcing the Byrnes to alter where they buried their rubbish and potentially resulting in the decommissioning of a long-drop (F430) which had once been at the bottom of the garden but now sat right on the street front. Around the site the streets were steadily improving and infrastructure was also beginning to be put into place, including proper drains and preparations for a reticulated water supply, which would have given the area less of a frontier feel.

Recovery

By 1870 the tensions which had plagued Whanganui for the past twenty years or so had dissipated enough for the military to move on. This had a huge impact on the character of the town as it lost what for so long had been the backbone of its economy and social scene. The soldiers were replaced by an influx of settlers keen to take advantage of cheap land prices and the opportunities which the area's rich resources and accessibility now offered. The existing population also began to spread out from the centre of town, with many moving back to hinterland properties they had abandoned during the wars. Both the Williamson and Byrne families were active participants in this process. Henry Williamson had a farm out towards Karakamea which he began to prepare as a family home in the early 1870s. By 1874 he and Margery had moved there permanently and left the everyday running of his shop to his new business partner W D Shaw. Williamson continued his horticultural and pastoral pursuits in Karakamea and sowed the seed of a love of plants among his family.

Mary Byrne and her son moved out to Waitotara shortly after Michael set up a saddle and harness making business in Hawera, although as a result of this process Mary was not able to sell all of her town property. The Maria Place cottages were no longer the valuable real estate they were when the town was full of military personnel looking for short term accommodation close to the stockades, and as it was now feasible for most settlers to purchase empty parcels of land upon which to build their own home, there was little interest in the properties.

Charles Chavannes was also taking advantage of the prosperity and growth being enjoyed by Whanganui during this period by making his first venture into the business world. In 1879, aged 25, Charles purchased the Victoria Hotel on the corner of Victoria

Avenue and Maria Place (opposite the VRC site). His position as a publican placed him at the forefront of Whanganui society, especially as he was taking over an already established hotel, and helped him on his way to becoming a prominent and influential member of the community. He also embarked on a successful (if short-lived) military career as a quartermaster for the Alexandra Volunteer Cavalry during the Parihaka campaign in the early 1880s which would have undoubtedly helped with his public image.

The end of the Recovery period saw Henry Williamson leaving New Zealand and returning to Scotland to seek treatment for what appears to have been epilepsy. This is a significant choice as it shows that although Williamson was apparently committed to civilising the new colony he never quite reached the point where he fully identified as a New Zealander, or saw the civilising process as complete. Reports (for example *Wanganui Herald* 12/1/1885, page 2) describe his journey as a return to “the homeland” and it is clear that he did not feel New Zealand was at this point advanced enough to offer him the medical aid he required.

Overall, the Recovery period was one full of prosperity and growth for Whanganui and its inhabitants. The Williamsons, Byrnes and Chavannes all took advantage of this and were able to take steps towards improving their situations, both socially and financially, with varying degrees of success. They were now able to begin to view Whanganui as a home which they now had control over (justified or not) and this created a suitable environment to harbour the creation of an inclusive community identity. This process was also underway on a national scale, with rapid changes occurring in demographics including the overtaking of Maori population levels by Europeans (Pool 1991; 2015; Smith 2008: 373), changing the character of New Zealand and cementing its status as an established British colony rather than a frontier outpost.

Depression

The 1880s were a period of economic depression for New Zealand and Whanganui did not escape the effects. Unemployment and bankruptcies were common topics in the local press and several businesses around the VRC site were forced to dump unsold stock, including Victoria Avenue general store owner Edwin Moulton who partially filled three features with unwanted ceramic vessels (F374, F379 and F420) and bonded

warehouse operator Andrew Tod who used old latrines along his back fence (F656, F657, F659 and F672) to dispose of glass bottles.

Shortly after the official beginning of the depression, Mary Byrne was once again struck by misfortune, this time losing her beloved Waitotara home to a fire. This forced her to move back to her small cottage on Maria Place full time and sees the resumption of her material culture deposition at the site. A small fragment of a rural figurine found in one of these deposits suggests that she never quite let go of her country fantasies, however. She had, by now, clearly adjusted to the life of a widow and put considerable effort into amassing a teaware assemblage which best portrayed her respectability, even though her economic situation restricted her to low-end knock offs. Her health was by this time becoming a major issue and there is evidence that she began to retreat from her social circles in the declining effort she put into her teaware in her last few deposits. She finally passed away in 1891 and her son's post-death clear out implies that the end of her life was not a comfortable one, although the wide variety of complete medicinal bottles and folk remedies point towards her attempting to hide her pain from those close to her. Her choice of products included a mixture of modern pharmaceuticals sourced locally, from Australia and America alongside more traditional Irish remedies including soda water, reflecting a willingness to trust new medicine but at the same time maintaining the behaviours of the past.

Henry Williamson suffered a similar fate, except that before his death his condition was reported to be improving. He intended to return to New Zealand once he had received treatment in Scotland but died suddenly before he was able to. His family remained in Karakamea and continued to indulge their horticultural and pastoral interests.

Charles Chavannes' first wife Emily also passed away during the Depression, but four years later he re-married and his family appear to have been largely unaffected by the unfavourable economic situation; the Victoria Hotel continued to prosper and was renamed the Chavannes Hotel during this period. Their social standing also seems to have continue to increase, and they appear more often in the local society columns, which often marvel at their sporting prowess or acts of conspicuous consumption. Charles attempted to take advantage of his military experience to get a land grant from the government but this was refused as he had not served the required time. This potentially signals a de-valuing of military service compared to the earlier military

settlers who knew and accepted that five years was the minimum term to qualify for a land grant.

The deaths of Henry Williamson and Mary Byrne and the flourishing of the younger Chavannes during the Depression marks a turning point in Whanganui's story. At a superficial level this was a time when the first generation of European settlers, both civilian (Williamson) and military (Byrne), were coming to the end of their lives and as a result losing their influence on society. The subsequent generation (Chavannes) had grown up in a less turbulent environment than many of their predecessors and had access to an abundance of new technologies, consumables and knowledge with the improvements in global trade links, communications and transportation. As a result, their world views would have been significantly different. Perhaps most importantly, this new generation were, more often than not, born outside of Britain and as a result their ideological ties to "the homeland" were being diluted and replaced by influences from around the world.

Late Victorian/ Edwardian

By 1895 Whanganui and New Zealand were bouncing back and officially out of economic depression. This period, as with the earlier Recovery period, was one of growth and prosperity which enabled the town to enter the twentieth century as one of the most important trade hubs in the country. The beginning of this period also saw in a new chapter for the VRC site, in particular TS191 on the corner of Maria Place and St Hill Street. Michael Byrne had passed away in 1892, leaving the Byrne property in the hands of his estate who continued to try to sell it. They finally succeeded in 1895, the first year of this new period, when Charles and Mary Ann Chavannes decided to move on from their hotel across Victoria Place and purchased the property. Over the next decade they completely redeveloped the corner site, first extending Mary Byrne's cottage beyond recognition, then building a large stable right on the corner which was eventually replaced with their motor garage in 1906. This transformed the property from an overgrown and run-down relic of the Garrison period into an important commercial hub (the garage was flanked by a large coal warehouse, bicycle shop and blacksmith workshop) which played a major role in driving Whanganui into the twentieth century.

The Chavannes epitomise the post-Garrison generation in Whanganui. While they still actively engaged in traditional British status display behaviours (such as equestrianism and hunting for sport) they were also actively engaging with trends, fashions and networks from across the globe. This is particularly evident in their archaeological deposits, which include evidence for a stronger focus on consumerism and more extreme material displays of disposable income. The best examples of this are the two near complete dinner sets discarded in F420 and other features, especially the Cairo pattern service which was fashionable for such a short period of time. This dinner set itself characterises the new global community the couple were part of, with its fusion of Japanese and Egyptian design on a quintessentially British form and material.

Their willingness to adapt to rapidly changing trends and at times take serious risks with their financial stability is evidenced in their short-lived stable building which was demolished and replaced with a car garage less than two years after Charles imported one of the first cars into Whanganui. This choice further cemented their status as global citizens as motor cars were mostly a French and American phenomenon at the time.

Potential differences in this new generation's world view, or more specifically the way in which they saw events of the past, can also be seen to be increasing in the Chavannes story during this period. The more recent military experiences of the Parihaka campaign gave many of the settlers who were too young to remember the Land and Hau Hau wars a point of reference for these events and, due to the extreme one-sidedness of Parihaka in favour of the colonial forces, may have helped to romanticise and almost mythologise them. This effect would only increase in the following generations, as evidenced by the collection of a 57th Regiment mess-hall plate fragment and then the subsequent special treatment it received when re-discovered by archaeologists in 2010.

By the end of the period covered in this research (1914) Whanganui was the largest town in the province and acted as a major trade hub for much of the central North Island (Ross 1968: 166). New Zealand was still very much viewed as a British outpost at this point, and would only fully emerge as a post-colonial state with an independent identity after the First World War (Schrader 2016: 22).

Immigrants to New Zealanders

The observations outlined here can also add another dimension to Smith's (2008) "Kiwi period," which he defines as beginning in 1860 and marks both an influx of multi-cultural immigration and a clear change in views and policies towards various ethnic groups. While Smith's Kiwi period is largely intended as an organisational device for New Zealand's post-contact archaeological sequence, it also points towards the development of the modern New Zealand (or "Kiwi") identity. In fact, he is quick to point out that it is during the second half of the nineteenth century that the Kiwi bird starts to be used as a national emblem and, by the early twentieth century, a label for New Zealanders themselves (ibid: 368). The research presented here, however, suggests that the development of our modern identity was not complete until the early twentieth century at the earliest, and so the transitional nature of the Kiwi period should be emphasised. It is clear that the Williamsons, Byrnes and Chavannes all remained to some degree connected to the ideals and behaviours of the British "homeland" all the while adapting and abandoning aspects of each in their own unique ways in order to fit best into the Whanganui context.

This process was not only occurring in New Zealand. The most obvious and earliest example is the United States of America which was so adamant that it was *not* British anymore that the American Revolution of the late 18th century brought about the end of the "first" British Empire (Parkinson 2016: 4). History repeats itself towards the beginning of the twentieth century when similar (but less violent) processes become apparent in "second" British Empire colonies. In South Africa's East Cape, colonial identity and folklore formed around the mythologised first generation settlers who arrived in the area in the 1920s (Winer and Deetz 1990: 55). In Australia the "bush life" legend emerged around this time and, as in South Africa, placed the new nation's origins on Australian soil as opposed to simply being a British colony (even though the archaeology reveals that most people during this period stuck to a very British way of life) (Lawrence 2003b: 211). Whanganui, along with the rest of New Zealand, was part of the same global networks as these other British colonies and as such it is unsurprising that we see some of the same forces at work here at about the same time. Even though the end result of these identity formation processes was the dissolution of these colonies' connection as constituents of the British Empire, it could be argued that the transformation brought at least some of these nations closer together as they

looked to establish themselves in the modern world. This is tantalisingly evident in the Chavannes' obsession with American cars and Mary Byrne's reliance on American and Australian medicine, for example, and is a perfect embodiment of the "glocalization" which characterises the modern world (Orser 2008: 28).

This is an area which requires more research. Previous projects, such as the EAMC project in Australia, have taken up the challenge of global comparisons between urban nineteenth century sites, but have focused on comparisons between the colony and Britain (Murray 2013: 858). Doing this can reveal vital information about the connections between Britain and its (former) colonies but cannot offer answers about how those colonies interacted with each other once they were well enough established to become independent agents in global networks.

Reflections

As mentioned above, the preceding chapters have already shown the viability of using CRM material for constructing meaningful archaeological narratives. It is pertinent here, however, to reflect on the strengths and potential weaknesses of this approach in a more general sense, especially with regard to the theoretical concerns introduced in the first chapters, namely the use of CRM generated material, heteroglossia and viewing artefacts as multi-faceted and active agents.

The first, and perhaps most obvious, strength of the narrative approach is the ability to create engaging stories which have the potential to appeal to the general public as well as inform other academics. Community engagement is vital to ensure that our heritage is protected, understood and valued, and as archaeologists the responsibility falls on us to interpret the material remains of the past for the public. In New Zealand this includes any site which pre-dates 1900 and therefore vast amounts of urban and colonial heritage. Despite this, Victorian archaeology has the tendency to be viewed as merely an inconvenience which has to be done to fulfil statutory obligations and so is rarely taken further than the required descriptive reports. This is a self-fulfilling prophecy of sorts and compounds this view of nineteenth century archaeology in both the public and archaeology graduates. One way to combat this problem is to demonstrate the wealth of invaluable information possessed by assemblages and sites from this period of New Zealand's history by presenting it in a way which is easy to understand and enjoyable to read, requirements which are both easily met by

narratives. There is also increasing recognition that presenting research in a narrative style is one way to increase its influence and uptake in academia, even in fields as traditionally empirical as climate science (for example Hillier *et al* 2016).

Another major advantage of using a narrative approach as outlined in this research is that it facilitates the incorporation of heteroglossia into the resultant interpretations, even in the absence of explicit examples of period and/or place specific language. The data-led focus of the VRC analysis and interpretation lends itself particularly well to this concept as it forces the researcher to explore a wide range of sources which represent a variety of “voices.” For example, the subjects themselves can be heard through bureaucratic records which they instigated or authored, such as marriage certificates and wills, as well as in the deposition practices they undertook in terms of spatial patterning, which artefacts they chose to dispose of when and even what condition those artefacts were in when they were finally discarded. The broader voice of contemporary Whanganui and New Zealand sounds from the historical record, especially in this case newspapers. Artefacts, when viewed as active and multi-faceted, give their own accounts of the past, whether it be ubiquitous Willow pattern plates, Mary Byrne’s changing teapot styles or the re-deposited fragment of a 57th Regiment mess hall plate. Finally, the inescapable voice of the archaeologist permeates the narrative through the points of interest which are chosen to pursue. The acceptance of this particular voice is recognised by both Hall (2011:296) and Wilkie (2009) as vital for answering an incredibly important question: *why do these stories matter?* In the case of the VRC site, although there was very little conscious direction at the outset, this voice has lined up with one of the current major themes of the field: the archaeology of identity and what it means to be a citizen of the modern world. This issue is driven by modern concerns and curiosities much more than it is by those of people in the past, and highlights how central heritage and archaeology can be for defining identity at local, national and global scales.

Of course, this approach is not perfect and will not work for all sites or assemblages. The Williamson, Byrne and Chavannes narratives were each reliant on multiple securely provenanced deposits and at least some presence of the subjects in the historical record. This means that assemblages from mixed contexts will generally be unable to provide such in-depth interpretations and will, out of necessity, have to be

left at the descriptive stage. Narratives will also be more difficult to construct for sites without written records, such as pre-European sites, although they may be able to be constructed in some form from the material culture alone. Despite this, aspects of this approach, such as allowing for data-led research, can still easily be applied to other archaeological contexts.

Another issue with applying this approach to CRM projects is time and funding. These stories take work to create and strengthen and most developers would be unlikely to agree to paying extra for something which goes beyond the three descriptive reports Heritage New Zealand currently requires by law (Heritage New Zealand Pouhere Taonga Act 2014). This links back to the problem with the perceived value of colonial archaeology in New Zealand and can only be addressed by better community engagement.

Conclusion

The material culture assemblage collected during the redevelopment of the VRC site served as an ideal test case for exploring the applicability of archaeological narratives in a New Zealand context and highlights the wealth of information which assemblages like this can contain. The in depth recording and analysis of the artefacts allowed for the creation of three household level narratives which have the potential to appeal to a non-archaeological audience while at the same time being heavily grounded in evidence and insightful enough to suit academic applications. Through the Williamsons, Byrnes and Chavannes we were able to gain rich insights into colonial life during the formative years of Whanganui and in doing so delved into the formation of the New Zealand identity. The stories presented here are not, however, of families or individuals who completed the transition from settler to New Zealander but of people who laid the foundations for what it meant (and means) to be Kiwi.

Looking Forward

This research was undertaken in an attempt to highlight the potential which the vast amounts of archaeological data collected during CRM work around New Zealand has for understanding our past. As archaeologists we are entrusted with protecting, recording and, perhaps most importantly, interpreting the physical remains of this past, not just for other archaeologists and academics but for the general public. While

the method used here may not be feasible or even possible for all CRM assemblages it is hoped that it will encourage more people to move past the descriptive stage and put the people back into the archaeological record. Doing this will enable the data to be better appreciated by a wider audience and, potentially, raise the profile of archaeology in New Zealand amongst the general public while at the same time pushing for higher quality in academic research. In this respect, I envisage a future where archaeologists are driven by the same motivation as Ellen Hewett: to produce an account of the past which “may be of some interest to those who care to read it,” regardless of who they may be.

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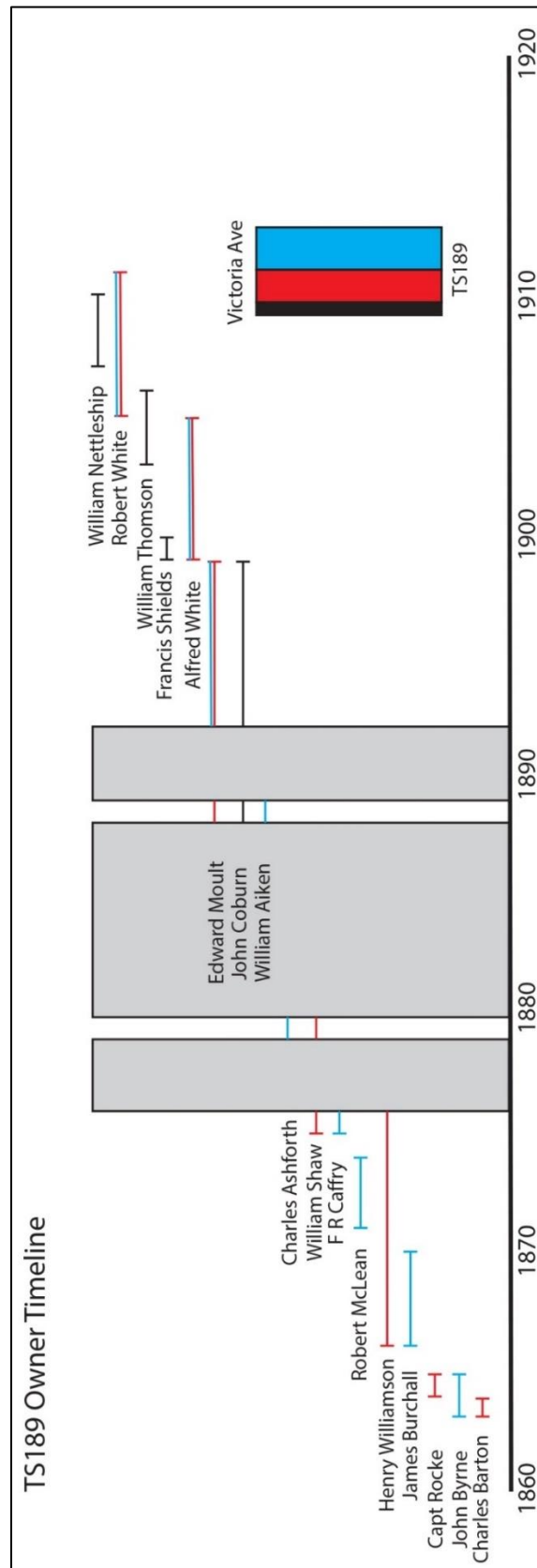
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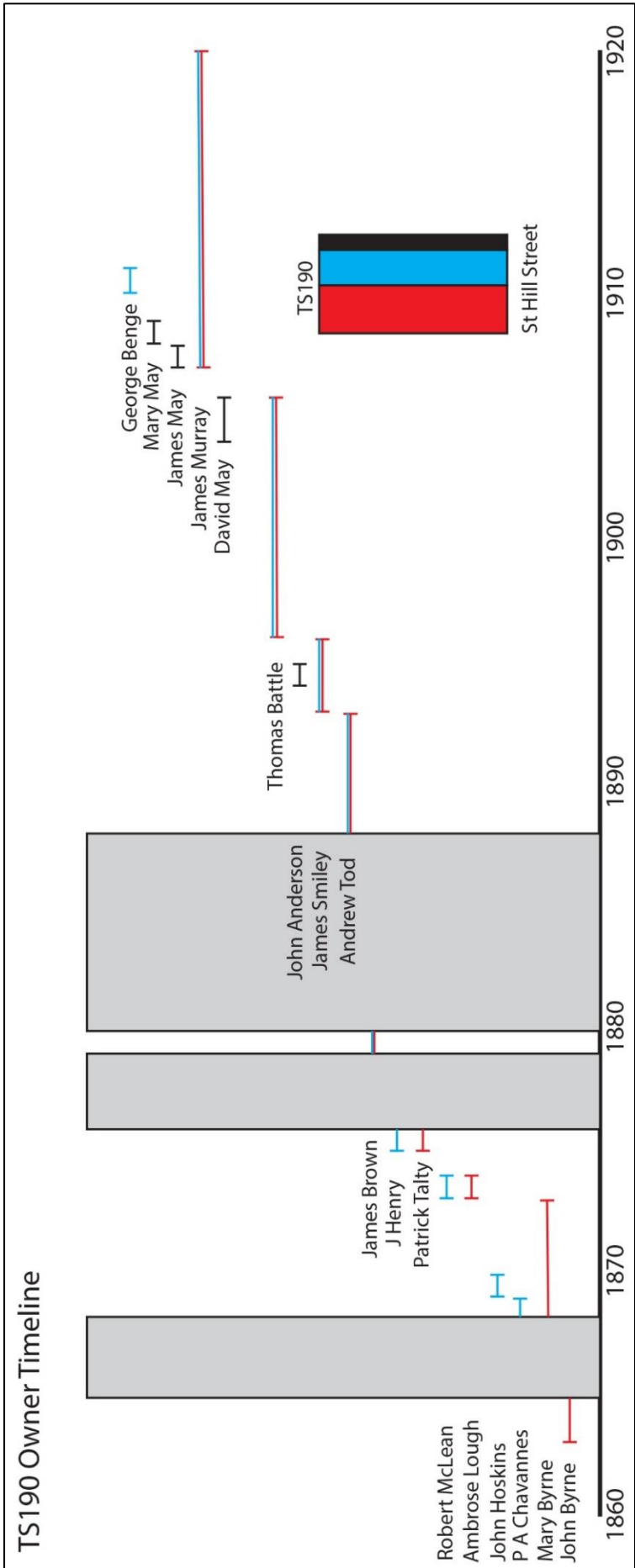
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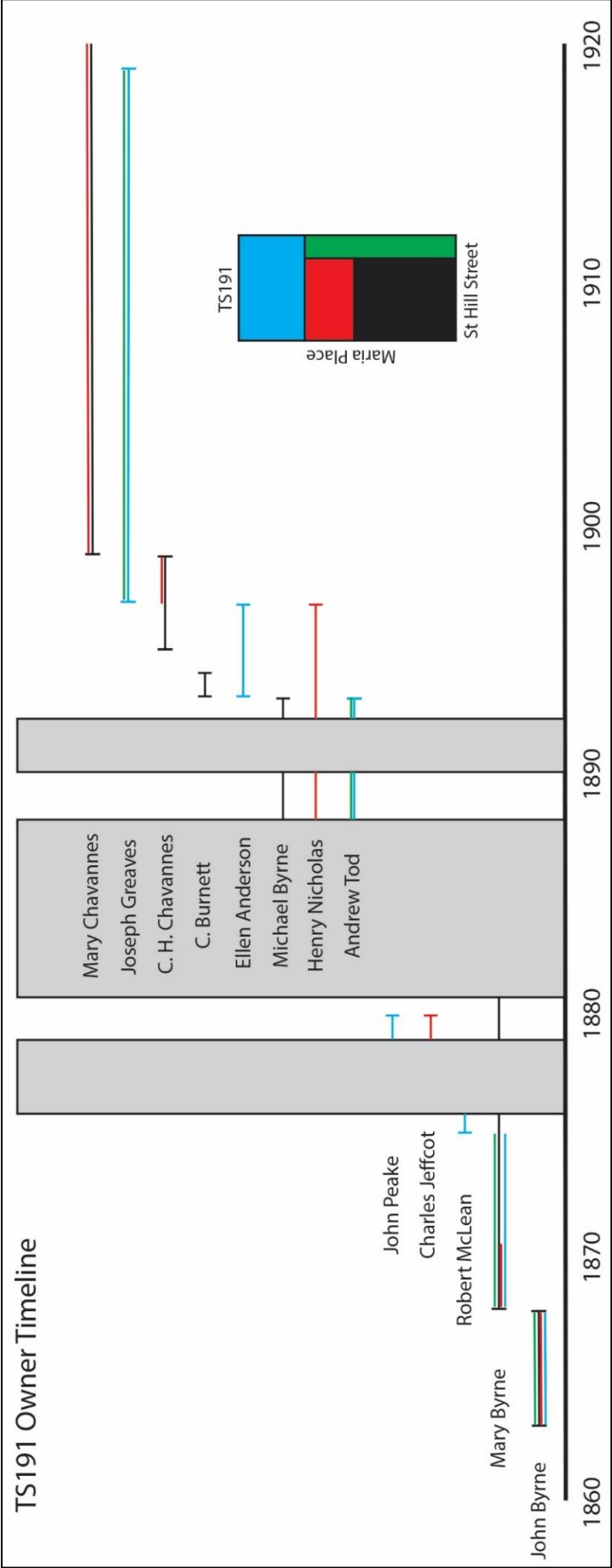
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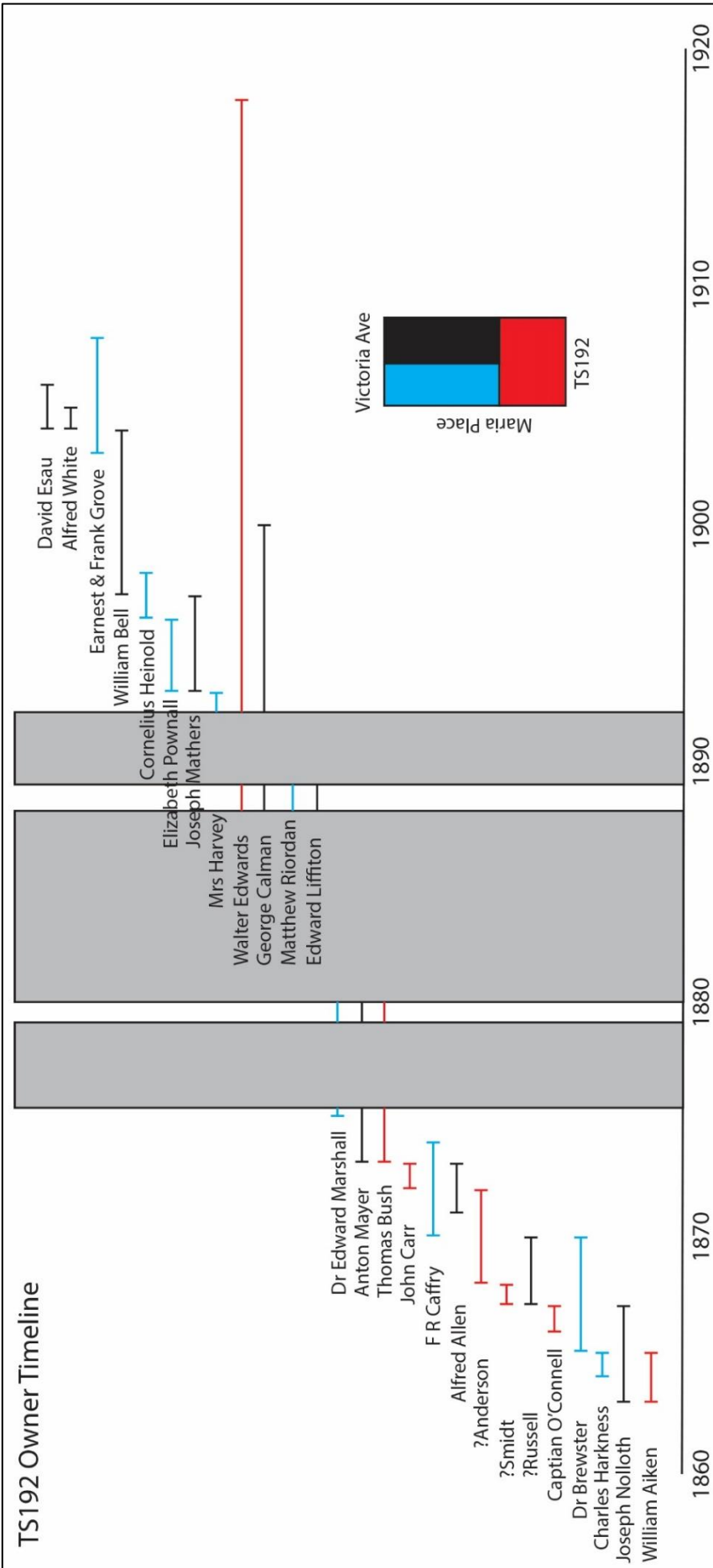
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Appendix A: Town Section Owner Timelines









Appendix B: Family Assemblages

This appendix contains descriptions of those deposits or parts of deposits which are associated with the three families from Chapters 6, 7 and 8 (Williamson, Byrne and Chavannes). Each family's assemblage is organised by individual deposit and includes short concluding interpretation sections which relate to the specific features from which they were recovered. The raw data for each assemblage can be found in the artefact databases in Appendix E.

Williamson

The Williamson family assemblage contains artefacts from two deposits located at the rear of TS189: all of the F165 deposit and the domestic portion of the mixed F313 well deposit. The remaining portion of the F313 assemblage is described in Appendix C.

F165

Feature 165 was a large (1800mm X 1800mm) square/rectangular rubbish pit on the southern border of TS189. It was dug into the natural and subsequently cut by a posthole (F144) and a concrete beam but most of it appears to be undisturbed. The feature sheet describes most of the artefacts as having been in the top portion of the feature and the feature itself as having been initially difficult to pick out as it was capped by a trampled layer of topsoil.

F165 Assemblage Summary

	NISP	MNV/I	Weight
Ceramic vessels	71	28	921.09g
Glass Vessels	3	1	244.98g
Metal	27	19	183.98g
Other	10	4	28.65g
Total	111	52	1378.70g

Ceramic Vessels

No complete vessels or maker's marks were found in F165. A range of domestic vessel forms were present in a variety of ware types and decoration styles, as is shown in the following tables.

Vessel Forms

	Ware							Total
	Whiteware	Yellowware	Buff-bodied earthenware	Euro porc-h	Bone China	Slip-glazed stoneware	Salt-glazed stoneware	
Plates	7	-	-	-	1	-	-	8
Table Bowls	-	-	-	-	1	-	-	1
Ashettes	1	-	-	-	-	-	-	1
Tureens	1	-	-	-	-	-	-	1
Jugs	-	1	1	-	-	-	-	2
Cups	4	-	-	-	2	-	-	6
Saucers	1	-	-	2	1	-	-	4
Bottles	-	-	-	-	-	1	1	2
Mixing Bowl	1	-	-	-	-	-	-	1
Chamberpot	1	-	-	-	-	-	-	1
Unidentified	1	-	-	-	-	-	-	1
Total	17	1	1	2	5	1	1	28

Decoration Styles

	Decoration							Total
	UGTP	Painted	Gilt	Mocha	Sprigged	Moulded	Undec	
Plates	8	-	-	-	-	-	-	8
Table Bowls	-	-	-	-	1	-	-	1
Ashettes	1	-	-	-	-	-	-	1
Tureens	1	-	-	-	-	-	-	1
Jugs	-	-	-	1	-	1	-	2
Cups	4	-	-	-	2	-	-	6
Saucers	-	1	3	-	-	-	-	4
Bottles	1	-	-	-	-	-	1	2
Mixing Bowls	-	-	-	-	-	-	1	1
Chamberpots	1	-	-	-	-	-	-	1
Unidentified	1	-	-	-	-	-	-	1
Total	17	1	3	1	3	1	2	28

Patterns and Colours

Blue was by far the most common colour for decoration on the F165 ceramic vessels. Four named (Willow on five vessels and Asiatic Pheasants, Bouquet and Dulcamara on one each) and three unnamed UGTP patterns (Blue 6, Flow Blue 3 and Purple 12, all on single vessels) were identified as well as three non-UGTP patterns (Chelsea Sprig, Imitation Jasper and Tea Leaf).

	Decoration Colour							Total
	Black	Blue	Brown	Green	Purple	Gold	Pink/gold	
Plate	-	7	-	-	1	-	-	8
Ashette	-	1	-	-	-	-	-	1
Tureen	-	1	-	-	-	-	-	1
Jug	-	-	1	-	-	-	-	1
Cup	-	4	-	1	1	-	-	6
Saucer	-	-	-	-	-	3	1	4
Sugar bowl	-	1	-	-	-	-	-	1
Bottle	1	-	-	-	-	-	-	1
Chamberpot	-	1	-	-	-	-	-	1
Total	1	15	1	1	2	3	1	24

Dating

Twelve of the F165 ceramic vessels possessed enough chronological information to date, including eleven UGTP and one gilt vessel. The calculated average manufacture range was 1823-present and peak popularity 1830-1862. An approximate *tpq* of 1862 can be taken from the Dulcamara patterned cup as this pattern seems to have been the work of Pinder Bourne & Co who began manufacturing pottery in this year.

Glass Vessels

The F165 assemblage only contained fragments from one glass vessel: a dark green dip-moulded cognac bottle. This particular example has a prunt (glass seal) on the shoulder which reads "VIEUX/COGNAC" which was a label commonly applied to cognacs during the nineteenth century and which still appear on some bottles today.

Metal

Iron nails were the only metal artefacts collected from this feature. Four complete clenched examples were identified and the rest were fragmentary. The manufacture method was unable to be identified for any of the fasteners.

Other

Stem and bowl fragments from four clay tobacco pipes were also present amongst the F165 assemblage. One bowl had a spur, one stem incised with "...& CO/ EDINBURGH," and two stems embossed with "T W & CO/ EDINBURGH." Thomas White & Co used this mark on their pipes from 1823-1876. Another stem fragment had a small area of floral moulded decoration.

Interpretation

F165 contains an assemblage typical of pre-1870 domestic occupation of the site. It appears to have been the result of several small scale dumping events, probably relating to cleaning activity occurring in the house on the TS192 side of the section. The most likely culprit for this deposit is Henry Williamson and family, who occupied this part of the site from 1866 until the mid-1870s. Previous occupants of this dwelling were only short term residents so it is doubtful that they would have created enough household refuse of this type to account for the F165 assemblage.

F165 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1823-present	1730s-1870s	1823-1876
Peak Popularity	1830-1862	<1870s	1823-1876
Proposed Deposit Date Range:		~1862-1870s	

F313(part)

The large ceramic vessel assemblage recovered from F313, much of which was complete, made it obvious that this was not a solely domestic deposit. The historical record records a crockery retailer (Robert McLean) on the neighbouring section (TS192) and the commercial material has been attributed to him. These artefacts are described in Appendix C. The rest of the deposit appears to be domestic so has all been attributed to the Williamson household, as if it is not directly related to them it is contemporaneous and therefore indicative of what they would have owned.

F313 (Williamson) Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	106	34	3681.50g
Glass Vessels	367	31	15073.79g
Metal	56	25	19031.40g
Other	14	12	155.97g
Total	543	102	36942.66g

Ceramic Vessels

Fragments from 34 vessels from F313 (15% of the total MNV for that deposit) were interpreted as belonging to the Williamson household. A limited range of ware types and vessel forms were recorded compared with F165. The only makers mark, found on two “Norman” pattern side plates, belonged to Samuel Alcock & Co. and dates to before 1859 (Godden 1988).

	Ware			
	Pearlware	Whiteware	Bone China	Total
Plate	-	9	-	9
Table bowl	1	1	-	2
Ashette	-	4	-	4
Mug	-	1	1	2
Cup	-	10	1	11
Saucer	-	3	1	4
Jar	-	1	-	1
Basin	-	1	-	1
Total	1	30	3	34

Patterns and Colours

Eight named patterns were identified amongst the Williamson F313 ceramics. Willow was the most popular but Rhine, Fibre, Norman, Imitation Jasper, Chelsea Sprig, Tea Leaf and a green UGTP pattern with partial name (Sch...) were also recorded.

Dating

While many of the identifiable UGTP patterns on the F313 Williamson ceramic vessels date to the pre-1860 period there are also examples of designs which did not become widely popular until later, including Asiatic Pheasants and Tea Leaf. A *tpq* of 1859 can be taken from the Samuel Alcock & Co. mark.

Glass Vessels

The F313 (spits ii-iv) glass assemblage was more characteristic of a domestic rather than commercial context so it has all been attributed to the Williamsons. Four vessels were recovered intact (Bordeaux, Torpedo, Rectangular Bevelled and Barrel shaped bottles). The manufacture methods represented in the assemblage are typical of the late 1860s to early 1870s.

	Manufacture Method						
	Free-blown	Dip mould	2-piece	Cup mould	Pressed	Unidentified	Total
Black round cross-section	6	7	-	-	-	-	13
Bordeaux	-	3	-	-	-	-	3
Spirit	-	1	-	-	-	-	1
Torpedo	-	-	5	-	-	-	5
Vinegar	-	-	-	1	-	-	1
Wide-mouth	-	-	-	-	-	1	1
Barrel	-	-	-	1	-	-	1
Rectangular bevelled	-	-	-	1	-	-	1
Tumbler	-	-	-	-	3	-	3
Unidentified	-	1	-	-	-	1	2
Total	6	14	5	3	3	2	31

One brand was able to be identified among the F313 Williamson material. Three of the torpedo bottles had a freehand “E” etched onto their bodies attributing them to lemonade, soda-water and cordial manufacturer Robert Evans, but this does not identify what type of aerated beverage they once held.

Metal

Nearly 20kg of metal artefacts were collected from the well (just under 12kg of which were identifiable). The following items are included in this assemblage:

- Four matchboxes, one with “F C U” embossed on the lid
- Five tin cans
- Fragments of corrugated roofing iron
- A small piece of decorative copper alloy trimming
- A trading token from a general store owned by J. Hurley and Company, Victoria Avenue
- A brass 57th Regiment button
- A plain brass belt buckle
- A fragment of barrel hoop iron
- A substantial metal box with handle, which resembles a cashbox
- Enamelled tin cup, teapot and ashette
- Six iron nails, only two of which could be identified to manufacture method (one wrought and one wire).

Other

Sixteen miscellaneous artefacts were included in the Williamson assemblage:

- A handmade glass “spiral” marble
- The head of a porcelain doll
- Two one-piece, four hole sew through buttons, one porcelain and one plastic
- Fragments of at least eight clay tobacco pipes (none were marked)

Interpretation

F313 contained a large deposit including domestic refuse and commercial stock. The domestic material is typical of the 1860s -70s and as the only long-term occupants of this section during that period were the Williamson family it is likely they contributed most of the deposit.

F313 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1859-present	1850s-1900s	1863-1866
Peak Popularity	1859-1862	1850s-1870s	1863-1866
Proposed Deposit Date Range:	~1863-1870s		

Byrne

The Byrne family had the largest number of associated deposits. Nine were located on TS191 and one on TS190 (KJ10). This is unsurprising given that the Byrne's occupied various portions of the site for over forty years. All but one of the Byrne deposits came from undisturbed features, the exception being F430 which contained later material attributed to the Chavannes household (described below). The deposits are presented in approximate chronological order.

F435/KJ5

Feature 435/KJ5 was a roughly circular (120mm X 90mm) rubbish pit on the Maria Place border of Town Section 191. It was approximately 400mm deep and had been dug into the natural substrate. The pit appears to have been filled in with soil before it was full of rubbish as the artefactual material is concentrated in the centre of the feature. This could have been done to alleviate negative odours which could easily have been produced by the contents which include meat bones. This, along with the small amount of items, suggests the artefacts were deposited within a short time. Feature 435 was roughly half-sectioned during the main 2010 excavations and then rediscovered and fully excavated in 2014 (when it was labelled as KJ5).

F435/KJ5 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	65	31	1831.79g
Glass Vessels	71	35	12511.01g
Metal	23	20	243.33g
Other	0	0	0g
Total	159	686	14586.13g

Another 1725.90g of unidentifiable metal was recovered from this feature.

Ceramics

Six of the F435 ceramic vessels (two Canova UGTP whiteware saucers and four small salt-glazed stoneware ink bottles) were recovered complete.

Ware Types

	Ware						Total
	Whiteware	Pearlware	Yellowware	Bone China	European porc-h	Salt-glazed st-w	
Plate	13	-	-	1	-	-	14
Cup	2	-	-	1	-	-	3
Saucer	4	1	-	-	-	-	5
Mixing Bowl	-	-	1	-	-	-	1
Bottle	-	-	-	-	-	5	5
Chamberpot	1	-	-	-	-	-	1
Decorative	-	-	-	-	1	-	1
Unidentified	1	-	-	-	-	-	1
Total	21	1	1	2	1	5	31

Decoration Styles

	Decoration					Total
	UGTP	OGTP	Shell-edge	Banded	None	
Plate	11	1	1	1	-	14
Cup	2	-	-	-	1	3
Saucer	5	-	-	-	-	5
Mixing Bowl	-	-	-	-	1	1
Bottle	-	-	-	-	5	5
Chamberpot	-	-	-	-	1	1
Decorative	-	-	-	-	1	1
Unidentified	-	-	-	-	1	1
Total	18	1	1	1	10	31

Patterns and Colours

Blue was the most common decoration colour, found on ten UGTP vessels, the banded and the shell-edged plate, followed by green on three, purple on two and flow blue and grey on one UGTP vessel each. The OGTP vessel was orange. Four named UGTP patterns were identified: Willow on five vessels, Canova on four and Rhine and Asiatic

Pheasants on single examples. Two other patterns were complete enough to be catalogued: Flow Blue 4 and Green 15.

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"CANOVA/ G & E" (print)	Goodwin & Ellis (Staffordshire)	Canova saucer	c.1839-1840	Godden 1991: 280

Dating

Fifteen of the F435/KJ5 ceramic vessels were able to be dated. This included eleven whiteware and one Pearlware UGTP vessels, a shell-edged whiteware plate and the banded plate. The average manufacture range for this assemblage was 1815-present and the peak popularity period 1823-1853. The Goodwin & Ellis mark provides a *tpq* of 1839 for the ceramic assemblage.

Glass Vessels

Eleven of the F435/KJ5 glass vessels (three squat black beers and one unidentified rectangular cross-sectioned bottle) were recovered complete. These included three squat dark olive round cross-section, a Schnapps, two Matthew's patent sodas, Codd, coffee and chicory, Worcestershire sauce, a rectangular panelled and rectangular bevelled pharmaceutical and an unidentified rectangular cross-sectioned bottle. All of the squat dark olive bottles had bare iron pontil marks which disappeared by about 1870.

Four brands and one retailer were able to be identified from body and base embossing on the F435/KJ5 glass bottles. The schnapps bottle is an aqua blue square-sectioned, rectangular panelled example and is embossed with "LEDIARD'S KNICKERBOCKER SCHNAPPS". This brand of aromatic schnapps was popular in the 1870s and is described in contemporary newspaper advertisements as "an absolutely original preparation" and "the most reliable and safe drink during hot weather" (Hawkes Bay Herald 5/4/1877). The non-alcoholic beverage brands identified were Symington and Co's Ess Coffee and Chicory and a Thomson and Lewis Crystal Springs Codd bottle which is embossed with "THOMSON LEWIS & CO/ CRYSTAL SPRINGS/ TRADEMARK/ WELLINGTON/ WANGANUI/ OTAKI/ PETONE & LEVIN" on the front and "CANNINGTON SHAW & CO LTD/ MAKERS/ ST HELENS ENGLAND" on the reverse heel. This Codd bottle dates to the early twentieth century as Thomson & Lewis only opened in Whanganui in 1906 (Robson 1995: 193) but as it was uncovered during the 2014 investigations which were largely undertaken with a mechanical excavator and is the only anomalous artefact in the deposit chronologically speaking, it was not used for dating purposes.

One complete Lea and Perrins Worcestershire Sauce bottle and the base of another were also recovered from KJ5. Both have the "A C B Co" stamp of the Aire and Calder

Bottling Company on the base. The other brand identified was Davis' Vegetable Kain Killer on a rectangular panelled bottle while another pharmaceutical bottle had "K/2072" embossed on the base which connects it with the Kinghorn glass factory in Scotland (Luff 2008: 42).

Manufacture methods

	Manufacture Method					Total
	Dip Mould	Cup-bottom Mould	Post-bottom mould	Pressed	Unidentified	
Dark Olive Round C-Section	19	-	-	-	-	19
Case Gin	1	-	-	-	-	1
Schnapps	-	1	-	-	-	1
Matthew's Patent	-	2	-	-	-	2
Codd	-	-	1	-	-	1
Worcestershire Sauce	-	2	-	-	-	2
Coffee & Chicory	-	1	-	-	-	2
Rectangular Bevelled Pharm	-	1	-	-	-	1
Rectangular Panelled Pharm	-	1	-	-	-	1
Oval C-Section	-	-	-	-	1	1
Nursing Bottle	-	-	-	-	1	1
Stemmed Glass	-	-	-	2	-	2
Unidentified	-	1	-	-	1	3
Total	20	9	1	2	3	35

Metal

Most of the F435 metal assemblage was made up of iron fasteners. This included two wrought nails, six generic wire nails, three wire roofing nails and four nails of unknown manufacture. Also recovered from this feature were two brass 65th Regiment Prince

Albert shako plates or hat badges, both complete but with the crowns snapped off, a plain brass military buckle, a utilitarian copper alloy button with scraps of fabric attached, and a length of wire made up of two strands twisted together and coated in a black substance, possibly the handle of a bucket. The shako plates give a *tpq* of 1847 when the 65th Regiment arrived in Whanganui.

Interpretation

None of the ceramic fragments found in F435/KJ5 join with those from any other features on the site, suggesting this deposit was undisturbed. Its location along the Maria Place street boundary at the St Hill Street end and the characteristics of the artefacts found within suggest that this feature relates to the earliest period of European activity at the site. Up until the end of the Garrison period the Cooks Garden sand hill extended part way up Maria Place from the St Hill Street junction and would have covered the Southwest corner of TS191. This would have meant that F435/KJ5 would have been on or close to the edge of this sand hill and would have essentially been at the back of the property as there was limited road access from the St Hill Street side. This would have made it a convenient location for the inhabitants of the first small cottages on this section to dispose of their household rubbish. As the sand hill was cleared and the surrounding roads properly formed this part of the site became much more prominent from the street and so less likely to be the location of a private rubbish dump. Photographs of this corner show that this area was a garden up until the erection of the stables building in 1897, although the 1866 plan does show a square structure right on the corner. This lack of extensive site modification allowed for this deposit to remain undisturbed and can provide us with a window into this early part of colonial Whanganui’s story. It also strongly links the deposit with the Byrnes who were the sole occupiers of this part of the site before they built their lodging cottages.

F435/KJ5 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1839-present	1730s-1900s	1847-1861
Peak Popularity	1839-1853	1850s-1860s	1847-1850s
Proposed Deposit Date Range:	~1850s-early 1860s		

KJ10

KJ10 was a circular rubbish pit located close to the St Hill Street frontage of TS190 and was recorded during the 2014 monitoring. It contained a relatively small assemblage of domestic artefacts, all of which appear to date to the 1850s or early 1860s, making it one of the earliest features on the VRC site.

KJ10 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	22	16	851.61g
Glass Vessels	7	7	4007.22g
Metal	2	2	173.21g
Other	1	1	38.14g
Total	32	26	5070.45g

Ceramic Vessels

Twenty-two pieces of ceramic were recovered from KJ10, representing at least sixteen vessels. The assemblage is mostly made up of table and teaware items and a range of ware types are present.

	Ware					Total
	Whiteware	Pearlware	Refined red e/w	Yellowware	Salt-glazed Stoneware	
Plates	4	1	-	-	-	5
Table Bowls	1	-	-	-	-	1
Cups	3	-	-	-	-	3
Saucers	2	-	-	-	-	2
Teapots	-	-	1	-	-	1
Bottles	-	-	-	-	2	2
Unidentified	-	-	-	1	-	1
Total	10	1	1	1	2	16

Only two decoration styles are represented in this assemblage: UGTP and engine turned banding. UGTP accounts for twelve of the vessels and is present in blue, purple and green. Several named patterns were able to be identified (Willow, Palestine, Brosley, Festoon and Berry) along with examples of Blue 9, Blue 10 and Green 5. These patterns and colours are typical of a pre-1860 New Zealand ceramics assemblage.

Three maker's marks are present that can be attributed to specific potteries and assigned fairly narrow manufacture date ranges. The back of one of the Willow dinner plates bears a printed mark which reads "STONEWARE/P W & CO". This mark was used by Podmore Walker and Company, a Staffordshire pottery, from 1834-1859. The pattern name ("BERRY") is printed on the base of the pearlware plate above the initials

of William Ridgway (“W R”). William Ridgway operated out of two factories in Staffordshire from 1830 until 1834 when the company became William Ridgway and Company. A blue UGTP saucer has both stamped and printed marks on the base. The print reads “COPELAND & GARRETT/ NEW BLANCHE” while the print is almost identical but for the inclusion of “18”. A printed “U” is also visible. Copeland and Garrett were a well-known pottery company that operated under this name from 1833 to 1847. “New Blanche” refers to a specific type of whiteware which was developed by the firm.

Glass Vessels

Seven glass vessels are included in the KJ10 assemblage, three of which are complete. All but one of these bottles are alcohol related and all exhibit manufacture techniques typical of the first half of the nineteenth century. One squat black beer bottle has the distinctive irregular shape of a free blown vessel while three more squat black beers are clearly dip moulded. A spirit bottle and case gin have been manufactured in the same way, and the case gin has a “pig snout” finish which is characteristic of examples made before the middle of the century. Bare iron pontil marks can also be seen on the bases of four of the bottles. The other vessel is a dip moulded aqua green bottle with a fluted oblong cross-section, but as only the base is present it is not clear what this bottle would have held.

Metal

Two metal artefacts were recovered from this pit, a fragment of what appears to be barrel hoop iron and a button. The button is of particular interest because it has the numbers “65” embossed on the face, referring to the 65th Regiment which were stationed at the York Stockade, and is made of pewter. This artefact links the assemblage to the military activity going on around the VRC site in the early years of the settlement’s existence and gives an approximate date of the mid 1850s as after the Crimean War British Imperial buttons began to be made from brass rather than pewter.

Other

The only other artefact in this assemblage is a bone and iron handle from an item of cutlery. The type of cutlery is not discernible.

Interpretation

KJ10 appears to have been a domestic rubbish pit dating to the Garrison period. Its location close to the St Hill Street frontage supports this hypothesis as during this period that street was unformed and partially covered by the Patupuhou sand hill, meaning this would have been at the back of the property. This date and the inclusion of a 65th regimental jacket button links this deposit with the Byrne household.

KJ10 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1822-1854	1840s-1870s	<1856
Peak Popularity	1829-1845	1840s-1860s	<1860s
Proposed Deposit Date Range:	~1850s-early 1860s		

F448

Feature 448 was a rectangular (660mm wide) rubbish deposit located on the Maria Place frontage of TS191. It was only half sectioned during the 2010 excavations as half of the feature lay under the Maria Place footpath, and was excavated to a depth of 360mm. The matrix was comprised of dark brown soil with red iron stained patches. There was no evidence of intrusion from later features. The excavation notes suggest that it was a kitchen dump, noting the presence of faunal remains. This suggests the artefacts would have been deposited within a short space of time.

F448 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	17	9	531.59g
Glass Vessels	19	3	1293.58g
Metal	2	1	22.04g
Other	3	2	22.88g
Total	41	15	1870.09g

Ceramics

A single polygon-sectioned Bone China gilt Tea Leaf cup was the only complete ceramic vessel collected from F448 and no maker's marks were recorded.

Ware Types

Only two ware types were identified in the F448 assemblage: whiteware and Bone China.

	Ware		Total
	Whiteware	Bone China	
Plate	2	-	2
Jug	-	1	1
Eggcup	-	1	1
Cup	-	1	1
Saucer	1	2	3
Unidentified	1	-	1
Total	4	5	9

Decoration Styles

	Decoration					Total
	UGTP	Gilt	Enamel	Sprigged	None	
Plate	2	-	-	-	-	2
Jug	-	-	-	1	-	1
Eggcup	-	-	1	-	-	1
Cup	-	1	-	-	-	1
Saucer	1	1	-	1	-	3
Unidentified	-	-	-	-	1	1
Total	3	2	1	2	1	9

Patterns and Colours

Blue, grey and gold were the most common colours for decoration on the F448 ceramics, each appearing on two vessels. Green and polychrome decoration were also noted on single examples. The only named UGTP pattern identified in this assemblage was Rhine on two plates. A saucer was decorated with a simple green UGTP pattern but it was not complete enough to be described any further. Two other decorative patterns were noted: Imitation Jasper on a saucer and jug and Tea Leaf on a cup. A fragment from a polychrome floral enamelled eggcup was also found.

Dating

Three of the F448 ceramic vessels were able to be dated (two UGTP and one gilt Tea Leaf vessel). They provided an average manufacture period of 1838-1900s and a peak popularity of 1850-1900. The Tea Leaf cup provides an approximate *tpq* for the ceramics of 1850.

Glass Vessels

F448 contained a small amount of glass which included two complete bottles (a turn moulded ring-seal and an aqua blue oval cross-sectioned bottle made in a cup bottom mould) and a selection of small body glass fragments. The cup-bottom moulded bottle suggests an approximate *tpq* of 1850.

Metal

The only metal artefact recovered from this feature was a copper alloy cylinder, the purpose of which is unknown.

Other Artefacts

Two shards of colourless plate window glass (2.53mm thick) and the bone handle of a table knife were also collected from F448.

Interpretation

F448 appears to have been a small domestic kitchen dump relating to the southern-most cottage on TS191. None of the artefacts recovered from this feature are chronologically sensitive enough to definitively place it within one of the constructed periods but a clue does lie in its location. It lay right on the Maria Place street boundary suggesting that it was dug before the Patupuhou sand hill was partly cleared and this street became a busy thoroughfare. This occurred towards the end of the Garrison period so it is probable that F448 dates to before this happened and when it was just the Byrne family occupying this part of the site.

F448 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1838-present	1850s-1900s	n/a
Peak Popularity	1850-1900	1850s-1900s	n/a
Proposed Deposit Date Range:	~1860s		

F414

Feature 414 was a rectangular pit measuring 1320mm X 980mm and 740mm deep and was located towards the centre of the southern half of TS191 on the edge of one of the cottages recorded in the 1866 plan and within the footprint of the dwelling visible in the 1908 plan. Just under half of this feature was not excavated to the base and there appears to have been considerable disturbance, possibly caused by tree roots. This pit cuts into at least three earlier features, all of which appear to be post holes, and is cut by one later post hole (F413). It was also capped with a layer of clay and most of the artefacts were collected from the top portion of the deposit.

F414 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	18	13	280.74g
Glass Vessels	324	51	15182.74g
Metal	11	11	193.17g
Other	1	1	1.76g
Total	354	76	15658.41g

Ceramics

No maker's marks were found on any of the F414 ceramic fragments and none of the vessels were complete.

Ware Types

	Ware			Total
	Whiteware	Bone China	Bristol-glazed st-w	
Plate	4	-	-	4
Ashette	1	-	-	1
Mug	1	-	-	1
Cup	1	-	-	1
Saucer	1	1	-	2
Bottle	-	-	1	1
Ewer	1	-	-	1
Cosmetic Jar	1	-	-	1
Unidentified	1	-	-	1
Total	11	1	1	13

Decoration Styles

	Decoration				Total
	UGTP	Banded	Gilt	None	
Plate	3	1	-	-	4
Ashette	-	1	-	-	1
Mug	1	-	-	-	1
Cup	-	-	-	1	1
Saucer	1	-	1	-	2
Bottle	-	-	-	1	1
Ewer	1	-	-	-	1
Cosmetic Jar	-	-	-	1	1
Unidentified	1	-	-	-	1
Total	7	2	1	3	13

Patterns and Colours

Only two ceramic decoration patterns were able to be identified in the F414 assemblage: Asiatic Pheasants on two dinner plates and Laconia (a blue romantic

pattern) on another dinner plate. Of the unidentified patterns none were complete enough to include in the database but one of the blue hollowware vessels had classical and a black printed mug had floral motifs. Blue was the most common colour for UGTP decoration as well as for the overall ceramic assemblage, accounting for five UGTP and one banded vessel while black, purple, red and gold were all present on single vessels.

	UGTP Colour			Total
	Black	Blue	Purple	
Plate	-	3	-	3
Mug	1	-	-	1
Saucer	-	1	-	1
Ewer	-	-	1	1
Unidentified	-	1	-	1
Total	1	5	1	7

Dating

Five vessels from this feature were able to be dated (three UGTP and two banded vessels). They provided an average manufacture period of 1847-1982 and a mean peak popularity of 1865-1890. Caution must be used with these dates, however, as the banded and two of the UGTP vessels have long periods of manufacture but were popular much later in the century than the other UGTP vessel which had a manufacture period of just two years at the end of the 1840s. An approximate *tpq* of 1860 can be taken from the banded ware.

Glass Vessels

Only one of the F414 glass vessels was recovered intact: a dip-moulded squat dark olive round cross-section bottle.

Makers' Marks

Two maker's marks were found among the glass bottles, both appearing on the bases of two dip-moulded black beers. One was "COOPER & WOOD/ PORTOBELLO" who were active under this name in Edinburgh from 1859-1866, and the other was "H P" which was not able to be attributed to a specific maker.

Manufacture Methods

	Manufacture			Total
	Dip Mould	Cup Mould	Unidentified	
Dark Olive Round c-Section	45	-	-	45
Case Gin	1	-	-	1
Torpedo	1	-	-	1
Club Sauce	1	1	-	2
Unidentified	1	-	1	2
Total	49	1	1	51

Products

Two bottles from F414 had body embossing that enabled their original contents to be identified: a Lea & Perrins Worcestershire sauce bottle (made in a cup-bottom mould) and a dip-moulded torpedo bottle bearing the partial embossing "...R'S/[SO]DA WATER/[WANGA]NUI" which was probably the work of George Gower who produced aerated water and lemonade in Whanganui from 1865 to 1879 (Luff 2008: 9).

Dating

The F414 glass assemblage is almost entirely made up of dip-moulded bottles, most of which are black beers, which dominated the New Zealand glass bottle market prior to the 1870s. There are also no bottles which could not have been made before this date. The Gower's torpedo bottle provides the *terminus post quem* for the assemblage, which is 1865.

Metal

Nine used iron nails of unknown manufacture, a complete wax vesta matchbox and small length of copper alloy chain which appears to have been machine made were also recovered from F414.

Other

An orange screw-on amber or celluloid bite for a tobacco pipe was also found in this feature.

Interpretation

F414 is described a chimney base in the excavation notes however there is no chimney in this location in any photographs of this corner. In one of the earliest detailed photographs a barrel can be seen in the vicinity of F414 with the spouting from the cottage directed into to collect rain water.

The material culture assemblage from this feature was 97% glass (by weight), and 70% of that glass was from black beer bottles, all but one of which (the only intact bottle from the assemblage) appear to have been broken either before or during deposition. This was a lodging house so it is unlikely that this was a commercial dump of unwanted bottles as in the case with some of the other deposits on the site, but the uniform nature of the assemblage suggests that it was also not a domestic rubbish deposit or clear-out event. A possible explanation is that the glass was added to the sandy soil to provide some extra structural support for the heavy water-filled barrel. Black beer bottles would have been a relatively accessible resource during the 1860s, especially in the centre of town, so could have provided a cheap and readily available alternative to more traditional construction materials. The cottages are assumed to have been constructed by the Byrnes so it seems likely that this feature also relates to that household.

F414 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1847-present	<1870s	n/a
Peak Popularity	1865-1882	1850s-1870s	n/a
Proposed Deposit Date Range:		~1860s	

F550

Feature 550 was a rectangular depression measuring roughly 1170mm X 1070mm with a depth of 380mm. it was not excavated fully as it was cut by a later concrete footing. The matrix consisted of two apparent layers of dark brown and grey sand but these were excavated as one spit. F550 was located in the central area of the southern end of TS191 within the footprint of one of the dwellings visible in the 1908 plan.

F550 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	64	24	1748.61g
Glass Vessels	155	11	4554.00g
Metal	75	10	1086.99g
Other	83	6	263.21g
Total	377	51	7652.81g

Another 1079.50g of unidentifiable metal was collected from this feature.

Ceramics

Four ceramic vessels were recovered complete from this feature: a salt-glazed stoneware blacking bottle, small whiteware jar and two whiteware cups.

Ware Types

	Ware					
	Whiteware	Refined red earthenware	British porc-s	European porc-h	Salt-glazed st-w	Total
Plate	4	-	-	-	-	4
Table bowl	1	-	-	-	-	1
Ashette	1	-	-	-	-	1
Cup	3	-	-	-	-	3
Saucer	3	-	1	-	-	4
Teapot	-	1	-	-	-	1
Bottle	-	-	-	-	1	1
Jar	2	-	-	-	-	2
Toothbrush holder	1	-	-	-	-	1
Decorative	-	-	-	1	-	1
Unidentified	3	-	1	-	1	5
Total	18	1	2	1	2	24

Decoration Styles

	Decoration					Total
	UGTP	Gilt	Sprigged	Moulded	None	
Plate	4	-	-	-	-	4
Table bowl	1	-	-	-	-	1
Ashette	1	-	-	-	-	1
Cup	1	1	-	-	1	3
Saucer	2	1	-	-	1	4
Teapot	-	-	-	1	-	1
Bottle	-	-	-	-	1	1
Jar	-	-	-	-	2	2
Toothbrush holder	1	-	-	-	-	1
Decorative	-	1	-	-	-	1
Unidentified	3	-	1	-	1	5
Total	13	3	1	1	6	24

Patterns and Colours

Blue and purple were the most numerous decorative colours on the F550 ceramic vessels. Five known UGTP patterns were present (Asiatic Pheasants, Rhine, Teddesley, Willow and Medici), with all appearing on single vessels except Willow which was found on two. Three other purple UGTP patterns from F550 were added to the database: Purple 19 (classical), Purple 32 and Purple 33 (both floral). Among the non-UGTP decorated vessels two patterns were identified (Tea Leaf and Chelsea Sprig).

	Decoration Colour						Total
	Black	Blue	Green	Grey	Purple	Gold	
Plate	1	2	-	1	-	-	4
Table bowl	-	1	-	-	-	-	1
Ashette	-	1	-	-	-	-	1
Cup	-	-	-	-	1	1	2
Saucer	-	-	-	-	2	1	3
Toothbrush holder	-	-	-	-	1	-	1
Unidentified	-	2	1	-	1	-	4
Total	1	6	1	1	5	2	16

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"PINDER BOURNE & CO" (stamp)	Pinder, Bourne & Co (Staffordshire)	Teddesley whiteware plate	1862-1882	Godden 1991: 495

Dating

Nine of the F550 ceramic vessels were able to be dated (eight UGTP and one gilt Tea Leaf vessel). The average manufacture period for this assemblage is 1847-1890(1934) and the peak popularity period for this combination of styles is 1865-1890. The Pinder Bourne & Co stamp gives a *tpq* of 1862.

Glass Vessels

No complete glass vessels were recovered from this feature and no makers or specific brands/products were able to be identified.

Manufacture methods

	Manufacture			Total
	Dip Mould	Cup mould	Pressed	
Dark olive Round C-Section	4	-	-	4
Bordeaux	1	-	-	1
Case Gin	1	-	-	1
Salad Oil	-	1	-	1
Oval sectioned	-	1	-	1
Tumbler	-	-	1	1
Unidentified	2	-	-	2
Total	8	2	1	11

Dating

The small F550 glass assemblage is characteristic of a 1850s-1870s deposit, as by the end of the 1870s dip moulded bottles had been largely replaced by turn and cup-bottom moulded vessels. The presence of two cup-bottom moulded bottles means that this assemblage must have been deposited after around 1850 when these moulds came into use.

Metal

Nine iron nails of unknown manufacture and an unidentified rectangular container were the only metal artefacts able to be identified from the F550 assemblage.

Other

Also present in this feature were:

- Twelve fragments of aqua green plate window glass, 2.18mm thick
- The base of an opaque green glass candle holder
- Rim and body fragments from a glass oil lantern
- A section of black plastic or Bakelite chain with oval links
- An unmarked stem fragment from a clay tobacco pipe
- A small carved wooden cricket bat with hole for attachment to a badge

Interpretation

F550 appears to have been a chimney base for the southern-most Maria Place cottage. It lay too close to the building to have been dug as a rubbish pit, especially given how much further away all other rubbish pits associated with this dwelling were located. In the earliest photographs the small cottage closest to St Hill Street has a single gable roof with a chimney at the southern end but by around 1870 it has been extended to a double gable with another chimney on the back wall. At this time it was owned by the Byrne family who let out the cottage as a lodging house. This later chimney appears to be in the vicinity of F550 and a date of around 1870 fits with the glass found within this feature, however several of the ceramic vessels are complete and/or more typical of a slightly later period. This is evidence that when the associated chimney was removed more material was added to the feature, probably to level the ground surface. By about 1880 this chimney no longer appears in photographs, obviously having either fallen down or been removed. By the time of its removal the cottage was occupied by Mary Byrne, now a widow.

F550 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1847-present	<1870s	n/a
Peak Popularity	1865-1890	<1870s	n/a
Proposed Deposit Date Range:		Late 1860s	

F430 (Part)

Feature 430 was a circular rubbish pit 1200mm in diameter and 900mm deep close to the Maria Place frontage of TS191. According to the excavation notes it tapered towards the bottom and contained a large amount of whole and broken gin bottles. The assemblage recovered from F430 is clearly made up of two distinct deposits: the original domestic deposit with the later addition of demolition material. The demolition rubbish and most of the identifiable metal artefacts are associated with the Chavannes and are described later in the Chavannes section.

F430 (Byrne) Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	29	15	2102.55g
Glass Vessels	74	43	14220.61g
Metal	0	0	0g
Other	1	1	4.34g
Total	145	80	16327.50g

Another 1281.29g of unidentifiable metal was recovered from F430 and has not been included in either the Byrne or Chavannes deposit from this feature.

Ceramics

Two slip-glazed stoneware stout bottles were the only intact ceramic vessels collected from this rubbish pit

Ware Types

	Ware				
	Whiteware	Dyed-body	Bone China	Slip-glazed st-w	Total
Plate	3	-	1	-	4
Eggcup	-	-	1	-	1
Cup	1	-	-	-	1
Saucer	3	-	1	-	4
Bottle	-	-	-	2	2
Basin	1	-	-	-	1
Unidentified	1	1	-	-	2
Total	9	1	3	2	15

Decoration Styles

	Decoration					Total
	UGTP	Enamel	Sprigged	Moulded	None	
Plate	3	-	-	-	1	4
Eggcup	-	1	-	-	-	1
Cup	1	-	-	-	-	1
Saucer	3	-	1	-	-	4
Bottle	-	-	-	-	2	2
Basin	1	-	-	-	-	1
Unidentified	1	-	-	1	-	2
Total	9	1	1	1	3	15

Patterns and Colours

Four ceramic vessels from F430 were decorated with well-known UGTP patterns: Willow, Asiatic Pheasants, Rhine and Dulcamara, and a basin was decorated with a floral pattern labelled as Green 22. Of the other UGTP vessels three were in blue and another in flow blue. The base of a British soft-paste porcelain Imitation Jasper saucer, a small fragment of blue-dyed Basket-ware and the rim of a polychrome floral enamelled eggcup made up the remainder of the decorated vessels. Blue was again the most popular colour scheme, accounting for 40% of the total ceramic assemblage.

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"SUSSEX/ Z" (stamp)	Unknown (Sussex)	Slip-glazed stoneware stout bottle	?	n/a
"PORT DUNDAS/ GLASGOW/ POTTERY COY," "B" (stamp)	Port Dundas Pottery Company Ltd (Glasgow)	Slip-glazed stoneware stout bottle	c.1850-1932	Godden 1991: 504

Dating

Five of the F430 ceramic vessels were able to be used to calculate average manufacture and peak popularity periods (four UGTP vessels and the marked stout bottle). The

manufacture range was 1836-1907(1971) and peak popularity was 1845-1893. A *tpq* of ca. 1850 can be taken from the port Dundas stout bottle.

Glass Vessels

Eleven glass vessels were recovered intact from this feature (Six ring-seal, a case gin, a dark green squat beer, a Hutchinson's patent and two Matthews patent or gravitating stopper soda bottles) and another 15 case gin bottles appear to have been complete when they were deposited. No specific brands, products or businesses were able to be positively identified though any of the glass vessels, although the oval cross-sectioned bottle is stamped with "K" on the base, a mark usually attributed to the Kinghorn glassworks in Scotland and often found on bottles used by Wakefield & Hogg, the Whanganui chemists, from 1877 to 1883, thus providing a *tpq* of 1877 for the F430 glass.

Manufacture Methods

	Manufacture Method								Total
	Free Blown	Dip Mould	Shingle Mould	Cup Mould	Post Mould	Turn Mould	Pressed	Unident.	
Dark Olive Round C-Section	-	-	-	-	-	-	-	1	1
Green squat beer	-	2	-	-	-	-	-	-	2
Bordeaux	-	1	-	-	-	-	-	-	1
Case Gin	-	-	18	-	-	-	-	-	18
Ring-seal	-	6	-	-	-	5	-	-	11
Hutchinson's patent	-	1	-	-	-	-	-	-	1
Matthew's patent	-	1	-	-	1	-	-	-	2
Salad Oil	-	-	-	1	-	-	-	-	1
Oval C-Sectioned	-	-	-	1	-	-	-	-	1
Tumbler	-	-	-	-	-	-	1	-	1
Vase	1	-	-	-	-	-	-	-	1
Unidentified	-	1	-	-	-	-	-	2	3
Total	1	12	18	2	1	5	1	3	43

Other Artefacts

The only miscellaneous artefact found in F430 was one fragment of a china doll.

Interpretation

Fragments from three ceramic vessels join with those found in three other features across the VRC site (F165, F313 and F334), suggesting that F430 was filled in after or during the use-life of these features.

Most of the metal assemblage recovered from this feature relates to the stables (both the building itself and its occupants) erected on this section in 1897 and demolished in 1906. As F430 lay within the footprint of the building constructed by the Chavannes after the demolition of the stables it can be safely assumed that this pit was sealed during or soon after the removal of the stables. The other artefacts found in this deposit appear earlier in date than the demolition rubble and to other types of activity. The most obvious explanation is that this feature was initially dug, was used to dispose of the Case Gin and other bottles and was then left open, allowing for the addition of a small amount of household rubbish and finally the demolition material in 1906. This hypothesis raises the question of why this feature was located close to the street frontage rather than at the back of the section as is the case with other similar late nineteenth century deposits. An examination of photographs of this corner do show a small structure in the vicinity of F430 during the 1870s, possibly an earth closet or latrine, which is hidden or replaced by dense vegetation by the end of the decade. This vegetation is still visible in the 1905 image, so could have obscured the pit until it was cleared during the demolition of the stables, at which time it was necessary to add more fill to F430 in order to level the ground surface. This means that this deposit can be split into two assemblages: the glass bottles and household rubbish which probably relate to Mary Byrne and family who occupied the nearby cottage from the 1870s until her death in 1891, and the stable demolition material which relates to the Chavannes. Those artefacts which are difficult to date to either of these events are of little concern to this research as they provide limited contextual information (for example metal cans and a tobacco tin).

F430 (Byrne) Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1836-present	1730s-1900s	n/a
Peak Popularity	1850-1893	1877-1890s	n/a
Proposed Deposit Date Range:		Late 1870s	

F515

Feature 515 was a rectangular rubbish pit with a flat bottom that measured approximately 5700mm X 4600mm (although the original dimensions are unclear) and was 2600mm deep. It was located along a fence line which separated the corner property and the neighbouring St Hill Street property that extended into TS191 from TS190. It was cut by F516, although the portion that remained seems to have been largely undisturbed. The fill was described as a “hard brown/grey sandy mix” and it contained a relatively small artefact assemblage consisting entirely of ceramic and glass artefacts. There was no food waste collected from this rubbish pit.

F515 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	13	8	441.14g
Glass Vessels	6	4	728.69g
Metal	0	0	0g
Other	1	1	43.70g
Total	20	13	1213.53g

Ceramic vessels

No complete ceramic vessels or maker’s marks were recovered from this feature.

Ware

	Whiteware	Bone China	Slip-glazed stoneware	Total
Plates	2	1	-	3
Cups	2	-	-	2
Saucers	1	-	-	1
Basin	1	-	-	1
Bottle	-	-	1	1
Total	6	1	1	8

Patterns and Colours

All of the whiteware vessels were decorated with UGTP in black (the most common colour), blue, grey and purple, and four known patterns were identified (Rhine, Willow, Teddesley and Fibre), each on single vessels except Fibre which was present on a cup and saucer. Another floral UGTP pattern was complete enough to be catalogued (Purple 26). The Bone China plate and slip-glazed stoneware bottle were undecorated.

	Decoration Colour				Total
	Black	Blue	Grey	Purple	
Plate	-	1	1	-	2
Cup	2	-	-	-	2
Saucer	1	-	-	-	1
Basin	-	-	-	1	1
Total	3	1	1	1	6

Dating

Three UGTP ceramic vessels were able to be dated. Their manufacture range spanned from 1833 to today and their average peak popularity period was 1839-1877. The presence of a Teddesley patterned vessel provides an approximate *tpq* of 1862 when Pinder Bourne & Co, the probable manufacturer of this vessel, began operations.

Glass vessels

One complete bottle was recovered from F515 while the others were represented by small portions. Three (two light green Bordeaux wines and a dark olive round cross section) were dip moulded and the other (an aqua blue oval-cross sectioned pharmaceutical bottle) was made in a two-piece mould with a cup-bottom.

Dating

The glass assemblage from this feature is very small but is typical of a pre-1870s deposit. An approximate *tpq* of 1850 can be tentatively applied due to the inclusion of the bottle made in a cup-bottom mould.

Other

The only other artefact recovered from this feature was part of a porcelain figurine. This decorative item appears to depict a farm scene and part of a trough is visible. Both gilt and painted decoration has been used to pick out details.

Interpretation

The spatial and chronological information that the F515 assemblage provide suggests that it relates to the cottage closest to the St Hill Street corner of Maria Place during the third quarter of the nineteenth century, probably during the Recovery period or early Depression. At this time the cottage was the home of Mary Byrne after she sold the other two TS191 cottages.

Fragments from three of the ceramic vessels found in F515 are from the same vessels as those found in three other features across the site (F313, F516 and F550) but this

would probably have been a result of the disturbance caused by the digging of F516 which, as mentioned previously, cuts the edge of this pit.

F515 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1833-present	1730s-1900s	n/a
Peak Popularity	1862-1877	1850-1880s	n/a
Proposed Deposit Date Range:	Late 1870s-1880s		

F478

Feature 478 was a circular (1600mm X 1400mm) pit on the border of TS191 and 190. This pit was not completely excavated in 2010 due to part lying underneath a concrete beam. The north-west edge was also cut by a later ceramic drain pipe (F494). This drain only cut a very small portion of F478 so the majority of the feature appeared to be undisturbed. The excavation report describes this feature as being a rubbish pit and the feature sheet describes the top layers as being filled with metal and faunal remains while the bottom contained rich soil and glass including several complete bottles, the whereabouts of which are unknown. Unfortunately, the material that was collected from the pit was excavated as one deposit with no regard to these supposed layers so any precise context information has been lost, although the artefacts seem to all be roughly contemporaneous.

	NISP	MNV/I	Weight
Ceramic vessels	134	54	2233.37g
Glass Vessels	20	9	1950.48g
Metal	56	42	2476.13g
Other	8	3	96.34g
Total	218	108	6756.32g

A further 1966.39g of unidentifiable metal was recovered from this feature.

Ceramic Vessels

None of the ceramic vessels from F478 were recovered complete, although some were nearly so.

Vessel Forms

	Ware					Total
	Whiteware	Yellowware	Refined red earthenware	Bone China	Slip-glazed stoneware	
Plates	11	-	-	1	-	12
Table Bowl	4	-	-	1	-	5
Ashettes	1	-	-	-	-	1
Tureens	3	-	-	-	-	3
Jugs	-	1	-	-	-	1
Egg cups	1	-	-	1	-	2
Cups	8	-	-	2	-	10
Saucers	5	-	-	3	-	8
Teapots	-	-	1	-	-	1
Bottles	-	-	-	-	1	1
Mixing Bowls	1	-	-	-	-	1
Jars	1	-	-	-	-	1
Cosmetic jars	2	-	-	-	-	2
?	6	-	-	-	-	6
Total	43	1	1	8	1	54

Decoration

	Decoration								
	UGTP	Banded	Gilt	Sprigged	Moulded	Engine-turned	Lustre	None	Total
Plates	11	-	1	-	-	-	-	-	12
Table Bowls	4	-	1	-	-	-	-	-	5
Ashettes	1	-	-	-	-	-	-	-	1
Tureens	3	-	-	-	-	-	-	-	3
Jugs	-	-	-	-	-	1	-	-	1
Egg cups	-	1	-	1	-	-	-	-	2
Cups	2	5	1	1	-	-	-	1	10
Saucers	4	1	3	-	-	-	-	-	8
Teapots	-	-	-	-	-	-	1	-	1
Bottles	-	-	-	-	-	-	-	1	1
Mixing Bowl	-	-	-	-	-	-	-	1	1
Jars	-	-	-	-	-	-	1	1	1
Cosmetic jars	2	-	-	-	-	-	-	-	2
Unidentified	2	1	1	-	1	-	-	1	6
Total	29	8	7	2	1	1	2	5	54

Patterns and Colours

Blue was the most common decoration colour for the F478 ceramics, followed by green, gold, purple, grey and black, brown, silver and polychrome. Five common UGTP patterns were identified: Asiatic Pheasants (four vessels), Willow (two), Rhine (two), Fibre (two) and Teddesley (two), and two further UGTP patterns were given codes: Blue 24 (simple, one vessel), and Brown 16 (floral, two vessels). Tea Leaf was the most popular pattern overall (on six vessels) and Imitation Jasper was also found on two vessels.

	Decoration Colour									Total
	Black	Blue	Brown	Green	Grey	Purple	Gold	Silver	P-chrome	
Plate	1	4	-	2	1	3	1	-	-	12
Table bowl	1	-	1	-	1	-	1	-	-	4
Ashette	-	1	-	-	-	-	-	-	-	1
Tureen	-	3	-	-	-	-	-	-	-	3
Eggcup	-	2	-	-	-	-	-	-	-	2
Cup	-	3	-	3	1	1	1	-	-	9
Saucer	1	1	-	1	1	1	3	-	-	8
Teapot	-	-	-	-	-	-	-	1	-	1
Cosmetic Jar	1	-	-	-	-	-	-	-	1	2
?	-	-	-	2	-	1	1	-	-	4
Total	4	14	1	8	4	6	7	1	1	46

Maker's Marks

Only one maker's mark was identified amongst the F478 ceramic vessel assemblage on a black UGTP Teddesley patterned plate. It belongs to the Pinder, Bourne & Co pottery in Staffordshire that was active for twenty years from 1862 to 1882. Their vessels are commonly found in New Zealand archaeological sites around the country.

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"[TEDDESLE]Y/ [P] B & CO" (print)	Pinder, Bourne & Co (Staffordshire)	Teddesley whiteware plate	1862-1882	Godden 1991: 495

Dating

Twenty-five of the F478 ceramic vessels were able to be dated, including ten UGTP, eight banded and six gilt Tea Leaf vessels. These vessels had an average manufacture period of 1846-1896 (or 1972) and a combined peak popularity period of 1858-1895. The *tpq* for the ceramic assemblage is taken from the Pinder, Bourne & Co plate (1862).

Glass Vessels

Manufacture methods

The manufacture method was able to be identified for seven of the F478 glass vessels. Two case gins, a schnapps and a colourless square-sectioned bottle were made in closed moulds, an aqua green spirit bottle in a three-piece dip-mould and two tumblers were pressed.

Products/brands

The only bottle from this deposit which bore any identifying embossing was part of an Udolpho Wolfe's Aromatic Schnapps bottle.

Dating

The glass vessel assemblage is typical of a deposit dating to around the 1870s and a *tpq* of 1863 can be taken from the Udolpho Wolfe's Aromatic Schnapps bottle.

Metal

The F478 metal assemblage includes 27 fasteners. Three of these are wrought iron bolts with either rose or flat heads, square cross sections and chisel shaped points. The rest are nails, one of which is copper alloy and the rest iron. The copper alloy nail appears to have been handmade and three of the iron examples are wire nails but the rest were unable to be identified to manufacture method. Roughly half the fasteners were bent and the remainder look unused.

Of the fifteen other metal artefacts ten were related to various types of containers. Two complete matchboxes, part of a tobacco tin, the handle of a bucket, fragments of hoop iron and the lid of a circular container were recovered. The other items include a utilitarian square shaped iron harness buckle, a section of iron wire, fragments of strip iron, sections of a small hand-formed copper alloy chain and a thimble-like copper alloy object that may be a cap for something.

Other

The other artefacts collected from F478 were three fragment from a white earthenware decoy hen's egg, a rectangular piece of pumice with a groove on one side (probably used as a knife sharpener) and fragments from an unmarked clay tobacco pipe with a spur at the base of the bowl.

Interpretation

Spatially F478 seems to relate to the southern-most Maria Place cottage and would have sat right along the fence line bordering the neighbouring property. This would have been a convenient location for a household rubbish pit, a hypothesis supported by the recovery of a mixed assemblage including food scraps and household items. Although none of the F478 artefacts are overly chronologically sensitive all are

characteristic of the 1860s to 1880s, therefore placing it in either the Recovery or Depression period. The presence of a decoy hen's egg suggests that this pit was filled when such subsistence activities were still being undertaken in this part of the site. Photographs from the 1870s and early 1880s show that the southern portion of TS191 was a simple garden with several small structures close to the back of the cottage and along the back fence line, any one of which could easily have been a chicken coop. Mary Byrne resided in the cottage for this period so this material probably relates to her.

F478 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1846-present	1730s-1900s	n/a
Peak Popularity	1862-1895	1863-1900	n/a
Proposed Deposit Date Range:	Late 1870s-1880s		

F493

Feature 493 was a rectangular rubbish pit (full dimensions not recorded) located partly under a modern wall close to the St Hill Street boundary of TS191. Little is mentioned about this feature in the excavation notes and report other than it contained "a lot of bone." It is in line with several other pit features analysed here (F510, 516, 515 and 478) and lies within the footprint of the early twentieth century garage.

F493 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	63	25	1155.78g
Glass Vessels	51	6	896.66g
Metal	3	3	9.59g
Other	3	2	8.62g
Total	120	36	2070.65g

Ceramics

No complete vessels were recovered from this feature and only one had a maker's mark.

Ware types

	Ware				Total
	Whiteware	Yellowware	Bone China	European porc-h	
Plate	7	-	1	-	8
Table bowl	1	-	-	-	1
Ashette	1	-	-	-	1
Tureen	1	-	-	-	1
Jug	-	1	-	-	1
Cup	4	-	1	-	5
Saucer	3	-	-	1	4
Toothbrush holder	1	-	-	-	1
Urn	1	-	-	-	1
Unidentified	2	-	-	-	2
Total	21	1	2	1	25

Decoration Styles

	Decoration							Total
	UGTP	Banded	Sponged	Gilt	Engine Turned	Moulded	None	
Plate	6	-	-	1	-	-	1	8
Table bowl	-	-	-	-	-	-	1	1
Ashette	-	1	-	-	-	-	-	1
Tureen	1	-	-	-	-	-	-	1
Jug	-	-	-	-	1	-	-	1
Cup	4	-	-	1	-	-	-	5
Saucer	2	-	1	-	-	1	-	4
Toothbrush holder	-	1	-	-	-	-	-	1
Urn	1	-	-	-	-	-	-	1
Unidentified	2	-	-	-	-	-	-	2
Total	16	2	1	2	1	1	2	25

Patterns and Colours

Purple was the most common colour found on the F493 ceramic vessels, followed closely by blue, although there is only one or two vessels difference in the colour frequencies. Five common UGTP patterns were identified (Rhine on three vessels, Willow on two and Asiatic Pheasants, Fibre and Teddesley on one each) and four more were complete enough to be catalogued (Green 18, Purple 20, Purple 24 and Purple 25), each appearing on a single vessel. A red and black spongeware pattern (Sponge 2) was the only other decorative pattern complete enough to be identified.

	Decoration Colour							Total
	Black	Blue	Green	Grey	Purple	Polychrome	Gold	
Plate	-	3	-	3	-	-	1	7
Ashette	-	-	-	-	-	1	-	1
Tureen	-	-	-	-	1	-	-	1
Jug	-	-	-	-	-	1	-	1
Cup	2	-	1	-	1	-	1	5
Saucer	-	-	1	-	1	1	-	3
Toothbrush holder	-	-	1	-	-	-	-	1
Urn	-	-	-	-	1	-	-	1
?	-	1	-	-	1	-	-	2
Total	2	4	3	3	5	3	2	19

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"Rhine/ G W T & SONS" (print)	G W Turner & Sons (Staffordshire)	Rhine whiteware soup plate	c.1873-1895	Kowalsky & Kowlasky 1999: 355

Dating

Thirteen F493 ceramic vessels were able to be dated (ten UGTP, two banded and one spongeware vessel), providing a mean manufacture range of 1841-1903 (1963) and a peak popularity period of 1849-1879. The G. W. Turner & Sons mark provides a *tpq* of 1873.

Glass Vessels

The F493 glass assemblage was highly fragmentary and only one bottle was able to be identified to type (a torpedo) and two to manufacture method (the torpedo was made

in a 2-piece mould and another round-cross section bottle was made with a dip mould). The single finish that was recovered was applied and looks as though it was tooled. The unidentified bottles all had round cross-sections and were aqua green in colour.

Metal

An iron semi-circular buckle frame, complete copper alloy thimble and a piece of a copper alloy clothing pin were also found in F493.

Other Artefacts

A fragment of an unidentified European porcelain figurine and an unmarked fragment of clay tobacco pipe stem were also recovered from this feature.

Interpretation

Ceramic fragments from three vessels join or match with ones found in F478 and two further fragments with vessels from F420 and F516. The F493 and F478 vessels include an engine-turned yellowware jug, London-style Fibre pattern cup and a Willow tureen. As well as this, the same range of named UGTP patterns were found in this feature and F478, suggesting that these two features are related, or at least both formed within a short period of time (probably the late Recovery or early Depression period). They both bear the characteristics of domestic kitchen dumps and it is possible that the occupants of the nearby cottage (probably Mary Byrne) could have been used simultaneously or filled up F493 and had to dig F478 to dispose of the same material.

F493 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1841-present	1730s-1900s	n/a
Peak Popularity	1873-1879	1850s-1880s	n/a
Proposed Deposit Date Range:	Late 1870s-1880s		

F510

Feature 510 was a rectangular rubbish pit measuring 6500mm X 7000mm and 9000mm deep located in the south corner of TS191, along the line of an old fence which separated the Maria Place corner property and one which fronted St Hill Street (the majority of this property was on TS190). Its associated artefact assemblage was mostly made up of glass vessels, many of which were complete.

F510 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	107	34	1371.77g
Glass Vessels	474	76	23259.74g
Metal	60	46	665.35g
Other	8	6	15.68g
Total	649	170	25312.54g

Another 351.37g of metal collected from F510 was unidentifiable.

Ceramics

One ceramic vessel was recovered from F510 complete (a green banded whiteware cup) and another seven vessels were almost complete.

Ware types

	Ware						Total
	Whiteware	Yellowware	Buff-bodied e/w	Dyed- body	Bone China	Bristol-glazed st-w	
Plate	7	-	-	1	3	-	11
Ashette	2	-	-	-	-	-	2
Jug	1	-	-	-	-	-	1
Cup	5	-	-	-	1	-	6
Saucer	5	-	-	-	1	-	6
Teapot	-	-	1	-	-	-	1
Jar	1	-	-	-	-	-	1
Unidentified	3	1	-	-	1	1	6
Total	24	1	1	1	4	1	34

Decoration styles

	Decoration						Total
	UGTP	Banded	Gilt	Sprigged	Moulded	None	
Plate	5	2	2	-	1	1	11
Ashette	1	1	-	-	-	-	2
Jug	-	-	-	-	1	-	1
Cup	3	1	-	1	-	1	6
Saucer	3	2	1	-	-	-	6
Teapot	-	-	-	-	1	-	1
Jar	-	-	-	-	-	1	1
Unidentified	3	-	-	-	-	3	6
Total	15	6	3	1	3	6	34

Patterns and Colours

Four named UGTP patterns were identified on the F510 ceramic vessels (Asiatic Pheasants, Rhine, Willow and Lattice), all appearing on single vessels with the exception of Asiatic Pheasants which was found on four. Another UGTP pattern was complete enough to be catalogued and appeared on one cup (Blue 23). Seven UGTP vessels were too fragmentary for the pattern to be identified. Two other decorative patterns (Tea leaf and Chelsea Sprig) were also present on one vessel each. Blue was overall the most common decoration colour, however amongst the banded vessels red was more common than other colours.

	Decoration Colour							Total
	Blue	Brown	Green	Grey	Purple	Red	Gold	
Plate	4	-	-	1	-	2	2	9
Ashette	2	-	-	-	-	-	-	2
Cup	3	-	1	-	1	-	-	5
Saucer	-	1	2	-	1	1	1	6
Unidentified	2	-	-	-	1	-	-	3
Total	11	1	3	1	3	3	3	25

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"Asiatic Pheasants/ O H E C/ L" (print)	Old Hall Earthenware Pottery Company Ltd.	Asiatic Pheasant whiteware side plate	1862-1886	Kowalsky & Kowalsky 1999: 297

Dating

Fourteen of the F510 ceramic vessels were able to be dated, including seven UGTP, six banded and one gilt vessel. They had an average manufacture period of 1846-1902 (1990) and a mean popularity period of 1862-1892. The Old Hall Earthenware Pottery Company mark gives the assemblage a *tpq* of 1862.

Glass Vessels

Of the 76 glass vessels recovered from F510, 31 were recovered complete. Around half of these (15 bottles) were pharmaceutical containers.

Maker's Marks

Mark	Vessel(s)	Factory (origin)	Date Range	Reference
"J K W/ 778"	Spirit bottle	John Kilner & Sons	1847-1857	Lindsey 2015
"K(numbers)"	3 rectangular bevelled and 1 oval sectioned	Kinghorn Glass (Scotland)	1870s-1880s	Luff 2008: 42
"BARRETT & ELMERS LONDON"	Breffit patent soda	Barrett & Elers (London)	>1884	Lindsey 2015

Manufacture methods

	Mould Type							Total
	Dip	2-piece	Shingle	Post-bottom	Cup-bottom	Turn	?	
Case Gin	3	-	6	-	-	-	-	9
Ring-seal	-	-	-	-	-	13	-	13
Spirit	-	-	-	-	1	-	1	2
Torpedo	-	1	-	-	-	-	-	1
Breffit	-	-	-	2	-	-	-	2
Lamont	-	-	-	1	-	-	-	1
Hogben	-	-	-	1	-	-	-	1
Codd	-	-	-	1	-	-	-	1
Club Sauce	-	-	-	-	1	-	-	1
Salad Oil	-	-	-	-	1	-	-	1
Wide Mouth	-	-	-	-	-	-	3	3
Square Sectioned	-	-	-	1	1	-	-	2
Rectangular Bevelled	-	-	-	-	11	-	-	11
Rectangular Panelled	-	-	-	-	1	-	-	1
Oval Sectioned	-	-	-	-	2	-	-	2
Cylindrical Pill	5	-	-	-	2	-	-	7
?	1	-	-	-	-	1	14	18
Total	9	1	6	6	20	14	18	76

Products/Brands

Several of the F510 glass vessels bore embossing which allowed them to be attributed to specific products, brands or businesses.

Product	Vessel(s)	Manufacturer	Date Range	Ref
St Jacob's Oil	2 Cylindrical pills	Charles Avogeler Company (Baltimore)	ca. 1880-1940s	Smith and Garland 2012: 57
Fluid Magnesia	Oval sectioned	Kruse (Australia)	1863-today	ibid
Davis Vegetable Pain Killer	Rectangular panelled	Perry Davis (USA)	1840-1900s	Jones 1983: 69
Unknown pharmaceuticals	4 rectangular bevelled	H B Williamson (Whanganui)	1876-1903	Luff 2008:43
Unknown pharmaceuticals	Oval sectioned	Wakefield & Hogg	1877-1883	Luff 2008: 42
Aerated water/soda	Breffit patent	E Hodren (Whanganui)	1887-1898	Luff 2008: 23
Aerated water/soda	Lamont patent	Lane & Co (Dunedin)	1876-1950+	Robson 1995
Aerated water/soda	Torpedo	E Dixon (Wellington)	1860-1880s	Robson 1995
Hop bitters	Square sectioned	Dr Soule (Rochester, NY)	1872+	Lindsey 2015
Flavour Extract	Rectangular bevelled	Joseph Burnett (Boston)	1847-1946	Southborough Historical Society 2014

Dating

Most of the F510 glass vessels are typical of the last two decades of the nineteenth century. The Hodren Breffit patent soda bottle provides a *tpq* of 1887, although by this date several of the bottles would have been old. This suggests either continued re-use or prolonged dumping into this feature.

Metal

The F510 metal assemblage contained 39 fasteners, all of which were generic iron nails apart from one roofing nail with a lead head. Wire was the most common manufacture method used to make these nails, accounting for twenty. Four were wrought and three were cut, the remainder were unable to be attributed a manufacture method. All but one nail (the roofing nail) were bent or clenched.

The other metal artefacts were typical of a domestic assemblage and included:

- A copper alloy pin, 38mm long
- The frame of a copper alloy utilitarian buckle
- Part of a tobacco tin
- Fragments of a circular can
- The head of an iron file
- Fragments of strip iron
- A small piece of iron wire

Other

The miscellaneous artefacts recovered from this feature include a worn down slate pencil stub, the head of a porcelain doll with black painted hair, a marble and fragments from at least three clay tobacco pipes. One of the tobacco pipes has “BUR.../GLA...” incised on the stem and one has a stem which has been broken and re-shaped to form a new bite.

Interpretation

None of the ceramic fragments found within F510 appear to be from any vessels found in other features although there are some which are very similar to those found in F515, 478 and 493. The high number of complete glass bottles within the deposit suggests that this rubbish pit had a short use-life and was perhaps even dug for the disposal of this one particular collection of artefacts. A clean out event would explain such a feature and assemblage, and F510’s location along the fence line of the garden at the southern end of TS190 suggest that this event was related to the Maria Place cottage closest to St Hill Street. The dates gathered from the artefacts suggest this material was dumped during the 1880s or 1890s, and in 1891 an event occurred at this particular cottage which would have prompted a clear out: the death of Mary Byrne. This deposit’s association with the late Mrs Byrne could also explain the high percentage of pharmaceutical products, several of which are intended as pain relief. The cause of Mary Byrne’s death is unknown but the F510 assemblage is evidence that it was not particularly sudden or unexpected.

F510 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1846-present	1840s-1900s	n/a
Peak Popularity	1862-1892	1887-1900	n/a
Proposed Deposit Date Range:	Early 1890s		

Chavannes

Three deposits were able to be confidently associated with the Chavannes family. All were located on TS191 and two were recovered from features which contained multiple deposits.

F430 (part)

Feature 430 was a circular rubbish pit 1200mm in diameter and 900mm deep close to the Maria Place frontage of TS191. According to the excavation notes it tapered towards the bottom and contained a large amount of whole and broken gin bottles. The assemblage recovered from F430 is clearly made up of two distinct deposits: the original domestic deposit (described above in the Byrne section) with the later addition of demolition material. The demolition rubbish and most of the identifiable metal artefacts are associated with the Chavannes and are described here.

F430 (Chavannes) Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	0	0	0g
Glass Vessels	0	0	0g
Metal	41	21	2187.59g
Other	0	0	0g
Total	41	21	2187.59g

Another 1281.29g of unidentifiable metal was recovered from F430 which was not included in either the Byrne or Chavannes assemblage.

Metal

A varied metal assemblage was collected from this pit, featuring:

- Fragments from at least nine iron nails of unknown manufacture
- An iron railway peg
- A front horseshoe with central toe clip
- The head and part of the wooden handle of a metal curry comb
- Fragments of a tobacco tin
- Fragments from at least five unidentified metal containers, four circular and one rectangular
- A length of iron wire composed of two strands twisted together
- Lengths of strip iron
- Fragments of roofing zinc sheet

Interpretation

Most of the metal assemblage recovered from this feature relates to the stables (both the building itself and its occupants) erected on this section in 1897 and demolished in 1906. As F430 lay within the footprint of the building constructed by the Chavannes after the demolition of the stables it can be safely assumed that this pit was sealed during or soon after the removal of the stables. The other artefacts found in this deposit appear earlier in date than the demolition rubble and to other types of activity. The most obvious explanation is that this feature was initially dug, was used to dispose of the Case Gin and other bottles and was then left open, allowing for the addition of a small amount of household rubbish and finally the demolition material in 1906. This hypothesis raises the question of why this feature was located close to the street frontage rather than at the back of the section as is the case with other similar late nineteenth century deposits. An examination of photographs of this corner do show a small structure in the vicinity of F430 during the 1870s, possibly an earth closet or latrine, which is hidden or replaced by dense vegetation by the end of the decade. This vegetation is still visible in the 1905 image, so could have obscured the pit until it was cleared during the demolition of the stables, at which time it was necessary to add more fill to F430 in order to level the ground surface. This means that this deposit can be split into two assemblages: the glass bottles and household rubbish which probably relate to Mary Byrne and family who occupied the nearby cottage from the 1870s until her death in 1891, and the stable demolition material which relates to the Chavannes. Those artefacts which are difficult to date to either of these events are of little concern to this research as they provide limited contextual information (for example the metal cans and tobacco tin).

F430 (Chavannes) Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	n/a	n/a	?
Peak Popularity	n/a	n/a	?
Proposed Deposit Date Range:	1906 (stables demolished)		

F420(part)

Feature 420 was a well located in the southern corner of TS191. It contained a huge amount of archaeological material, which upon analysis seems to relate to two distinct events. The first was a commercial dumping event sometime in the late 1890s by Edwin Moulton who owned and operated a grocery and general goods store on TS189. This dump consisted almost entirely of unsold ceramic vessels, identifiable through their completeness, lack of any signs of use (chips, scratches etc.) and the fact that large numbers of identical vessels and sets are present. This dump may have coincided with a change in business direction taken by Moulton around 1897 when he started focussing on furniture and appears to have stopped selling crockery. The second event (which may overlap with this first event) was the dumping of unwanted household goods into the well by the Chavannes family who lived on this section. This material must have

been deposited before 1906 when the well was covered during the construction of a garage. The top spits of the deposit also include various equestrian and structural artefacts that were probably dumped during the demolition of the stable block that was demolished to make way for the new building. Similar to F313, a presence/absence usewear analysis was undertaken to separate the commercial crockery (described in the next Appendix) from the domestic material. In the case of F420 this division must be treated as extremely conservative as the assemblage contained large amounts of vessels in ware types which do not easily show usewear such as stonewares and porcelains.

F420 (Chavannes) Deposit Summary

Material	NISP	MNI/V	Weight
Ceramic	211	52	4340.67g
Glass	342	69	12730.36g
Metal (identifiable)	170	110	10126.78g
Other	115	34	910.22g
Total	838	265	28108.03g

Ceramics

A total of 211 ceramic sherds, representing an MNV of 37, were attributed to the Chavannes household. Twelve vessels were complete but all were broken.

As in most of the VRC assemblages, whiteware is the predominant body material, accounting for 72% of the F420 ceramic vessels. The next most common body materials are European porcelain (9%), Ivory-dyed-whiteware (7%) and Bone China (5%). Other body materials are present in much smaller numbers, with a single vessel unable to be identified to body material.

	Ware				Total
	Whiteware	Ivory-dyed whiteware	Buff-bodied e/w	Bone China	
Plate	22	10	-	2	34
Table bowl	1	-	-	-	1
Ashette	1	2	-	-	3
Tureen	1	-	-	-	1
Cup	2	-	-	-	2
Saucer	7	-	-	1	8
Teapot	-	-	2	-	2
Mixing Bowl	1	-	-	-	1
Total	44	12	4	15	52

Four decorative techniques were identified among the F420 Chavannes ceramics. UGTP is the most common technique, while the other techniques are represented by smaller numbers of vessels. UGTP patterns identified were Asiatic Pheasant (fourteen vessels), Cairo (eleven), Willow (four) and Rhine (two). A fragment from a 57th regiment mess hall plate was also recovered along with two unknown floral UGTP patterns (Brown 8 and Brown 9), neither of which were able to be dated. Non-UGTP patterns recorded were Tea Leaf and Imitation Jasper.

	Decoration					Total
	UGTP	Gilt	Sprigged	Moulded	None	
Plates	31	1	2	-	-	34
Table bowl	1	-	-	-	-	1
Ashettes	3	-	-	-	-	3
Tureen	1	-	-	-	-	1
Cups	1	-	-	-	1	2
Saucers	-	7	-	-	1	8
Teapots	-	-	-	2	-	2
Mixing bowl	-	-	-	-	1	1
Total	37	8	2	2	3	52

Ceramic sets

The F420 ceramic assemblage contains what appear to be two dinner sets in blue Asiatic Pheasant and Cairo (green UGTP on ivory-dyed whiteware) patterns. Both sets have multiple serving vessels, six dinner plates and a smaller number of side plates, suggesting they were originally six person sets.

Maker's Marks

Mark	Manufacturer	Date Range	Vessels
"CAIRO/G J & SONS" (print)	George Jones & Sons	1873-1894	Cairo dinner set (12 vessels)

Glass

A total of 342 fragments of glass were recovered from the F420 well, representing an MNV of 69. Only one glass bottle from this feature was complete. Four main manufacture methods were identified amongst the glass bottles: free blown, dip moulded, turn moulded, three-piece and two-piece moulded (both cup and post bottom). Like the ceramics, the glass assemblage is very large for a domestic deposit, however the Chavannes were still running the Chavannes Hotel on the corner of Victoria Avenue and Maris Place when they first occupied this part of the site so it is possible these vessels still relate to the household.

Products and Brands

The specific products included in the F420 glass assemblage are two bottles of Davis' Vegetable Painkiller and one Lea & Perrins Worcestershire Sauce bottle. Davis' Vegetable painkiller was a popular American patent medicine which was first advertised for sale in New Zealand in 1863 (*Daily Southern Cross* 27/2/1863) and remained common well into the twentieth century. Lea & Perrins first appeared in New Zealand in 1851 (Smith and Woods 2014) and has remained the most popular Worcestershire Sauce brand through to the present day.

	Manufacture									
	Free blown	Dip	Shingle	Post	Cup	Turn	Cut	Pressed	?	Total
Black Beer	3	9	-	-	-	-	-	-	-	12
Case Gin	-	1	-	-	-	-	-	-	-	1
Bordeaux	-	2	-	-	-	-	-	-	-	2
Spirit	-	-	-	-	2	-	-	-	2	4
Ring-seal	-	-	-	-	-	16	-	-	-	16
Schnapps	-	-	3	-	-	-	-	-	-	3
Breffit patent	-	-	-	1	-	-	-	-	-	1
Salad Oil	-	-	-	-	2	-	-	-	-	2
Club Sauce	-	-	-	-	2	-	-	-	-	2
Wide- mouth	-	-	-	-	-	-	-	-	3	3
Rectangular bevelled	-	-	-	-	3	-	-	-	-	3
Rectangular panelled	-	-	-	-	2	-	-	-	-	2
Cylindrical pill	-	1	-	-	-	-	-	-	-	1
Castor oil	-	-	-	-	1	-	-	-	-	1
Square- sectioned	-	-	-	-	1	-	-	-	-	1
Bowl	-	-	-	-	-	-	-	-	1	1
Tumbler	-	-	-	-	-	-	-	3	-	3
Decorative	-	-	-	-	-	-	1	-	-	1
?	-	2	-	-	-	-	-	1	7	10
Total	3	15	3	1	13	16	1	4	13	69

Dating

One glass manufacturer and two specific products were able to be identified through embossing. A Hogben's patent soda bottle base bears the words "E. BREFFIT & CO MAKERS LONDON" and "T & C CO/1885," which belong to Edgar Breffit & Co who originally had a glass factory in Yorkshire (Harris 2006: 10). The "T & Co" was unable

to be attributed to a factory or retailer. The Hogben's patent itself was developed by Wellington bottling company Dixon and Hogbens and was produced during the last quarter of the nineteenth century (Woods 2013: 52).

For the remainder of the glass assemblage it is the methods of manufacture that reveal the chronological information sought. Turn moulding was the most common technique, accounting for around 63% of the bottles. This method was most common during the last two decades of the nineteenth century and coincides with the popularity of ring-seal bottles as almost all of these were made in this manner. Dip moulds were used to make 37% of the assemblage, which is interesting as this method was largely obsolete by the 1870s. A further 13% of the bottles were free blown, a technique that was uncommon after the first half of the century. Three-piece mould were used for much of the nineteenth century, while cup and post bottom two-piece mould have a similar peak popularity period as turn moulds. This suggests that a significant proportion of the F420 bottles were at least ten or 20 years old by the time they were disposed of, or alternatively had been deposited in the well prior to the Chavannes' occupation of the site. Without precise stratigraphic information for the whole assemblage it is impossible to draw concrete conclusions about this and as a result the glass vessels did not play a central role in the construction of the Chavannes narrative.

Metal

Just over half (9.1kg) of the more than 16kg of metal recovered from Feature 420 was identifiable:

- One copper alloy bullet casing
- A large brass padlock
- A small brass door or furniture knob
- The hoop from a large barrel
- 12 tin cans, various sizes
- Lids from three jars
- Five matchboxes
- Three tobacco tins
- Four unidentified iron containers
- Three iron table forks
- A nickel cake fork
- Two teaspoons, one nickel and the other nickel silver
- One unidentified piece of nickel silver cutlery

- A rectangular copper alloy panel from an unknown object with “Patent” embossed
- Three horseshoes, all the same size (130mm long and 120mm wide)
- A copper alloy utilitarian harness buckle
- The head on an iron rake
- An industrial sized hook
- What appears to be an industrial iron offcut with cut marks on both sides
- Part of a gas lamp
- The faceplate from a coin operated machine with coin slot and lock
- An iron railway peg
- A section of sheet iron
- A wire bottle closure
- Five sections of strip iron in various sizes
- A round copper alloy fitting with a hexagonal nut attached
- Ten lengths of iron wire, some of which are shaped into loops
- Several fragments of corrugated roofing lead

Other

Miscellaneous items collected from this well include:

- A section of rubber car or motorcycle tyre
- A fragment of oil lantern glass
- Part of a glass light fitting
- Thirteen shards of plate window glass of various thickness, ranging from 1.5mm to 7.9mm
- One opaque white glass two-hole, sew through button
- Two cutlery handles, one wooden and the other made of bone
- A fabric purse with copper alloy frame and closure
- A partial set of wooden rosary beads
- Two small glass “spiral” marbles and eight fragments of china doll

Interpretation

F420 poses some interpretive problems in that it was a well which would have been open for many years and that some of the artefact classes (the glass vessels especially) span multiple decades in age. While it was relatively simple to separate the domestic and commercial ceramics and provide a confident date for the sealing of this feature of 1906 when it was built over, the bottles remain enigmatic. It is possible, as mentioned above, that they do in fact all relate to the Chavannes as they ran the nearby Chavannes Hotel for the first few years of their time here, some of the bottles are typical of the 1850s-1870s which is long before this couple became publicans. The Byrnes, who occupied this area before the Chavannes, were responsible for several other bottle dumps across the site so it is possible that they at least contributed to this one as well. For this reason, only the domestic ceramics, metal and miscellaneous artefacts from F420 were used to construct the Chavannes narratives.

F420 (Chavannes) Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1861-present	1730s-1910s	>1904
Peak Popularity	1880s-1900	1850s-1900	>1904
Proposed Deposit Date Range:	1906 (stables demolished)		

F516

Feature 516 was described as a “deep circular pit” in the excavation notes, although its exact dimensions were not recorded. It lay in the southern corner of TS191 adjoining F515 and apparently in line with F478, F521 (a dog burial), F510 and F493. All of these features were located well within the footprint of the garage built in 1906 but are outside the confines of any earlier buildings. F516 is described as having contained a lot of metal, especially zinc, most of which appears to be demolition rubbish.

F516 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	133	34	1399.58g
Glass Vessels	106	16	1831.00g
Metal	105	57	6923.99g
Other	5	4	15.18g
Total	349	111	10169.75g

Another 1630.68g of unidentifiable metal was recovered from this feature.

Ceramic vessels

No complete vessels were recovered from this feature and no fragments bore any maker's marks.

Ware Types

	Ware							Total
	Whiteware	Ivory-dyed Whiteware	Yellowware	Buff- bodied e/w	Bone China	Salt- glazed st-w	slip glazed st-w	
Plate	6	1	-	-	1	-	-	8
Table bowl	1	-	-	-	-	-	-	1
Ashette	2	1	-	-	-	-	-	3
Cup	4	-	-	-	3	-	-	7
Saucer	4	-	-	-	1	-	-	5
Teapot	1	-	-	1	-	-	-	2
Jar	1	-	-	-	-	-	-	1
Bottle	-	-	-	-	-	1	1	2
Basin	1	-	-	-	-	-	-	1
Toothbrush holder	1	-	-	-	-	-	-	1
Unidentified	2	-	1	-	-	-	-	3
Total	23	2	1	1	5	1	1	34

Decoration Styles

	Decoration						Total
	UGTP	Banded	Gilt	Sprigged	Moulded	None	
Plate	7	-	1	-	-	-	8
Table bowl	-	1	-	-	-	-	1
Ashette	1	2	-	-	-	-	3
Cup	1	1	4	1	-	-	7
Saucer	1	2	2	-	-	-	5
Teapot	-	-	-	-	2	-	2
Jar	-	-	-	-	-	1	1
Bottle	-	-	-	-	-	2	2
Basin	-	1	-	-	-	-	1
Toothbrush holder	-	1	-	-	-	-	1
Unidentified	2	-	-	-	-	1	3
Total	12	8	7	1	2	4	34

Patterns and Colours

Overall blue was the most common colour for ceramic decoration, however gold and green also appear to have been favoured. For UGTP vessels blue was again the most popular but for banded vessels it was green. Six known UGTP patterns were identified on one vessel each (Asiatic Pheasants, Fibre, Rhine, Willow, Teddesley and Cairo) while another three floral patterns were catalogued (Blue 30, Purple 26 and Purple 34). Two non-UGTP patterns were also present: Tea Leaf and Imitation Jasper.

	Decoration Colour									Total
	Black	Blue	Green	Grey	Purple	Red	Gold	Pink/gold	P-chrome	
Plate	1	3	1	1	1	-	1	-	-	8
Table bowl	-	-	1	-	-	-	-	-	-	1
Ashette	-	1	1	-	-	-	-	-	1	3
Cup	-	1	-	-	1	1	3	1	-	7
Saucer	1	1	-	-	-	1	2	-	-	5
Basin	-	-	1	-	1	-	-	-	-	2
Toothbrush holder	-	-	1	-	-	-	-	-	-	1
Unidentified	-	1	-	-	-	-	-	-	-	1
Total	2	7	5	1	3	2	6	1	1	28

Dating

Seventeen of the F516 ceramic vessels were able to be dated (eight UGTP, eight banded and one gilt Tea Leaf vessel) and the average manufacture range was 1853-1893(1972) with a mean peak popularity of 1867-1891. The fragments of Cairo pattern ivory-dyed whiteware give a *tpq* of 1879 for the ceramic assemblage.

Glass Vessels

All the glass vessels from F516 were recovered in fragmentary condition and most were only represented by small portions. All finishes were applied.

Manufacture Methods

	Manufacture method					Total
	Dip Mould	Shingle Mould	Cup-bottom Mould	Pressed	?	
Black	2	-	-	-	-	2
Coffin Flask	-	-	1	-	-	1
Schnapps	-	1	-	-	-	1
Salad Oil	-	-	1	-	-	1
Wide-mouth	-	-	-	-	3	3
Rectangular-bevelled	-	-	1	-	-	1
Tumbler	-	-	-	1	-	1
Decorative	-	-	-	-	1	1
?	1	-	1	-	3	5
Total	3	1	4	1	7	16

Products/Brands

Only one of the F516 bottles bears identifiable embossing. A rectangular-bevelled bottle has "...AMSON & CO/ ...MISTS/...ANUI" which is the partial mark of H B Williamson & Co, the Whanganui chemist active from 1876-1903.

Dating

Looking at the manufacture methods used to make the bottles to which the F516 glass fragments belonged, the assemblage seems typical of around 1860-1880 as there are no turn moulded ring seals which are usually present in any glass assemblage dating to after 1880. A *tpq* can be taken from the single embossed fragment of 1876, when Williamson & Co first opened.

Metal

A variety of metal artefacts were identified amongst the F516 assemblage:

- Fragments of at least eighteen iron wire nails, all of which are used
- Twenty-six used iron nails of unknown manufacture
- A copper alloy teaspoon handle
- A complete wax vesta matchbox
- An iron chisel, 170mm long
- A small (45mm diameter) iron castor wheel
- The head of an axe
- An iron railway peg
- The handle and hoops of a wooden bucket, some remnants of wood remain attached to the hoops
- Fragments of an iron can
- A brass oil lamp shade holder
- One piece of strip iron
- Large amounts (2350.53g) of zinc sheeting from a roof

Other Artefacts

Also collected from this feature were the unglazed, painted head of a blonde porcelain doll, the rim of a porcelain toy saucer, the stem of a clay tobacco pipe incised with "C. CROP.../LONDON" and an unidentified cylindrical copper alloy and cork artefact with an external screw thread.

Interpretation

Fragments from four ceramic vessels found in this feature were found in the nearby F420 well, F515 and F493.

The demolition material mixed in with the other fill in F516 is clear evidence of its association with the Chavannes family and their time occupying this part of the site, in particular during the removal of the stables and construction of the garage building in the early twentieth century. Most of the domestic material was highly fragmented with many ceramic and glass vessels represented by single pieces, suggesting that most of this material was re-deposited. Where this material came from and why the Chavannes chose to deposit it here remains unclear although a 1905 photograph of this corner does show a small rectangular structure in the vicinity of F516. It is possible that this was an earth closet or latrine dug by the Chavannes and that required filling in to level the ground for the garage building but not enough information exists to confirm this hypothesis.

F516 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1853-present	1730s-1910s	n/a
Peak Popularity	1879-1891	1876-1900s	n/a
Proposed Deposit Date Range:	1906 (stables demolished)		

Appendix C: Other Assemblages

This appendix contains descriptions of the analysed deposits which were not associated with any of the main three families, organised by Town Section.

TS187

Only one feature within TS187 was investigated as part of this research.

F700

This feature (a brick-lined well) is not mentioned in the final report for the VRC site or recorded on any of the site plans; however a large assemblage of artefacts was recovered from it. Although the exact location of F700 is not discussed in the final report, the on-site record form and initial site plan show it as being in the Northeast corner of Area 2E, which would position it towards the rear of TS187. The nature of the artefact assemblage suggests there was some differentiation between at least the very top and bottom of the deposit, but as it was excavated in two large and entirely arbitrary spits any detailed stratigraphic information has been lost and so the deposit is presented as one. Of particular interest in this deposit is the high number of near identical Case Gin and Bordeaux shaped bottles, most of which it appears were deposited whole.

F700 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	373	78	12353.37g
Glass Vessels	1371	221	82609.15g
Metal	101	44	13914.17g
Other	205	22	1806.17g
Total	2050	365	110682.86g

A further 4438.43g of metal was collected from this feature but was not identifiable.

Ceramics

Only one ceramic vessel (a gilt whiteware saucer) was recovered from this feature intact, although at least another five were complete, presumably having been broken during the deposition process.

Ware Types

	Ware										Total
	Whiteware	Yellowware	Refined-red Earthenware	Buff-bodied e/w	Terracotta	Bone China	European Porcelain	Japanese Porcelain	Salt-glazed Stoneware		
Plates	21	-	-	-	-	3	1	-	-	-	25
Ashettes	5	-	-	-	-	-	-	-	-	-	5
Tureens	1	-	-	-	-	-	-	-	-	-	1
Mugs	2	-	-	-	-	-	-	-	-	-	2
Jugs	1	-	1	-	-	-	1	-	-	-	3
Egg cups	-	-	-	-	-	2	-	-	-	-	2
Cups	2	-	-	-	-	6	1	-	-	-	9
Saucers	3	-	-	-	-	5	1	-	-	-	9
Teapots	-	-	2	1	-	-	-	-	-	-	3
Bottles	-	-	-	-	-	-	-	-	-	1	1
Roasting dishes	1	-	-	-	-	-	-	-	-	-	1
Bowls	1	1	-	-	-	-	-	-	-	-	2
Jars	2	-	-	-	-	-	-	-	-	-	2
Basins	1	-	-	-	-	-	-	-	-	-	1
Ewers	1	-	-	-	-	-	-	-	-	-	1
Chamberpots	2	-	-	-	-	-	-	-	-	-	2
Cosmetic jars	2	-	-	-	-	-	-	-	-	-	2
Decorative	-	-	-	-	1	-	-	-	-	-	1
Unidentified	5	-	-	-	-	-	-	1	-	-	6
Total	50	1	3	1	1	16	4	1	1	1	78

Decoration Styles

	Decoration Style												Total
	UGTP	Banded	Painted	Enamelled	Gilt	Decal	Edge-moulded	Moulded	Sprigged	Lustre	Slip	None	
Plates	8	-	-	-	2	1	8	-	1	-	-	5	25
Ashettes	3	-	-	-	-	-	1	-	-	-	-	1	5
Tureens	-	-	-	-	-	-	-	-	-	-	-	1	1
Mugs	2	-	-	-	-	-	-	-	-	-	-	-	2
Jugs	-	-	1	-	-	1	-	-	-	1	-	-	3
Egg cups	-	-	-	-	-	-	-	-	2	-	-	-	2
Cups	-	-	-	-	4	1	-	-	-	-	-	4	9
Saucers	-	-	-	-	7	-	-	-	-	-	-	2	9
Teapots	-	-	-	-	-	-	-	1	-	-	1	1	3
Bottles	-	-	-	-	-	-	-	-	-	-	-	1	1
Roasting dishes	-	-	-	-	-	-	-	-	-	-	-	1	1
Bowls	-	-	-	-	-	-	-	1	-	-	-	1	2
Jars	1	-	-	-	-	-	-	-	-	-	-	1	2
Basins	1	-	-	-	-	-	-	-	-	-	-	-	1
Ewers	1	-	-	-	-	-	-	-	-	-	-	-	1
Chamberpot	2	-	-	-	-	-	-	-	-	-	-	-	2
Cosmetic jar	2	-	-	-	-	-	-	-	-	-	-	-	2
Decorative	-	-	-	-	-	-	-	-	-	-	-	1	1
Unidentified	3	2	-	1	-	-	-	-	-	-	-	-	6
Total	23	2	1	1	13	3	9	2	3	1	1	19	78

Patterns and Colours

Gold was overall the most common decoration colour for the F700 ceramics but blue was used most often on the UGTP vessels. Six named (Willow on three, Asiatic Pheasants on two and Rhine, Rouen, Phoebe and Ithaca on single vessels) and six unnamed UGTP patterns (Brown 11 and 21, and Green 11, 12, 13 and 14, all on one vessel each) were recorded as well as two non-UGTP designs (Tea Leaf on eight and Imitation Jasper on three vessels).

Decoration Colour

	Black	Blue	Brown	Green	Grey	Purple	Red	Gold	Copper	Polychrome	Total
Plate	1	6	-	1	1	-	-	2	-	1	12
Ashette	-	2	-	1	-	-	-	-	-	-	3
Eggcup	-	2	-	-	-	-	-	-	-	-	2
Jug	-	-	-	-	-	-	1	-	1	1	3
Mug	-	-	1	1	-	-	-	-	-	-	2
Cup	-	-	-	-	-	-	-	5	-	1	6
Saucer	-	-	-	-	-	-	-	7	-	-	7
Teapot	-	1	-	-	-	-	-	-	-	-	1
Jar	-	-	-	-	-	1	-	-	-	-	1
Ewer	-	-	1	-	-	-	-	-	-	-	1
Basin	-	-	-	1	-	-	-	-	-	-	1
Chamberpot	-	-	1	1	-	-	-	-	-	-	2
Cosmetic jar	2	-	-	-	-	-	-	-	-	-	2
Unidentified	1	2	-	2	-	-	-	-	-	1	6
Total	4	13	3	7	1	1	1	14	1	4	49

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"WEDGWOOD & CO Ltd/ ENGLAND/ PHEOBE/ SEMI ROYAL PORCELAIN" print	Wedgwood & Co Ltd. (Staffordshire)	Flow blue UGTP dinner plate	1890-1906	Kowalsky & Kowalsky 1999: 365
"BISHOP & STONIER/ ENGLAND" print	Bishop & Stonier (Staffordshire)	Edge-moulded whiteware ashette	c.1891-1939	Kowalsky & Kowalsky 1999: 112
"JOHNSON B.../ ENGLAND" print	Johnson Brothers Ltd. (Staffordshire)	Undecorated whiteware plate	1891-1913	Godden 1991: 355
"FELL" with seahorses (print), "FELL & CO" with anchor (stamp)	Thomas Fell & Co (Newcastle upon Tyne)	Willow whiteware ashette	1830-1869	Godden 1991: 245
"ITHACA/ H & C" print	Hope & Carter (Staffordshire)	Ithaca whiteware side plate	c.1862-1880	Godden 1991: 334

Dating

Thirty-two of the F700 ceramic vessels could be used to date the deposit (thirteen gilt, twelve UGTP, three decal, two banded, one edge-moulded and one undecorated vessel). The calculated average manufacture range was 1852-1903(1938) and peak popularity was 1856-1893. Two of the marked vessels provide a *terminus post quem* for the ceramics of 1891.

Glass

Sixty-seven intact glass vessels were collected from F700 and at least two others which were broken but complete. The majority of these complete bottles were of forms associated with alcoholic contents (24 Case Gins, sixteen Bordeaux, three ring-seals, two spirits, two stouts and a coffin flask) but also included seventeen pharmaceutical containers (ten oval cross-sectioned, four rectangular-bevelled, two cylindrical pills and a castor oil bottle), two food related (a club sauce and tomato sauce) a small triangular poison vial and an unidentified colourless round cross-sectioned bottle.

Manufacture methods

A range of methods were used to manufacture the F700 glass bottles but dip moulds were by far the most common, accounting for 113 (53%) of the total bottle count.. The next most common mould type is the cup bottom mould, accounting here for 38 (18%) of the bottles. Shingle moulds were used on 31 (14%) of the F700 bottles, all of which are Case Gins.

	Manufacture Method							Total
	Dip mould	Shingle mould	2-piece mould	Cup mould	Turn mould	Pressed	Unidentified	
Dark Olive Round C-section	13	-	-	-	-	-	-	13
Green beer	1	-	-	-	-	-	-	1
Spirit	3	-	-	1	-	-	-	4
Case Gin	50	31	-	-	-	-	-	81
Bordeaux	33	-	-	-	-	-	-	33
Ring-seal	1	-	-	-	13	-	-	14
Schnapps	-	1	-	-	-	-	-	1
Coffin Flask	-	-	-	2	-	-	-	2
Torpedo	-	-	3	-	-	-	-	3
Club sauce	-	-	-	4	-	-	-	4
Tomato Sauce	-	-	-	1	-	-	1	2
Wide-mouthed	-	-	-	-	-	-	3	3
Rectangular bevelled	-	-	-	8	-	-	-	8
Oval-sectioned	-	-	-	14	-	-	-	14
Cylindrical pill	3	-	-	2	-	-	-	5
Castor oil	1	-	-	-	-	-	-	1
Poison	-	-	-	1	-	-	-	1
Square-sectioned	-	-	-	1	-	-	-	1
Tumbler	-	-	-	-	-	4	-	4
Stemmed glass	-	-	-	-	-	1	-	1
Unidentified	7	-	-	5	-	-	13	25
Total	112	32	3	39	13	5	17	221

Maker's Marks

Two maker's marks were able to be attributed to bottle manufacturers. "WOOD/PORTOBELLO" was embossed on the base of a black beer and was used from ca. 1866 into the 1880s. Four Lea & Perrins Worcestershire sauce bottles have "A C B Co" embossed on the base which belongs to the Aire & Calder glassworks in Yorkshire and dates from the 1850s through to the early twentieth century.

Products/Brands

Product	Vessel(s)	Manufacturer	Date Range
Whisky	Spirit bottle	James Stewart & Co (Saucel, Scotland)	1852-1903
Aerated water/soda	Torpedo bottle	E. Dixon (Wellington)	1860-1880s
Worcestershire Sauce	4x Club sauce bottles	Lea & Perrins (England)	1850s-
Tomato Sauce	Sauce bottle	H. Olson (Auckland)	1870-ca.1893
Re-carbonated fluid magnesia	Oval cross- sectioned bottle	Sir J Murray (London & Dublin)	19 th century
King of Pain	Rectangular bevelled bottle	"Professor Scott"	ca. 1878-1880s
?Pharmaceutical	Oval cross- sectioned bottle	Wakefield & Hogg (Whanganui)	1877-1883

Dating

The glass vessel assemblage is dominated by dip moulded bottles and shapes that are typical of the period prior to the 1870s but the dates gathered from maker's marks and body embossing provide a *terminus post quem* of 1878. This fits in with the hypothesis that the glass was dumped during the changeover to newer bottles types at Andrew Tod's wine and spirit shop.

Metal

Over 18kg of metal was collected from F700, but 4.4kg of that was not identifiable. The material that was identifiable included various containers, industrial, household and equestrian items:

- The internal workings and two bells of a crank telephone
- Three tobacco tins
- Six matchboxes
- Fragments of six tin cans

- An iron hoop from a wooden bucket
- A metal bottle screw cap
- Fragments of an unidentified rectangular container
- One used horseshoe measuring 160mmX160mm with a central toe clip and raised heels
- An iron bed spring
- A cast iron attachment for hitching a trailer or cart
- A round cast iron tap or valve fitting
- A white enamelled tin saucer or side plate with painted blue floral decoration around the rim
- The lid of a white enamelled hollowware vessel
- The blade from a pair of copper alloy scissors
- A short length of iron chain
- A fragment of roofing zinc
- Seventeen fragments of strip iron
- Seven complete nails, all bent (one wire, two cut and five of unknown manufacture)
- Two iron bolts, one with screw thread on the lower shaft

Other Artefacts

An eclectic mix of miscellaneous artefacts were recovered from this feature, almost all in fragmentary condition. These artefacts represent various aspects of late nineteenth century life ranging from infrastructure and buildings on site down to the most personal of items:

- One hundred and forty-seven fragments of plate window glass ranging in thickness from 1.75mm-2.14mm, representing at least one complete window pane
- Fragments from at least three oil lanterns, two of which are plain and the other decorated with gilt floral motifs
- Part of a yellow glazed whiteware wall or fireplace tile with a moulded shell design
- Various small scraps of fabric
- A bone handled table fork with iron tines
- A complete wooden backed dandy brush with copper alloy tacks

- A stacked leather shoe heel with iron heel plate
- Fragments of a glazed coarse earthenware water or sewage pipe
- A bone handled pen knife or straight razor (most of blade is missing)
- The black and white glass eye from a child's stuffed toy
- Three fragments of thick (4.9mm) plate glass
- A blue and white glass dome with copper alloy back and attached fabric remnants, possibly from a cushion or some other soft furnishing item

Also found were fragments from at least three clay tobacco pipes. These include two identical bowls with spurs and "T D" incised, both of which are blackened through use. "T D" marked pipes appear to have been made by a number of manufacturers dating back to the eighteenth century. Another unmarked bowl was collected, along with one piece of incised stem ("...SON/GLAS[GOW]") and three bites, one of which is original and the others formed from broken stems.

Interpretation

Due to the high proportion of complete alcohol bottles, most of which fall into three types (Bordeaux wine, dip-moulded Case Gin and closed moulded Case Gin) it seems likely that the majority of the F700 artefact assemblage relates to commercial activity. A major contender for this deposit is Andrew Tod who occupied TS187 from 1878 to 1888 and ran a wine shop on the neighbouring section. During this period the older bottle styles would have been in the process of being phased out so it seems probable that this well was seen as a convenient place to dispose of a large number of old bottles from the Tod Business. Some of these other artefacts may also relate to Tod's business but many of them are more personal in nature and more likely relate to the domestic activity. There are some artefacts that post-date Tod's occupation of the site, for example the ceramic vessels with maker's marks that definitively date to after 1891 and the crank telephone which only began to appear in Whanganui homes in the late 1880s, so the value of this deposit as a snapshot of a particular household is limited, but it can still tell us something about the type of activity happening in this part of the site in the late nineteenth century.

The ceramic vessels and most of the glass vessels can be treated as two separate deposits: the glass to a dumping event related to Andrew Tod's business, and the ceramics to a later event, possibly a clear out after the death of Mary Malcom May, who had occupied the section since the 1890s with her husband, David May, in 1907.

F700 Deposit Summary

	Ceramics	Glass	Other
Manufacture	1852-present	1850s-1900s	>1885
Peak Popularity	1891-1893	1878-1880s	>1885
Proposed Deposit Date Range:	1880s (Tod) and 1890s-1900s (May)		

TS189

Two deposits from three features on TS189 were associated with households or businesses other than the Williamson family.

F121/125

Feature 121 was a rectangular rubbish pit located towards the southern corner of TS189. It was partially covered by a later concrete footing and so was not able to be completely excavated. Feature 125 was a small square feature between F121 and the natural, described in the excavation report as a “fill deposit,” consisting of dark brown charcoal mottled fill mixed with cultural material. The two assemblages contained much of the same material and were contemporary so they have been analysed as one. It is possible that F125 was a particular fill episode or even just a patch of different matrix to the rest of the deposit.

F121/125 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	129	52	1536.44g
Glass Vessels	54	33	4330.79g
Metal	585	477	3974.61g
Other	54	32	670.40g
Total	822	599	10512.24g

Another 1125.18g of unidentifiable metal was recovered from this deposit.

Ceramic Vessels

Three ink bottles were recovered intact from this deposit but the rest of the ceramic vessels were found in fragmentary form. No maker's marks were found on any vessels.

Ware

	Ware										
	Whiteware	Yellowware	refined red earthenware	Terracotta	Dyed-body ware	Bone China	Euro porc-h	Japanese porc-h	Salt-glazed st-w	Slip-glazed st-w	Total
Plates	12	-	-	-	1	2	1	-	-	-	16
Bowls	1	-	-	-	-	-	-	-	-	-	1
Ashettes	1	-	-	-	-	-	-	-	-	-	1
Tureens	1	-	-	-	-	-	-	-	-	-	1
Mugs	1	-	-	-	-	-	-	-	-	-	1
Eggcups	1	-	-	-	-	1	-	-	-	-	2
Cups	4	-	-	-	-	2	2	-	-	-	8
Saucers	5	-	-	-	-	4	-	-	-	-	9
Teapot	-	-	1	-	-	-	-	-	-	-	1
Bottles	-	-	-	-	-	-	-	-	2	1	3
Jars	2	-	-	-	-	-	-	-	-	-	2
Roasting Dish	-	1	-	-	-	-	-	-	-	-	1
Decorative	-	-	-	1	-	-	1	2	-	-	4
Unidentified	6	-	-	-	-	-	1	-	-	-	2
Total	34	1	1	1	1	9	5	2	2	1	52

Decoration

	Decoration									
	UGTP	Banded	Painted	Sponged	Gilt	Enamel	Moulded	Edge-moulded	None	Total
Plates	9	-	2	-	-	2	-	1	2	16
Bowls	1	-	-	-	-	-	-	-	-	1
Ashettes	1	-	-	-	-	-	-	-	-	1
Tureens	1	-	-	-	-	-	-	-	-	1
Mugs	1	-	-	-	-	-	-	-	-	1
Eggcups	-	-	-	-	-	-	-	-	2	2
Cups	2	-	1	-	1	2	1	-	1	8
Saucers	-	4	-	1	3	-	-	-	1	9
Teapot	-	-	-	-	-	-	-	-	1	1
Bottles	1	-	-	-	-	-	-	-	2	3
Jars	1	-	-	-	-	-	-	-	1	2
Roasting Dish	-	-	-	-	-	-	-	-	1	1
Decorative	-	-	1	-	-	2	-	-	1	4
Unidentified	-	-	1	1	-	-	-	-	-	2
Total	17	4	5	2	4	6	1	1	12	52

Patterns and Colours

Blue was the most common decoration colour for the F121/125 ceramic assemblage. Four known UGTP (Willow on three vessels and Asiatic Pheasants, Rhine and Rouen on one each) and four unnamed UGTP patterns (Brown 1, Brown 3, Grey 5 and Red 4, all on single vessels) were identified, as well as two non-UGTP patterns (Tea Leaf and Sponge 1, each on one vessel).

	Decoration Colour										Total
	Black	Blue	Brown	Green	Grey	Purple	Red	Gold	Pink/gold	P-chrome	
Plate	1	2	2	1	2	1	-	-	1	3	13
Ashette	-	1	-	-	-	-	-	-	-	-	1
Tureen	-	-	1	-	-	-	-	-	-	-	1
Mug	-	-	1	-	-	-	-	-	-	-	1
Cup	-	2	-	-	-	-	-	1	1	2	6
Saucer	-	3	-	-	-	1	1	3	-	-	8
Sugar bowl	-	-	-	-	-	-	1	-	-	-	1
Jar	-	-	-	-	-	-	-	-	-	1	1
Unidentified	1	5	-	-	-	-	-	-	-	1	7
Total	2	13	4	1	2	2	2	4	2	7	39

Dating

Fifteen of the F121/125 ceramic vessels were able to be dated, including ten UGTP, two banded, two sponged and one gilt vessel, providing an average manufacture period of 1842-present and a combined peak popularity period of 1852-1880. The banded ware provides an approximate *tpq* of 1860.

Glass Vessels

One complete jar was found in this feature but the rest of the glass vessels were represented by fragments.

Manufacture methods

	Manufacture method					Total
	Dip mould	Cup mould	Turn mould	Pressed	Unidentified	
Bordeaux	1	-	-	-	-	1
Spirit	-	-	-	-	4	4
Ring-seal	-	-	8	-	-	8
Schnapps	-	-	-	-	1	1
Club sauce	-	1	-	-	-	1
Salad oil	-	1	-	-	-	1
Vinegar	-	1	-	-	-	1
Jar	-	1	-	-	-	1
Rectangular panelled	-	-	-	-	1	1
Cylindrical pill	1	-	-	-	-	1
Patent medicine	-	2	-	-	-	2
Tumbler	-	-	-	4	-	4
Stemmed glass	-	-	-	-	1	1
Bon-bon dish	-	-	-	-	1	1
Unidentified	-	1	-	-	4	5
Total	2	7	8	4	12	33

Maker's Marks

The only maker's mark identified in the F121/125 glass assemblage was the ubiquitous "A C B Co" embossing on the base of a Lea & Perrins club sauce bottle, which belongs to the Aire & Calder Bottle Company and was used on these bottles from the 1850s through to the twentieth century.

Products/Brands

Two specific products were able to be identified through body embossing: Lea & Perrins Worcestershire Sauce and Mrs Winslow's Soothing Syrup. The latter was a popular opiate based infant pain reliever produced by Curtis & Perkins, a New York firm, from the late 1840s until around 1930, although Soothing Syrup is first advertised in New Zealand in the 1870s.

Dating

The F121/125 glass assemblage is typical of the late 1870s or 1880s, and has a rough *tpq* of 1870 taken from the Mrs Winslow's Soothing Syrup bottle.

Metal

Fasteners accounted for most of the F121 and F125 metal assemblage. This included 25 complete iron wrought, 71 cut, 71 wire and 268 nails of unknown manufacture, one brad, a roofing nail and one screw, as well as a single copper alloy tack, a copper wire nail and a copper alloy screw. Two of the wrought nine of the wire and 64 of the unidentified nails were bent or clenched but the rest appear to not have been used.

The other metal artefacts recovered from this feature included:

- Four buttons (one pressed steel two-piece two-hole, one copper alloy one-piece four-hole sew through, one copper alloy dome and one copper alloy two-piece one-hole)
- A copper alloy clothing pin
- The iron heel plate of a child's shoe
- The copper alloy ferule of a paintbrush
- A small brass hook
- A nickel silver teaspoon with flattened handle
- A piece of twisted copper alloy wire (possibly early telephone wire)
- A complete pony-sized horseshoe
- A length of copper alloy wire shaped into a snare
- An offcut of roofing zinc
- The casing and caps from two bullets

Other Artefacts

A small assemblage of miscellaneous artefacts was also recovered during the excavation of this feature:

- Three fragments of china dolls and one marble
- Fragments from three well-used compression manufactured slate pencils, two with re-shaped points
- Fragments of a writing slate with bevelled edges and incised lines on one side
- The central portion of a wooden ruler with copper alloy hinge
- A rectangular sandstone tool sharpener

- Fragments from two colourless glass kerosene lampshades, one plain and the other with decorative pendants and etched floral decoration
- A colourless glass tube, either a medical vial or the outer case of a lightbulb
- A large (11.17mm diameter) dark green glass bead
- Part of a wooden handle
- Four fabric and copper alloy buttons with flexible canvas shanks
- A one-piece four-hole sew through milk glass button
- The base of a clay tobacco pipe bowl with “BURNS CUTTY/ JENAYL(??)” incised on the stem
- Two other clay tobacco pipe stems with “DAVIDSON/...IS CUTTY” and “COR.../...ORK” incised
- Part of a leather equestrian harness with copper alloy fasteners
- Fragment of 2mm thick flat glass with frosted grid design
- A fragment of thick (6.34mm) flat glass with frosted lettering (...AS...)
- Portion of a lead-glazed stoneware infrastructure pipe
- Two refined red-earthenware rectangular wall/fireplace tiles with black slip glaze
- A square white unglazed porcelain wall tile (36mm X 36mm)
- A short length of white plastic pipe with a red stripe (probably introduced during the excavation process)

Interpretation

This feature is typical of a generic rubbish pit. It was located towards the back of the section, was roughly rectangular in plan and contained a mix of domestic and possibly commercial material. The variability of the matrix suggests that this was not a single dump event but instead a pit which stayed open for a period of time and was repeatedly used to dispose of unwanted material. The chronological information gathered from the material culture suggest the last of the deposit was discarded around the late 1870s, during which this part of TS190 was occupied by William D Shaw and his family. Several aspects of the F121/125 assemblage fit well with this association. Shaw ran an ironmongery and seed warehouse from this section (previously in partnership with Henry Williamson) which sold a wide variety of agricultural tools, building and decorating supplies and other general household and garden tools and items, including a wide variety of metal fasteners. The F121/125 metal assemblage was dominated by mostly unused nails, screws, tacks and brads in a noticeably greater variety and number than any other feature on the site and the miscellaneous artefacts included tool sharpeners, parts of paint brushes and other household fittings, many of which are

listed for sale in Shaw's newspaper advertisements (e.g. *Wanganui Chronicle* 9/1/1877, page 4). Some of the artefacts relate to the presence of children (dolls, a marble, the heel of a child's shoe and a writing slate with etched lines to help with handwriting practice), of which Shaw had three (two were born at the site). His eldest, Emma Agnes Shaw, was one when they moved to TS189 in 1875 and so would have been of the age to start learning to write using the slate by the time the family left the site in the 1880s. A final tantalising clue comes in the form of the pony sized horseshoe found in this feature, as William Shaw is recorded as having a small pony mare named Sissy who he entered in local A & P shows (*Wanganui Herald* 2/11/1876, page 2) and presumably taught his children to ride on.

The F121/125 assemblage contained five small fragments of burnt material (four ceramic sherds and one glass) which, along with the charcoal flecked matrix that supposedly distinguished F125, suggests a small part of this deposit was a clear out event relating to a fireplace.

F121/125 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1842-present	1850s-1920s	>1870
Peak Popularity	1860-1880	1870-1900s	1870-1890s
Proposed Deposit Date Range:	1870s-1880s		

F313 (Part)

Feature 313 was a well located at the southern boundary of Town Section 189. It lay adjacent to Feature 305 and was cut by a later posthole (Feature 135) and concrete building footing.

The excavation of 313 was undertaken in six spits. Spit 1 corresponds with a layer of mottled top soil that lay above the clay cap and so dates to after the bulk of the material was deposited. Spits 2-5 were dug through uniform dark brown sand that contained the main rubbish deposit. Spit 6 is a layer of iron sand that presumably sat at the bottom of the well when it was in use and contained a lower concentration of artefacts.

For this analysis Spit 1 has been treated as a separate assemblage but the lower five spits are grouped together. Spit 1 was mixed and included modern material so was not used for this research. Spit 6 is made up of a different matrix to Spits 2 through 5 but there are considerable numbers of matches and joins between the artefacts contained in both. It is likely that the iron sand of which the lowest spit consists was present during the well's use. The domestic material was attributed to the Williamson household but this feature also contained a large assemblage of commercial ceramic waste which is described here.

F313 (McLean) Deposit Summary

Material	NISP	MNI/V	Weight
Ceramic	740	159	16789.14g
Glass	0	0	0g
Metal	0	0	0g
Other	0	0	0g
Total	1276	410	16789.14g

Ceramics

The ceramic vessels and sherd recovered from F313 (spits 2-6) which did not show signs of usewear were included in the McLean commercial deposit. This is a conservative classification and it is likely that some of these vessels did belong to the Williamson household but are vessel or ware types which do not typically show clear signs of use.

	Ware								Total
	Whiteware	Yellowware	Buff-bodied e/w	Bone China	European porcelain	Slip-glazed st-w	Bristol-glazed st-w	Salt-glazed st-w	
Plate	57	-	-	1	-	-	-	-	58
Table bowl	7	-	-	1	-	-	-	-	8
Ashette	2	-	-	-	-	-	-	-	2
Tureen	3	-	-	-	-	-	-	-	3
Jug	7	1	-	3	-	-	-	-	11
Cup	15	-	-	4	1	-	-	-	20
Saucer	21	-	-	7	2	-	-	-	29
Teapot	-	-	2	-	-	-	-	-	2
Eggcup	1	-	-	1	1	-	-	-	3
Bottle	2	-	-	-	-	1	9	13	25
Jar	3	-	-	-	-	-	-	-	3
Mixing bowl	1	1	-	-	-	-	-	-	2
Roasting Dish	-	1	-	-	-	-	-	-	1
Ewer	1	-	-	-	-	-	-	-	1
Basin	1	-	-	-	-	-	-	-	1
Chamberpot	3	-	-	-	-	-	-	-	3
Toothbrush Holder	1	-	-	-	-	-	-	-	1
Cosmetic Jar	2	-	-	-	-	-	-	-	2
Unidentified	8	-	-	-	1	-	-	-	9
Total	133	3	2	17	5	1	9	1	185

	Decoration													Total
	UGTP	Banded	Sponged	Enamelled	Moulded	Sprigged	Slip	Gilt	Bristol-glazed	Salt-glazed	Edge-moulded	None	Total	
Plates	52	1	-	-	-	-	-	1	-	-	1	3	58	
Bowls	7	-	-	-	1	-	-	1	-	-	-	-	9	
Ashettes	2	-	-	-	-	-	-	-	-	-	-	-	2	
Tureens	2	-	-	-	-	-	-	1	-	-	-	-	3	
Jugs	5	-	-	-	1	-	1	2	-	-	-	2	11	
Egg cups	-	-	-	-	-	-	-	3	-	-	-	-	3	
Cups	11	1	1	1	1	2	-	2	-	-	-	1	20	
Saucers	16	1	2	1	1	1	-	3	-	-	-	4	29	
Teapots	-	-	-	-	2	-	-	-	-	-	-	-	2	
Bottles	2	-	-	-	-	-	-	-	9	13	-	1	25	
Roasting dishes	-	-	-	-	-	-	-	-	-	-	-	1	1	
Bowls	-	-	-	-	-	-	-	-	-	-	-	2	2	
Jars	-	-	-	-	-	-	-	-	-	-	-	3	3	
Basins	1	-	-	-	-	-	-	-	-	-	-	-	1	
Ewers	1	-	-	-	-	-	-	-	-	-	-	-	1	
Chamberpots	2	-	-	-	-	-	-	-	-	-	-	1	3	
Cosmetic jars	1	-	-	-	-	-	-	-	-	-	-	1	2	
Toothbrush holders	1	-	-	-	-	-	-	-	-	-	-	-	1	
Decorative	-	-	-	-	1	-	-	-	-	-	-	-	1	
Unidentified	6	-	-	-	2	-	-	-	-	-	-	-	8	
Total	109	3	3	2	9	3	1	13	9	13	1	19	185	

Ceramic Motifs and Patterns

Fifteen named UGTP patterns were identified amongst the F313 ceramics. Willow was by far the most popular, followed by Ribbon and Rhine. Other patterns present typical of this period include Fibre, Medici and Palestine. While the bulk of the identifiable UGTP patterns date to the pre 1860 period there are examples of slightly later designs present. Asiatic Pheasant was first introduced in 1834 but did not become fashionable until after 1860 when it overtook even blue Willow in popularity. Ribbon, Dulcamara and both versions of Cable are other patterns which appear to have been in favour later in the century. This would suggest that the commercial dump occurred sometime in the late 1860s or early 1870s, when these older styles were beginning to be replaced with the newer designs.

Pattern Name	UGTP Colour(s)	MNV	Vessel forms
Willow	Blue	20	Dinner and side plates, saucers, ashettes, tureens, ?hollow
Rhine	Grey, blue	6	Dinner and side plate, cup, bowl, tureen
Ribbon	Purple	7	Dinner plates, cup, saucers, ?hollow
Fibre	Blue, grey	3	Cup, saucers
Cable	Blue, purple	6	Plate, saucers
Cable1	Black, purple	5	Plates, saucers, ?flat
Dulcamara	Green	2	Cup and saucer
Marble	Grey	2	Side plate, ewer
Medici	Blue, black	2	Cup, jug
Apple Blossom	Blue	1	Chamberpot
Asiatic Pheasant	Blue	2	Side plates
Barberini	Red	1	?
Bagdad	Blue	1	Plate
Palestine	Blue	1	Plate

The unnamed UGTP patterns tell a similar story. Most fall into either the floral or simple categories, both of which were popular in various styles throughout much of the nineteenth century. The floral patterns are Blue 1, 5, 6, 7, 8, 14, 15 and 16, Black 3, 6 and 15, Flow Blue 1, 2 and 3, Green 2 and 3 and Purple 6, 7, 10 and 12. Simple designs include Blue 2 and 3, Black 2, 5 and 16, Green 1 and Purple 8, 11 and 13. Romantic (Black 4), classical (Purple 14) and oriental (Black 14) themed designs were seen as unfashionable in the second half of the century so it makes sense that they are being discarded at the time of deposition.

Two Bone China vessels bear the ubiquitous gilt Tea Leaf design: a bowl and a jug. They hint at the presence of a tea set, yet there are no Tea Leaf cups or saucers within this assemblage. It could be that the set was fairly new when this clear-out event occurred,

some unfortunate circumstances caused the jug and sugar/slop bowl to break but the cups remained in use. This fits with the estimated date of the F313 deposit, as at this time the Tea Leaf motif had just begun to be popular. Alternatively, the two cups and saucers with plain gilt bands could have been used as part of this set, perhaps just the serving vessels bore the Tea Leaf mark.

Interpretation

Most of the ceramic vessel assemblage deposited in F313 appears to be commercial in nature due to its size and the range of vessels which it includes. The most likely candidate for the dumping of this shop stock is Robert McLean who operated a general store on this section during the first half of the 1870s. His occupation of part of this section overlaps with the Williamsons so it is probable that both parts of the deposit are roughly contemporaneous, especially given there are records of McLean going out of business in 1877 and having to dispose of vast amounts of stock (which included crockery) by auctioning it off (*Wanganui Chronicle* 24/10/1877, page 3). The stock which was passed in during this auction presumably makes up the majority of the F313 material and would explain the miss-matched and slightly old-fashioned nature of the assemblage.

F313 (McLean) Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1832-present	n/a	n/a
Peak Popularity	1844-1874	n/a	n/a
Proposed Deposit Date Range:		~1877	

TS190

Nine of the ten analysed features from TS190 were attributed to households/businesses other than the three used in the main portion of this research.

F620

F620 was located towards the rear of TS190 and was 1050mm deep. Fragments of hoop iron were recovered, suggesting it may have been a barrel well. The excavation notes for F620 state that the fill seemed “consistent with a rapid backfill” event.

F620 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	208	64	3096.84g
Glass Vessels	16	9	690.35g
Metal	12	6	1101.27g
Other	8	4	50.40g
Total	244	83	4938.86g

Ceramics

The F620 assemblage contains fragments from a relatively small number of vessels (64) but does include a fairly wide range of ware types.

Ware types

	Ware								Total
	Whiteware	Yellowware	Dyed-body ware	Bone China	Euro porc-h	Chinese porc-h	Salt-glazed st-w	Bristol-glazed st-w	
Plate	22	-	-	-	-	-	-	-	22
Ashette	1	-	-	-	-	-	-	-	1
Tureen	1	-	-	-	-	-	-	-	1
Jug	1	-	-	-	-	-	-	-	1
Cup	10	-	-	1	-	-	-	-	11
Saucer	11	-	-	2	-	-	-	-	13
Mixing Bowl	1	-	-	-	-	-	-	-	1
Roasting Dish	-	1	-	-	-	-	-	-	1
Jar	-	-	-	-	-	1	-	-	1
Bottle	-	-	-	-	-	-	1	2	3
Baby Feeder	1	-	-	-	-	-	-	-	1
Decorative	-	-	-	-	1	-	-	-	1
?	4	-	1	1	1	-	-	-	7
Total	52	1	1	4	2	1	1	2	64

Decoration Styles

	Decoration								Total
	UGTP	Banded	Painted	Enamelled	Gilt	Sprigged	Moulded	None	
Plate	19	2	-	1	-	-	-	-	22
Ashette	-	1	-	-	-	-	-	-	1
Tureen	1	-	-	-	-	-	-	-	1
Jug	-	1	-	-	-	-	-	-	1
Cup	2	3	-	-	2	1	-	3	11
Saucer	2	4	-	-	5	1	-	1	13
Mixing Bowl	-	-	-	-	-	-	-	1	1
Roasting Dish	-	-	-	-	-	-	-	1	1
Jar	-	-	1	-	-	-	-	-	1
Bottle	-	-	-	-	-	-	-	3	3
Baby Feeder	1	-	-	-	-	-	-	-	1
Decorative	-	-	-	-	-	-	1	-	1
?	3	1	-	-	1	-	2	-	7
Total	28	12	1	1	8	2	3	9	64

Maker's Marks

Vessel(s)	Mark	Manufacturer	Date Range
Asiatic Pheasants side plate	"ASIATIC PHEASANTS/ G L B CO L..."	G. L. Bentley & Co, Longton.	1898-1912
Baby feeder	"S. MAW SON & THOMPSON/ LONDON/ 7 TO 12 ALDERSCATE ST"	S. Maw, Son & Thompson, London	1870- ca 1900

Dating

Thirty-seven ceramic vessels were able to provide enough ware and decoration variables to date. This includes the two which were able to be dated by the presence of maker's marks. These vessels provided an average manufacture range of 1852-1902 and a peak popularity period of 1861-1895. The Asiatic Pheasant plate with the Bentley & Co mark dates provides a *tpq* of 1898.

Glass

Two-thirds of the glass vessels from this feature were able to be identified to manufacture methods. The tumbler was pressed but this does not offer any chronological information as the process was used for a long period. Three of the bottles (table) were produced in a dip mould and another three in two-piece moulds with cup bottoms. Dip moulds continued to be used until the 1870s and cup-bottom moulds were first used ca. 1850, going on to become the dominant mould type by the late 1880s. This assemblage is very small, however, so any date calculations must be used with caution.

	Manufacture method				Total
	Dip mould	Cup mould	Pressed	Unidentified	
Dark olive round c-section	2	-	-	-	2
Spirit	-	1	-	-	1
Bitters	1	-	-	-	1
Rectangular bevelled	-	1	-	-	1
Cylindrical pill	-	1	-	-	1
Perfume	-	-	-	1	1
Tumbler	-	-	1	-	1
Unidentified	-	-	-	1	1
Total	3	3	1	2	9

Products

One rectangular, bevelled pharmaceutical bottle has partial embossing on the body (...SON & CO/...STS/...NUI") and "K/2200/2200" on the base which are both associated with Hugh B Williamson & Co Chemists who were in business from 1876 (Luff 2008: 42). A cylindrical pill and perfume bottle also have partial body embossing but neither are complete enough to positively identify them to a particular brand. The perfume bottle has "...PARIS" on the side and most likely contained a Piesse & Lubin product. Unfortunately, this is one of the oldest in existence and were exporting to the colonies by the 1830s so this do not help with dating the assemblage.

Metal

A small collection of metal artefacts was retrieved from F620 well, representing six individual items. Three of these were iron nails which were too accreted to ascertain their method of manufacture, however they do appear to have been used. The other metal material culture items were equally as uninformative: several fragments of

barrel hoop, part of an 18mm diameter bullet cartridge and part of the lid of an unidentified iron container.

Other Artefacts

Fragments of four miscellaneous artefacts were also recovered:

- Part of a white ceramic decoy chicken egg
- Fragments of a glass lantern shade with etched floral decoration
- A black plastic disc, 24.5mm in diameter, with “B” and a feather above “NO WEIGHT” on one side
- The bowl and stem of a clay tobacco pipe (used) with “BURNS...” incised on the stem

Interpretation

The F620 assemblage is interesting in that a significant proportion of it shows evidence of having been burnt. This is especially evident amongst the ceramics, with 18% by NISP and 20% by MNV displaying signs of burning. A perfume bottle is also slightly melted. The small size of this assemblage combined with the high number of burnt artefacts would suggest that most of the artefacts can be related to the clean-up that would have happened after the fire. No reports of fires in this locality were able to be found in the local newspapers but the property’s close proximity to the St Hill Street fire station (just across the road) may have meant the blaze was dealt with so quickly that it was not news-worthy. This is supported by the small amount of material discarded and the fact the fire damaged artefacts are restricted to very similar kitchen items (mostly cups and saucers, with one soup plate) and a perfume bottle. It is likely that the fire would have begun in the chimney so if caught quickly would have only damaged areas around the chimney itself, in this case part of the kitchen and perhaps a bedroom. Given the suggested date range for the artefacts recovered and the location of F620 Thomas Battle and family are most likely to be responsible for this deposit, although the assemblage is too small and fragmentary to say this with much confidence.

F620 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1852-present	1850s-1910s	n/a
Peak Popularity	1861-1895 (<i>tpq</i> 1898)	1876-1880s	n/a
Proposed Deposit Date Range:		Early 1900s	

F656

Feature 656 was located along the back boundary of TS190, in line with four other features of similar shape and size. It was excavated in three spits, each of about

250mm, which appear to roughly correspond with different layers of fill. The excavation notes describe Spits 1 and 3 as “mid brown grey organic soil” while the middle spit (2) was “relatively clean grey sand.” Most of the artefact bags are labelled by spit except for one of the largest bags of ceramic artefacts. This is probably not an issue however as most of the material appears to be consistent across the labelled and un-labelled bags, including some vessels which have fragments in all bags, so the whole of the assemblage can be treated as a single deposit. This is further supported by the high level of preservation of organic materials throughout the deposit.

F656 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	350	96	14281.22g
Glass Vessels	57	28	12919.96g
Metal	130	108	4316.00g
Other	11	6	250.39g
Total	548	238	31767.57g

Another 5694.08g of unidentifiable metal, several pieces of fabric and faunal remains were also found in this feature.

Ceramics

Twelve of the F656 ceramic vessels were recovered complete, although only four of those were intact.

Ware types

	Ware										Total
	Whiteware	Creamware	Yellowware	Buff-bodied ew-r	Coarse red ew	White Granite	Bone China	Salt-glazed st-w	Slip-glazed st-w	Bristol-glazed st-w	
Plate	27	1	-	-	-	-	2	-	-	-	30
Table bowl	4	-	-	-	-	-	3	-	-	-	7
Tureen	3	-	-	-	-	-	-	-	-	-	3
Jug	1	-	1	1	-	-	-	-	-	-	3
Cup	12	-	-	-	-	-	1	-	-	-	13
Saucer	19	-	-	-	-	-	3	-	-	-	22
Bottle	-	-	-	-	-	-	-	2	3	1	6
Jar	3	-	-	-	-	-	-	-	-	-	3
Roasting Dish	-	-	1	-	-	-	-	-	-	-	1
Milk Pan	-	-	-	-	1	-	-	-	-	-	1
Cosmetic jar	1	-	-	-	-	-	-	-	-	-	1
Unidentified	4	-	-	-	-	1	1	-	-	-	6
Total	74	1	2	1	1	1	10	2	3	1	96

Decoration Styles

	Decoration							Total
	UGTP	Banded	Sponged	Gilt	Enamel	Moulded	None	
Plate	26	2	-	-	-	1	1	30
Table bowl	3	-	-	-	2	-	2	7
Tureen	2	1	-	-	-	-	-	3
Jug	1	-	-	-	-	-	2	3
Cup	11	1	-	1	-	-	-	13
Saucer	17	3	1	1	-	-	-	22
Bottle	-	-	-	-	-	-	6	6
Jar	1	-	-	-	-	-	2	3
Roasting Dish	-	-	-	-	-	-	1	1
Milk Pan	-	-	-	-	-	-	1	1
Cosmetic jar	1	-	-	-	-	-	-	1
Unidentified	4	-	-	-	-	-	2	6
Total	66	7	1	2	2	1	17	96

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"GERANEUM/ WEDGWOOD & CO/ NO 16" (print)	Wedgwood & Co (Staffordshire)	Purple UGTP whiteware saucer and table bowl	1860-1890	Kowalsky & Kowalsky 1999: 364
"F & CO" shield with seahorses (print)	Thomas Fell & Co (Newcastle upon Tyne)	Willow whiteware side plate	c.1830-1890	Godden 1991: 245
"Kulat/ P B & CO" (print), "PINDER BOURNE.../ BURSLEM" (stamp)	Pinder, Bourne & Co (Staffordshire)	Two Kulat whiteware dinner plates	1862-1882	Godden 1991: 495

Mark	Manufacturer	Vessel(s)	Date range	Reference
"MINTON," "D," two symbols (stamp)	Minton (Staffordshire)	Undecorated creamware side plate	December 1862 (from year ciphers)	Kowalsky & Kowalsky 1999: 289
"Medici/ H & C" (print)	Hope & Carter (Staffordshire)	Medici whiteware dinner plate	c.1862-1880	Godden 1991: 334
"CORSINA/ J T" (print)	John Tams (Staffordshire)	Corsina whiteware dinner plate	1875-1890	Godden 1991: 609

Dating

Forty-four of the F656 ceramic vessels were able to be dated, including 36 UGTP, seven banded and one spongeware vessel. These vessels provided an average manufacture range of 1840-present and peak popularity period of 1849-1873. A *tpq* of 1875 comes from the Corsina plate.

Glass Vessels

Eleven of the F656 glass vessels were recovered from the feature intact, including all but two of those manufactured using methods typical of the last quarter of the nineteenth century (turn and cup-bottom moulds).

	Mould Type					Total
	Dip	Cup-bottom	Turn	Pressed	Unknown	
Dark Olive Round C-section	8	-	-	-	-	8
Bordeaux	3	-	-	-	-	3
Case Gin	3	-	-	-	-	3
Ring-seal	-	-	2	-	-	2
Club Sauce	-	1	-	-	-	1
Salad Oil	-	1	-	-	-	1
Wide-mouthed	1	1	-	-	-	2
Cylindrical Pill	1	-	-	-	-	1
Perfume	1	-	-	-	-	1
Tumbler	-	-	-	3	1	4
Stemmed glass	-	-	-	-	1	1
Unidentified	-	1	-	-	-	1
Total	17	4	2	3	2	28

Maker's marks

Two identifiable maker's marks were found on vessels from F656. The base of a small squat black beer bottle "RD COOPER & CO/PORTOBELLO" was stamped, a mark which was used from 1866- ca. 1885, and a Lea & Perrins club sauce bottle is marked with "A C B Co" which was used by the Aire & Calder glassworks from ca. 1860-1920.

Products

The only specific product identified amongst the F656 glass assemblage was a single bottle of Lea & Perrins Worcestershire sauce.

Dating

The F656 glass bottle assemblage is typical of an 1870s-1880s deposit due to the range of manufacture methods used. A *tpq* of 1875 can be taken from the Cooper & Co mark.

Metal

The F656 metal assemblage contained:

- Four wrought iron nails, all bent
- Six cut iron nails, half of which were bent
- Seventeen wire iron nails, ten of which were bent
- Fifty-two iron nails of unknown manufacture
- One wrought copper alloy nail
- The brass faceplate from a door lock
- Nine wax vesta matchboxes, eight of which were complete
- Three tobacco tins, two of which were complete
- Part of a tin can
- Fragments of an unidentified rectangular tin container, similar to a sardine tin
- The head of a metal curry comb
- Two spurs, one iron and the other brass
- Two utilitarian rectangular harness buckles, one iron and the other brass
- The copper alloy frame and internal cog from a pocket watch
- A set of iron shears
- A pair of scissors, 165mm long
- The blade of a bread knife

- The blade of an unidentified cutting tool
- A piece of strip iron
- Fragments of a steel strip

Other Artefacts

The miscellaneous artefacts recovered from F656 included:

- A ceramic insulator or industrial fitting
- Part of a whiteware wall or fireplace tile with blue UGTP decoration
- Three fragments of aqua green plate window glass, 1.67mm thick
- The top of a glass oil lantern
- Fragments of a leather farrier’s apron
- A black plastic plumbing pipe attachment, probably introduced during the excavation process

Interpretation

Despite the presence of three distinct layers in F620, the artefact assemblage all seems to date within a short time period. The middle layer of clean grey sand could have been laid down to cover rubbish in the base of the pit and to alleviate any unpleasant smells coming from the waste. Several bags of faunal remains were also recovered from the pit, suggesting this was a multi-purpose rubbish deposit for both food and household waste. If the lower layer of rubbish was covered over quickly as the evidence suggests, it is likely the same fate happened to the upper layer as well, which also contains a high proportion of organic remains. It is also possible that F656 was a latrine like the other features along TS190’s rear boundary and the first layer of material was thrown in once the latrine had stopped being used and the clean sand was added to cover the potentially unpleasant smells that would have been associated with a toilet.

The large and varied assemblage recovered from this feature suggests that it was part of a clean out event, perhaps coinciding with a change in ownership of this property. Sometime in the early 1880s (there is a gap in the records) Andrew Tod moved into this part of the site, taking ownership from James Brown, so this may relate to that event.

F656 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1840-present	1850s-1900s	n/a
Peak Popularity	1849-1873	1866-1880s	n/a
Proposed Deposit Date Range:	Early 1880s		

F657

Feature 657 was a pit feature with a round top that tapered to a rectangular base. The lower portion contained very little cultural material, suggesting that this was originally a long drop toilet that was filled in with household rubbish when it stopped being used. Its position at the back of TS190 and spatial association with at least two other probable latrines (F671 and F672), all of which line up long the section back boundary, support this hypothesis.

F657 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	53	30	2353.02g
Glass Vessels	67	28	8367.38g
Metal	19	10	4742.02g
Other	9	6	52.28g
Total	148	74	15514.70g

Another 2133.31g of unidentifiable metal was collected from F657.

Ceramic Vessels

Ware types

	Ware							Total
	Whiteware	Yellowware	Creamware	Bone China	Bristol-glazed st-w	Slip-glazed st-w	Salt-glazed st-w	
Plate	7	-	-	-	-	-	-	7
Ashette	1	-	-	-	-	-	-	1
Tureen	2	-	-	-	-	-	-	2
Jug	-	-	-	1	-	-	-	1
Cup	5	-	-	1	-	-	-	6
Saucer	3	-	-	-	-	-	-	3
Mixing bowl	-	2	-	-	-	-	-	2
Roasting dish	-	1	-	-	-	-	-	1
Jar	-	-	1	-	-	-	-	1
Bottle	-	-	-	-	1	1	2	4
Ewer	1	-	-	-	-	-	-	1
?	1	-	-	-	-	-	-	1
Total	20	3	1	2	1	1	2	30

Decoration styles

	Decoration					
	UGTP	Banded	Gilt	Moulded	None	Total
Plate	4	1	-	1	1	7
Ashette	-	1	-	-	-	1
Tureen	1	1	-	-	-	2
Jug	-	-	1	-	-	1
Cup	2	2	2	-	-	6
Saucer	1	1	-	-	1	3
Mixing bowl	-	-	-	-	2	2
Roasting dish	-	-	-	-	1	1
Jar	-	-	-	-	1	1
Bottle	-	-	-	-	4	4
Ewer	1	-	-	-	-	1
?	1	-	-	-	-	1
Total	10	6	3	1	10	30

Dating

Twelve of the ceramic vessels from this assemblage were able to be dated. This included three six banded, three Asiatic Pheasants, one Medici and one Tea Leaf vessel. The calculated manufacture range is 1847-1896 with a peak popularity period of 1865-1892. No exact *tpq* was able to be determined but an approximate date of 1860 for the banded ware can be used for this.

Glass Vessels

Five glass vessels were complete upon removal from F657 while the rest were represented by either tops or bases. All fifteen finishes recorded were applied and nine of those were tooled.

Manufacture Method

	Manufacture method					Total
	Dip mould	Cup bottom mould	Post bottom mould	Turn mould	Pressed	
Dark Olive Round C-section	2	-	-	-	-	2
Bordeaux	2	-	-	-	-	2
Case gin	1	-	-	-	-	1
Ring-seal	1	-	-	6	-	7
Codd	-	-	4	-	-	4
Square-sectioned	-	1	-	-	-	1
Club sauce	-	1	-	-	-	1
Ketchup	-	1	-	-	-	1
Vinegar	-	1	-	-	-	1
Castor Oil	-	1	-	-	-	1
Perfume	-	1	-	-	-	1
Rectangular bevelled	-	3	-	-	-	3
Oval sectioned	-	1	-	-	-	1
Bon-bon dish	-	-	-	-	1	1
Unidentified	-	1	-	-	-	1
Total	6	11	4	6	1	28

Maker's Marks

Mark	Vessel(s)	Manufacturer (location)	Date Range	Reference
"E B & CO LTD /4/5609"	Aq green vinegar	Edgar Breffit & Co	1884-ca. 1920	Lindsey 2015
"COOPER & WOOD/ MANUFACTURERS/ PORTOBELLO"	Black beer	Cooper & Wood (Portobello, Scotland)	1859-1866	(Lockhart et al., 1928)

Mark	Vessel(s)	Manufacturer	Date Range	Reference
"K 2123"	Rectangular bevelled	Kinghorn Glass factory (Scotland)	?	Luff 2008: 42
"RELIANCE PATENT/ 4/ BOLE MAKERS/ DAN RYLANDS LD/ BARNESLEY"	Codd	Dan Rylands Ltd (Barnsley)	1888-1897	Potten 2002

Products/ Brands

Several specific products and/or brands were able to be identified in the F657 glass vessel assemblage due to the presence of embossing.

Vessel	Product	Manufacturer (Location)	Date Range
Club sauce	Worcestershire sauce	Mellor & Co	1874-1930s+(Shurtleff and Akiko 2012: 45)
Codd	Aerated water/soda	E. Hodren (Whanganui)	1888-1897 (Luff 2008)
Square-sectioned	Coffee and chicory	Symington & Co (Edinburgh)	"second half of 19 th century"-1975 (Spurtle 2015)
Rectangular bevelled	?	Williamson & Co Chemists (Whanganui)	1876-1903 (Luff 2008)
Rectangular bevelled	Mona Bouquet perfume	Greensill (Isle of Man)	At least 1876-1888 (Papers Past)

Tableware

A pressed glass lidded bon-bon dish was recovered from F657. It is noticeably sun-weathered so has either been sitting outside, on the surface or on a window sill prior to being deposited in this latrine.

Dating

Various types of dating information were able to be identified on the glass vessels, including maker's marks, specific products and manufacture methods. Looking at the maker's marks and brand/products present a *tpq* of 1888 is provided by the Hodren

soda bottle. A range of manufacture methods have been used to produce the F657 bottles but most are characteristic of the last two decades of the nineteenth century (turn, cup and post bottom moulds). With the Hodren bottle included this pushes the probable deposition date to sometime in the 1890s, although interestingly the assemblage also contains bottles (such as the Cooper & Wood black beer) that would have been about thirty years old by this time. These older bottles are represented by fragments so it is possible they were re-deposited here when the later material was thrown in. they do not appear to have been dropped during the use-life of the latrine as they were recovered from above the poop layer and, as previously mentioned, are fragmentary. This also acts as evidence for the deposition of the F657 assemblage as being part of a clean-out event that, due to the unsanitary nature of the base of the deposit, would have been laid down over a short period before being covered up.

Metal

A variety of metal artefacts were also found in this feature:

- An enamelled tin cup with white enamel on the inner surface and black on the outside
- A complete nickel silver teaspoon
- A single framed and pronged brass utilitarian harness buckle, measuring 53mm X 43mm
- The head of an iron shovel
- The cast iron central pillar of a set of scales with forked internal rod
- Fragments of barrel hoop iron
- Lengths of strip iron, one of which is shaped into a spiral at one end
- A fragment of lead sheet
- A round iron drain cover with decorative grill

Other Artefacts

Six miscellaneous artefacts were also recovered from the F657 latrine:

- Fragments of colourless plate window glass, 2.06mm thick
- A one piece, two-hole sew through white porcelain button, diameter 12mm
- A fabric pocket from an item of clothing
- A short turned wooden handle from an unknown tool
- A long, thin bone handle from an unknown item incised with "WILLIAMSON CHEMIST WANGANUI"
- The stem of a clay tobacco pipe with an incised mark which is unable to be deciphered

Dating

The only other artefacts that can provide dating evidence for this deposit are the Williamson Chemist bone handle and the nickel silver teaspoon. Nickel silver was first developed in China during the eighteenth century but became popular in Britain and the colonies after 1840, and Hugh B. Williamson ran a chemist shop in Whanganui from around 1876 until 1903. While these dates are reasonably broad they do at least provide a *tpq* for the deposit (1876).

Interpretation

As mentioned above, the most likely original use for F657 would be a latrine. The assemblage would presumably have been deposited here at the culmination of the latrine's use-life and contains material contemporaneous with this event as well as re-deposited material. Its position along the rear of TS190 and projected deposit date suggest that this latrine was used and filled in by Andrew Tod, especially as he appears to treat multiple features in the immediate vicinity in the same way.

F657 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1847-present	1888-1910s	>1876
Peak Popularity	1860-1896	1880s-1890s	>1876
Proposed Deposit Date Range:		1888-1890s	

F671

Feature 671 is described in the excavation report as having been rectangular (1000mm X 720mm) and 900mm deep with a stepped bottom, although in the plans it has been drawn as round. This pit lay along the back boundary of TS190 in line with several latrines and had no artefacts in the lower layer of fill, similar to those toilet features and suggesting this too could have been a latrine.

F671 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	44	20	834.67g
Glass Vessels	0	0	0g
Metal	8	6	1101.99g
Other	1	1	0.42g
Total	53	27	1937.08g

Another 3919.05g of unidentifiable metal was collected from this feature.

Ceramics

One complete (although broken) vessel was found in this pit: a candlestick holder. It is possible if this were a latrine as the evidence suggests that this candlestick was dropped down the hole during a night time visit, but without detailed context information for this particular artefact this is only speculation.

Ware types

	Ware							Total
	Whiteware	Yellowware	Bone China	Euro porc-h	Salt-glazed st-w	Bristol-glazed st-w	Manganese glazed st-w	
Plate	2	-	-	-	-	-	-	2
Cup	5	-	-	-	-	-	-	5
Saucer	2	-	-	-	-	-	-	2
Sugar Bowl	-	-	1	-	-	-	-	1
Jar	-	-	-	-	-	1	-	1
Bottle	-	-	-	-	1	-	1	2
Candlestick holder	-	-	-	2	-	-	-	2
Unidentified	4	1	-	-	-	-	-	5
Total	13	1	1	2	1	1	1	20

Decoration Styles

	Decoration						Total
	UGTP	Banded	Painted	Gilt	Moulded	None	
Plate	1	-	-	-	-	1	2
Cup	2	1	-	1	-	1	5
Saucer	1	1	-	-	-	-	2
Sugar Bowl	-	-	-	1	-	-	1
Jar	-	-	-	-	-	1	1
Bottle	-	-	-	-	-	2	2
Candlestick holder	-	-	2	-	-	-	2
Unidentified	3	1	-	-	1	-	5
Total	7	3	2	2	1	5	20

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"MADE IN GERMANY," "S," cross (painted)	unknown	Pink painted European porcelain candlestick holder	Post 1891	Godden 1988

Dating

Eight ceramic vessels were able to be dated including the marked candlestick holder, two UGTP, two Tea Leaf and three banded vessels. These vessels had an average manufacture date range of 1854-present, a combined peak popularity period of 1864-1900 and a *tpq* of 1891.

Metal

Fragments of barrel hoop iron, a can, one wire iron nail, a round brass door knob and an unidentified copper alloy artefact comprised the F671 metal assemblage.

Other Artefacts

The only other artefact recovered during the excavation of this feature was an oval blue glass bead, 7.59mm in diameter.

Interpretation

Due to its similarity with F656, 657 and 672 in form this feature has been interpreted as another latrine. Unlike the others, however, F671 only contained a small artefact assemblage suggesting that it was not used as intensively as a rubbish pit post-use. This could mean that it was the last in the series of toilet features or simply that there was less refuse on hand when it was filled in. Regardless, it has been attributed to Andrew Tod and family as it fits both spatially and chronologically with his occupation of the property.

F671 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1854-present	n/a	n/a
Peak Popularity	1891-1900	n/a	n/a
Proposed Deposit Date Range:		1890s	

F672

Feature 672 was a rectangular pit 1000mm deep located along the back boundary of TS190. Its wet, organic rich fill, small assemblage of artefacts and proximity to several other latrine features would suggest that this was originally a toilet.

F672 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	81	19	2791.52g
Glass Vessels	0	0	0g
Metal	32	24	1178.03g
Other	3	3	15.31g
Total	116	46	3984.86g

Another 350.79g of unidentifiable metal was recovered from F672, along with several scraps of fabric and some faunal remains.

Ceramics

Three of the ceramic vessels were complete but had been broken during the deposition process. This included two UGTP whiteware plates and an undecorated chamberpot.

Ware Types

	Ware				Total
	Whiteware	Pearlware	Creamware	European porc-h	
Plate	8	1	1	-	10
Cup	2	-	-	-	2
Saucer	-	-	-	1	1
Mixing bowl	1	-	-	-	1
Jar	1	-	-	-	1
Chamberpot	1	-	-	-	1
Unidentified	3	-	-	-	3
Total	16	1	1	1	19

Decoration styles

	Decoration		
	UGTP	None	Total
Plate	8	2	10
Cup	2	-	2
Saucer	-	1	1
Mixing bowl	-	1	1
Jar	-	1	1
Chamberpot	-	1	1
Unidentified	3	-	3
Total	13	6	19

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"Medici/ H & C" (print)	Hope & Carter (Staffordshire)	Medici whiteware dinner plate	c.1862-1880	Godden 1991: 334

Dating

Eight ceramic vessels (all UGTP) were able to be dated and provided an average manufacture period of 1827-1915 and mean peak popularity period of 1837-1859.

Metal

The identified metal artefacts collected from F672 were four cut, five wire and eleven iron nails of unknown manufacture, fragments of a tobacco tin, a spur, the brass burner of an oil lamp and lengths of strip iron.

Other Artefacts

A single white porcelain one piece, four-hole sew through button (10mm diameter) and two clay tobacco pipe bowls were the only other artefacts recovered from this feature. Both pipe bowls were blackened from use and had incised marks. One had "CORP" over a harp and wreath incised on the bowl itself and the other had "DAVIDSON/ ...CUTTY" on the small piece of stem which was attached.

Interpretation

As mentioned above, F672 has been interpreted as a latrine or similar toilet feature which has been used as a convenient place to discard domestic refuse once it stopped being used. The complete chamberpot is potentially an accidental deposit dating to F672's time as a toilet. This feature seems to be older than the other latrines in this

vicinity, although the sample size is small for attributing a confident date, and as a result is difficult to attribute to a particular household as there was a relatively rapid turnover of owners and occupants for this property prior to the 1870s. there is a chance that this was Mary Byrne's latrine as she owned part of this property until 1874, although it is more likely to have been a tenant in her St Hill Street cottage, not all of whom are recorded.

F672 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1827-present	n/a	n/a
Peak Popularity	1837-1859 (tpq 1862)	n/a	n/a
Proposed Deposit Date Range:	1860s		

F710

Feature 710 was another of the rectangular pit features along the back boundary of TS190. It measured 980mm X 510mm and was only 510mm deep. It was filled with a very loose sandy matrix containing material culture items, faunal remains and charcoal.

F710 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	22	13	269.55g
Glass Vessels	0	0	0g
Metal	59	6	2019.72g
Other	1	1	1294.36g
Total	82	20	3583.63g

Another 6260.64g of unidentifiable metal was recovered from this feature. The excavation records also note that bricks, charcoal, smoking pipes, faunal remains and bottle glass were found in F710 but the glass and tobacco pipes were not found among the material received for analysis.

Ceramics

No complete ceramic vessels or fragments bearing identifiable maker's marks were uncovered during the excavation of F710.

Ware types

	Ware				Total
	Whiteware	Yellowware	Bone China	Euro porc-h	
Plate	3	-	-	-	3
Saucer	3	-	-	1	4
Mixing Bowl	-	1	-	-	1
Jar	1	-	-	-	1
Toothbrush holder	1	-	-	-	1
?	-	1	1	1	3
Total	8	2	1	2	13

Decoration Styles

	Decoration						Total
	UGTP	Banded	Gilt	Enamel	Moulded	None	
Plate	3	-	-	-	-	-	3
Saucer	3	-	1	-	-	-	4
Mixing Bowl	-	-	-	-	1	-	1
Jar	-	-	-	-	-	1	1
Toothbrush holder	-	1	-	-	-	-	1
?	-	-	-	1	-	2	3
Total	6	1	1	1	1	3	13

Dating

Four of the F710 ceramic vessels had enough identifiable attributes to date, including a gilt Tea Leaf saucer, a blue Medici pattern plate, Rhine saucer and a red banded toothbrush holder. These gave an average manufacture date range of 1838-present and a mean peak popularity of 1852-1886. An approximate *tpq* of 1860 can be taken from the banded toothbrush holder.

Metal

The F710 metal assemblage included fragments from at least two bent iron nails of unknown manufacture, a rectangular iron harness buckle frame, a complete matchbox, a piece of hoop iron and a large unidentified container.

Other Artefacts

The only other artefact collected from this pit was a fragment of salt-glazed coarse earthenware infrastructure pipe.

Interpretation

From the field records F710 seems too shallow to have been a latrine like several of the other features which surround it. Instead, it seems to have been a purpose dug domestic rubbish pit. The inclusion of charcoal suggests that some of the material deposited here may have been from a fireplace clean out event. Without the chronological information from the glass and other artefacts supposedly recovered from this feature it is difficult to assign a proposed deposit date, but if a rough maximum time-lag of ten years is applied to the ceramics to allow for them to be used an approximate range can be proposed (1860s-1880s) which, like with F672, overlaps with multiple short term residents of the property.

F710 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1838-present	n/a	n/a
Peak Popularity	1860-1886	n/a	n/a
Proposed Deposit Date Range:	1860s-1880s		

KJ13

KJ13 was a circular pit feature recorded during the 2014 monitoring in the southwest corner of TS190.

KJ13 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	62	7	3491.00g
Glass Vessels	16	13	4787.67g
Metal	1	1	411.53g
Other	2	2	26.26g
Total	81	23	8716.46g

Ceramics

A total of 62 sherds of ceramics were recovered from KJ13, representing an MNV of 7. The assemblage is typical of a domestic assemblage dating to the late-1860s or early 1870s. Two ware types are present, with whiteware accounting for all but one vessel. The two plates are represented by single sherds and the pudding mould by just the lid but at least 50% of each of the other vessels are present.

	Ware		Total
	Whiteware	Bristol-glazed Stoneware	
Plates	2	-	2
Table Bowl	1	-	1
Kitchen Bowls	1	-	1
Pudding Moulds	1	-	1
Bottles	-	1	1
Ewers	1	-	1
Total	6	1	7

UGTP in one of three colours (blue, purple and grey) is the most common decoration style. Four named patterns were able to be identified: Fibre on the lid of a steamed pudding mould, Rhine and Asiatic Pheasant on plates and Bagdad on an ewer. No maker's marks or other backstamps were visible on any of the ceramic vessels.

Glass

The KJ13 glass assemblage consists of 13 vessels, all but two of which are complete.

	Manufacture				Total
	Dip mould	2-piece	Cup mould	Pressed	
Dark Olive Round C-Section	1	-	-	-	1
Bordeaux	1	-	-	-	1
Case Gin	1	-	-	-	1
Torpedo	-	1	-	-	1
Salad Oil	-	-	2	-	2
Club Sauce	-	-	1	-	1
Wide-mouthed	-	-	1	-	1
Oval C-Section	-	-	1	-	1
Stemmed Glass	-	-	-	2	2
?	1	-	1	-	2
Total	4	1	6	2	13

Three bottles have forms which are characteristic of alcohol vessels. A squat Black beer bottle has a bare iron pontil mark on the base and suggests a date of manufacture of before 1870 (Lindsey 2015). A similar date can be assigned to a light green "Bordeaux" style wine bottle and to a dip moulded Case Gin bottle with a four-point base.

The only non-alcoholic beverage related bottle found was an aqua green torpedo bottle with a serified letter "E" etched onto the body. Marks similar to this have been found

elsewhere in Whanganui and are thought to be the work of Robert Evans, a local lemonade manufacturer. Fifteen similarly marked examples were found during excavations at the nearby Wanganui Hotel site (Campbell et al. 2009: 75).

Four food bottles are included in the KJ13 glass assemblage. A Lea and Perrins Worcestershire sauce bottle has “A C B Co” embossed on the base. This is the mark belongs to the Aire and Calder Bottling Company from Yorkshire and it found on the earliest examples of these club sauce Lea and Perrins bottles. This is consistent with the pre-1870 date of the other bottles. The other food bottles are a generic wide mouthed pickle and two salad oils. One of the salad oil bottles is ribbed while the other is of the more decorative cathedral style. The cathedral example has a partial paper label present, although no writing is discernible, and some of what appears to be the original contents still inside. These condiment bottles are found in domestic archaeological deposits dating to throughout the nineteenth century.

The other bottles recovered were an aqua blue oval cross-sectioned pharmaceutical bottle, a dark green jar with an unknown purpose and a small colourless oval cross-sectioned bottle with a metal cap in place. This last bottle appears to be machine made, although the metal cap obscures the finish, and is probably present as a result of contamination during the mechanical excavation process. Two stemmed drinking glasses are the final glass vessels in this assemblage.

Metal

A complete horse’s bit is also included in this assemblage. It is a straight shanked, fixed jaw curb bit with a mouthpiece width of about 127mm (5 inches).

Other Artefacts

Fragments from two clay smoking pipes were recovered during the excavation of KJ13. One is an unmarked bowl and the other is the bowl base and part of the stem of a Davidson “Cutty” pipe.

Interpretation

This feature appears to have been a purpose dug rubbish pit. Its location close to the St Hill Street frontage of TS190 suggests it was created before the sand from Patupuhou was fully cleared from this area (ca. mid-1870s). This would place it during the Byrne’s ownership of the property but it probably relates to one of the first occupants of their lodging houses rather than the family themselves.

KJ13 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1817-present	1730s-1910s	n/a
Peak Popularity	1835-1857	1860s	n/a
Proposed Deposit Date Range:	1860s- early 1870s		

TS191

All but three of the TS191 analysed deposits were associated with either the Byrne or Chavannes households, and only one of these deposits was able to be confidently attributed to an individual.

F375

Feature 375 was a circular brick-lined well with a diameter of 740mm located close to the boundary with TS192. It would have been located behind the northern-most cottage visible in the 1866 plan and was still outside of any building footprints in the 1908 plan. It was only excavated until the water table was reached at 1430mm but the brick lining continued below this. Few artefacts were found amongst the coarse gravel fill and some of the bricks from the top layers of lining were missing.

F375 Deposit Summary

	NISP	MNV/I	Weight
Ceramic vessels	151	36	614.83g
Glass Vessels	11	8	936.01g
Metal	23	23	2374.76g
Other	1	1	5.38g
Total	186	68	3930.98g

A further 1613.45g of unidentifiable metal was collected from this feature.

Ceramic vessels

No complete ceramic vessels were recovered from this feature and only one unidentifiable partial maker's mark was recorded.

Ware types

	Ware							Total
	Whiteware	Ivory-dyed whiteware	Buff-bodied e/w	Bone China	European porc-h	Salt-glazed st-w	Bristol-glazed st-w	
Plate	7	1	-	-	1	-	-	9
Ashette	1	-	-	-	-	-	-	1
Cup	9	-	-	3	-	-	-	12
Saucer	3	-	-	2	-	-	-	5
Teapot	-	-	1	-	-	-	-	1
Bottle	-	-	-	-	-	1	1	2
Unidentified	5	-	-	1	-	-	-	6
Total	25	1	1	6	1	1	1	36

Decoration Styles

	Decoration							Total
	UGTP	Banded	Painted	Gilt	Sprigged	Moulded	None	
Plate	8	-	-	-	-	-	1	9
Ashette	1	-	-	-	-	-	-	1
Cup	4	4	1	1	1	-	1	12
Saucer	1	2	-	1	1	-	-	5
Teapot	-	-	-	-	-	1	-	1
Bottle	-	-	-	-	-	-	2	2
Unidentified	5	-	-	-	-	1	-	6
Total	19	6	1	2	2	2	4	36

Patterns and Colours

Six UGTP patterns (Asiatic Pheasants, Rhine, Fibre, Cable, Chain and Cairo) and two other named patterns (Imitation Jasper and Tea Leaf) were identified on the F375 ceramics. Asiatic Pheasants was the most common, appearing on four vessels (two dinner plates, a side plate and an unidentified vessel), followed by Rhine and Imitation Jasper on two vessels (a dinner and side plate and a cup and saucer respectively). The other patterns were found as single examples.

Blue was the most common decoration colour, found on fourteen vessels, followed by green on four, black, brown, grey and red on two and the others on single vessels.

	Decoration Colour									Total
	Black	Blue	Brown	Gold	Green	Grey	Pink/gold	Purple	Red	
Plate	-	4	1	-	1	2	-	-	-	8
Ashette	1	-	-	-	-	-	-	-	-	1
Cup	-	5	-	1	2	-	1	1	1	11
Saucer	-	3	-	1	-	-	-	-	1	5
Unidentified	1	2	1	-	1	-	-	-	-	5
Total	2	14	2	2	4	2	1	1	2	30

Dating

Fifteen ceramic vessels were used to provide average manufacture and peak popularity periods for this assemblage. This included nine UGTP, six banded and one gilt Tea Leaf vessel and had an average manufacture date range of 1849-1903(1992) and mean popularity period of 1858-1896. An approximate *terminus post quem* of 1860 can be taken from the banded vessels.

Glass Vessels

F375 contained a small glass assemblage which included one complete bottle (a Lea & Perrins Worcestershire Sauce bottle) and the tops and/or bases of another seven vessels. Two ring-seal bottles were turn moulded, the Worcestershire sauce bottle made in a cup-bottom mould, a Codd in a post-bottom mould, an unidentified round cross-sectioned bottle was dip-moulded, a tumbler and yellow decorative vessel pressed and one colourless bottle was unable to be identified to manufacture method. All finishes were applied.

The only bottle with identifiable embossing of any kind was the Lea & Perrins bottle which also had the "A C B Co" stamp of the Aire & Calder glassworks on the base. This mark was used on these bottles from around 1860 until 1920 and provides the *terminus post quem* for this assemblage.

Metal

The metal artefacts collected from F375 included:

- Seventeen iron wire nails
- Two iron round cross-sectioned screws
- An iron "S" shaped hook, 265mm long
- A horseshoe, 145mm X 152mm with worn down toe

- An iron chamber door lock (150mm X 108mm, 20mm thick)
- An offcut of roofing zinc

Other Artefacts

A toy European porcelain saucer with orange enamel decoration was also found in F375.

Interpretation

F375 was a brick lined well probably dug to service the northern-most cottage on TS191. It is not known when this well was dug but it could have been as early as the late 1840s if this is the cottage that appears in the very earliest sketches and photographs of the site. As the well was not excavated to the base the earliest artefacts which would help in answering this question were not recovered. This first cottage would have required a nearby water source and digging a well would have been a relatively safe option in this period before pollution became a major problem. The well could have remained open well into the twentieth century as it was not built over during that time and contains fragments of ceramic which join with some found in three other features (F186, F372 and F420), however none of the artefacts positively date to post-1900. That, combined with the fact that some of the top brick lining has been removed and the well filled with gravel, suggests that it was filled in by the end of the nineteenth century. This long accumulation period for the assemblage and its fragmentary nature make F414 of little use in any specific contextual analysis.

F375 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1849-present	1840s-1910s	n/a
Peak Popularity	1860-1896	1860-1900	n/a
Proposed Deposit Date Range:	1860s- ca.1900		

F420(part)

Feature 420 was a well located in the southern corner of TS191. It contained a huge amount of archaeological material, which upon analysis seems to relate to two distinct events. The first was a commercial dumping event sometime in the late 1890s by Edwin Moulton who owned and operated a grocery and general goods store on TS189. This dump consisted almost entirely of unsold ceramic vessels, identifiable through their completeness, lack of any signs of use (chips, scratches etc.) and the fact that large numbers of identical vessels and sets are present. This dump may have coincided with a change in business direction taken by Moulton around 1897 when he started focussing on furniture and appears to have stopped selling crockery. The remainder of the material recovered from this feature is described in Appendix B.

F420 (Moult) Deposit Summary

Material	NISP	MNI/V	Weight
Ceramic	686	130	9829.33g
Glass	0	0	0g
Metal (identifiable)	0	0	0g
Other	0	0	0g
Total	686	130	9829.33g

Ceramic Vessels

(tables on following pages)

Ware											
	Whiteware	Creamware	Coarse red e/w	Buff bodied e/w	Dyed-body	Bone China	European porc-h	Japanese porc-h	Salt-gl st-w	Slip-gl st-w	Total
Plates	15	-	-	-	-	2	1	-	-	-	18
Table bowl	1	-	-	-	-	6	-	-	-	-	7
Ashettes	3	-	-	-	-	-	-	-	-	-	3
Tureens	2	-	-	-	-	-	-	-	-	-	2
Jugs	2	-	-	-	1	-	-	-	-	-	3
Egg cups	-	-	-	-	-	-	1	-	-	-	1
Cups	23	-	-	-	-	3	3	-	-	-	29
Saucers	20	-	-	-	-	3	5	-	-	-	28
Teapots	-	-	-	2	-	-	-	-	-	-	2
Bottles	-	-	-	-	-	-	-	-	2	2	4
Mixing Bowl	1	-	-	-	-	-	-	-	-	-	1
Milk pan	-	-	1	-	-	-	-	-	-	-	1
Jars	6	-	-	-	-	-	-	-	-	-	6
Ewers	2	-	-	-	-	-	-	-	-	-	2
Chamberpots	1	-	-	-	-	-	-	-	-	-	1
Cosmetic jars	1	-	-	-	-	-	-	-	-	-	1
Toothbrush holders	2	-	-	-	-	-	-	-	-	-	2
Candle holder	-	-	-	-	-	-	1	-	-	-	1
Decorative	-	-	-	-	-	-	3	-	-	-	3
Unidentified	13	1	-	-	-	-	-	1	-	-	15
Total	92	1	1	2	1	14	14	1	2	2	130

	Decoration											Total
	UGTP	Banded	Painted	Gilt	Enamel	Sprigged	Moulded	None				
Plates	13	1	-	1	1	1	1	-	-	-	18	
Table bowl	5	1	-	1	-	-	-	-	-	-	7	
Ashettes	2	1	-	-	-	-	-	-	-	-	3	
Tureens	2	-	-	-	-	-	-	-	-	-	2	
Jugs	1	-	-	-	-	2	-	-	-	-	3	
Egg cups	-	-	-	1	-	-	-	-	-	-	1	
Cups	9	5	1	10	-	-	-	4	-	-	29	
Saucers	2	6	-	14	-	1	1	5	-	-	29	
Teapots	-	-	-	-	-	2	-	-	-	-	2	
Bottles	-	-	-	-	-	-	-	4	-	-	4	
Mixing bowl	-	-	-	-	-	-	-	1	-	-	1	
Milk pan	-	-	-	-	-	1	-	-	-	-	1	
Jars	-	-	-	-	-	-	-	6	-	-	6	
Ewers	1	1	-	-	-	-	-	-	-	-	2	
Chamberpots	-	1	-	-	-	-	-	-	-	-	1	
Cosmetic jars	-	-	-	-	-	-	-	1	-	-	1	
Toothbrush holders	1	1	-	-	-	-	-	-	-	-	2	
Candle holder	-	-	-	-	1	-	-	-	-	-	1	
Decorative	-	-	-	-	1	-	2	-	-	-	3	
Unidentified	8	-	1	1	1	-	-	4	-	-	15	
Total	44	17	2	28	4	2	9	25	9	2	131	

Maker's Marks

Only one maker's mark was found amongst the Moulton F420 material. "H. KENNEDY" was stamped on the heel of one of the slip glazed stoneware bottles and belongs to H. Kennedy, a pottery manufacturer in Glasgow who used this mark from 1866 to 1929 (Godden 1988).

Dating

Forty-three of the Moulton ceramic vessels were able to be dated, including seventeen UGTP, seventeen banded and nine gilt vessels. The manufacture range was 1860-present and the peak popularity 1861-1894. These dates fit well with the interpretation of this portion of the F420 assemblage originating from Edwin Moulton's nearby shop which began to move away from selling crockery in the 1890s.

F420 (Moulton) Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1860-present	n/a	n/a
Peak Popularity	1861-1894	n/a	n/a
Proposed Deposit Date Range:		1890s	

F495

Feature 495 was an oval pit measuring about 1400 X 700 X 800mm with a flat base and a dark brown sandy soil matrix. It was located in TS191 close to the boundary with TS190 and within the footprint of the garage which was built in the early 1900s at the St Hill Street end of the section, meaning it must predate this building. A large amount of metal is reported as being present in this feature in the excavation notes. None of the glass or ceramic vessels are represented by more than a few small pieces and a significant proportion of the glass fragments are water-rolled, suggesting that the material found in this pit was redeposited. This makes it useless for attributing to specific residents but it still holds some value as archaeological "background noise."

F495 Deposit Summary

Artefact type	NISP	MNI/V	Weight
Ceramic vessels	85	30	821.03g
Glass vessels	123	16	1922.35g
Metal	?	1	1840.00g
Other	13	2	31.14g
Total	221	49	4614.52g

Ceramic Vessels

Eighty-five sherds of ceramic were recovered during the excavation of F495, representing at least 32 vessels. No complete vessels were found and most were represented by small pieces.

	Ware							Total
	Whiteware	Yellowware	Buff-bodied e/w	Bone China	Dyed-body st-w	Bristol- glazed st-w	Euro porc-h	
Plate	5	-	-	1	-	-	-	6
Ashette	1	-	-	-	-	-	-	1
Saucer	4	-	-	2	-	-	1	7
Cup	4	-	-	1	-	-	1	6
Teapot	-	-	1	-	-	-	-	1
Roasting Dish	-	1	-	-	-	-	-	1
Jar	1	-	-	-	1	-	-	2
Bottle	-	-	-	-	-	1	-	1
Kitchen Bowl	1	-	-	-	-	-	-	1
?	4	-	-	-	-	-	-	4
Total	20	1	1	4	1	1	2	30

Decoration Styles

	Decoration						Total
	UGTP	Gilt	Banded	Moulded	Sprigged	None	
Plate	5	-	-	-	1	-	6
Ashette	1	-	-	-	-	-	1
Saucer	1	4	1	1	-	-	7
Cup	2	1	-	1	-	2	6
Teapot	-	-	-	1	-	-	1
Roasting Dish	-	-	-	-	-	1	1
Jar	-	-	-	-	-	2	2
Bottle	-	-	-	-	-	2	2
Kitchen Bowl	-	-	-	-	-	1	1
?	3	-	1	-	-	-	4
Total	12	5	2	3	1	8	30

Patterns and Colours

Blue was the most common decoration colour of the F495 ceramic vessels. The known UGTP patterns identified are all extremely common, with Asiatic Pheasant appearing on the highest number of vessels (three), followed by Rhine on two and Teddesley and Willow on one each. Imitation jasper was also recorded on one vessel.

	Decoration Colour						Total
	Black	Blue	Brown	Green	Grey	Gold	
Plate	-	4	1	-	2	-	7
Ashette	-	1	-	-	-	-	1
Cup	-	-	2	-	-	1	3
Saucer	-	1	-	1	-	4	6
?	1	-	1	2	-	-	4
Total	1	6	4	3	2	5	21

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"Asiatic Pheasants/ W & T A/ TUNSTALL" (print)	William & Thomas Adams (Staffordshire)	Asiatic Pheasant whiteware side plate	c.1866-1891	Kowlasky & Kowalsky 1999: 88

Dating

Nine of the F495 ceramic vessels were able to be dated (six UGTP and two banded vessels), providing an average manufacture range of 1843-1886 (1986) and mean popularity period of 1857-1891, with a *tpq* of 1866. This relatively long date range reinforces the hypothesis that this feature was either filled with re-deposited material or was filled over a long period, making it of little use for the specific context portion of this research.

Glass Vessels

A total of 123 fragments of glass were collected from F495, representing a MNV of 16. Of these, 20% (25 fragments) showed signs of being water-rolled to varying degrees, which is evidence of at least a portion of the assemblage being re-deposited from a location in which they were exposed to running water for a length of time. This could have been as part of a drain clearing event elsewhere on site, perhaps during a period of significant site modification.

Manufacture Methods

	Manufacture Method							Total
	Dip Mould	Closed Mould	Cup mould	Post Mould	Turn Mould	Pressed	Unidentified	
Black beer	1	-	-	-	-	-	-	1
Case Gin	-	1	-	-	-	-	-	1
Ring-seal	-	-	-	-	1	-	-	1
Schnapps	-	1	-	-	-	-	-	1
Salad Oil	-	-	1	-	-	-	-	1
Vinegar	-	-	-	-	-	-	1	1
Wide mouthed	-	-	-	-	-	-	2	2
Oval Sectioned	-	-	1	-	-	-	-	1
Cylindrical pill	-	-	-	-	-	-	1	1
Sarsaparilla	-	-	-	1	-	-	-	1
Tumbler	-	-	-	-	-	-	1	1
Stemmed glass	-	-	-	-	-	-	1	1
Bon-bon dish	-	-	-	-	-	1	-	1
Unidentified	-	-	-	-	-	-	2	2
Total	1	2	2	1	1	1	8	16

Products/Brands

A body fragment of an Udolpho Wolfe's Schnapps and several pieces of an emerald green Dr Townsend's Sarsaparilla bottle. Dr Townsend Sarsaparilla was produced for nearly 80 years from 1839 until at least 1910, however after the 1870s these bottles ceased to be embossed; instead they had paper labels (Lindsey 2015). This particular example was made in a two-piece mould with a post-bottom, a manufacture method that was most popular during the last third of the nineteenth century but which had been used less commonly since about 1840. This gives a rough date of the middle of the century for this emerald green bottle.

Dating

The F495 glass assemblage contained bottles typical of the 1870s, during which time the older dip moulded bottles were beginning to be replaced by turn and cup-bottom moulded vessels. The Udolpho Wolfe bottle provides a *tpq* of 1863.

Metal

Although the excavation notes report a large amount of metal as being recovered from this feature the only metal found in the material sent for analysis was a large bag of fragments of roofing zinc. It is implied in the feature sheet that this was near the top of

the feature so it could relate to the pit being filled during the demolition of the stables nearby in 1897.

Other Artefacts

The only other artefacts collected from F495 were eleven fragments of plate window glass (2.25mm thick) and two fragments of lantern glass.

Interpretation

Although F495 technically lies within TS191, it probably relates to the occupation of neighbouring TS190 as a small strip of TS191 was attached to TS190 to form a particular property for much of the mid to late-nineteenth century. This is supported by the fact that no obvious matches or joins were recorded between the ceramic fragments from this deposit and any of those in TS191. As previously mentioned, the high chance of this material having been re-deposited means it is unable to be attributed to a particular occupancy of this part of the site but the chronological information gathered from the artefacts suggests this assemblage can provide general information as to the available material culture for the mid to late nineteenth century population of Whanganui.

F495 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1843-present	1730s-1900s	n/a
Peak Popularity	1866-1891	1863-1880s	n/a
Proposed Deposit Date Range:		1860s-1890s	

TS192

None of the nine analysed deposits from TS192 were associated directly with any of the families focussed on for this research but seven could be attributed to other households or businesses.

F185

Feature 185 is barely mentioned in the excavation notes or report aside from being described as “roughly oval.” It was located towards the southern corner of TS192 well within the footprint of a stable building recorded in the 1908 plan.

F185 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	480	68	9309.30g
Glass Vessels	99	51	12669.04g
Metal	36	12	1491.86g
Other	7	6	170.35g
Total	622	137	23640.55g

Another 802.46g of unidentifiable metal was recovered from this feature.

Ceramics

	Ware							Total
	Whiteware	Yellowware	Buff-bodied e/w	Bone China	European porc-h	Salt-glazed st-w	Slip-glazed st-w	
Plate	10	-	-	1	-	-	-	11
Table bowl	-	-	-	2	-	-	-	5
Mug	-	-	-	-	1	-	-	1
Jug	2	-	-	-	-	-	-	2
Cup	10	-	-	11	1	-	-	22
Saucer	8	-	-	-	-	-	-	8
Teapot	-	-	1	-	-	-	-	1
Mixing bowl	2	1	-	-	-	-	-	3
Roasting dish	1	-	-	-	-	-	-	1
Bottle	-	-	-	-	-	2	-	2
Jar	2	-	-	-	-	-	-	2
Crock	-	-	-	-	-	-	1	1
Chamberpot	1	-	-	-	-	-	-	1
Ewer	1	-	-	-	-	-	-	1
Basin	1	-	-	-	-	-	-	1
Cosmetic jar	-	-	-	-	1	-	-	1
Unidentified	4	-	-	-	1	-	-	5
Total	45	1	1	14	4	2	1	68

Decoration Styles

	Decoration										Total
	UGTP	Banded	Painted	Gilt	Enamelled	Lustre	OGTP	Sprigged	Moulded	None	
Plate	6	-	-	2	-	-	-	-	-	3	11
Table bowl	3	-	-	1	-	-	1	-	-	-	5
Mug	-	-	-	1	-	-	-	-	-	-	1
Jug	-	-	-	-	-	1	-	-	1	-	2
Cup	3	4	2	12	-	-	-	-	-	1	22
Saucer	-	5	-	-	-	1	-	1	-	1	8
Teapot	-	-	-	-	-	-	-	-	1	-	1
Mixing bowl	-	-	-	-	-	-	-	-	1	2	3
Roasting dish	-	-	-	-	-	-	-	-	-	1	1
Bottle	-	-	-	-	-	-	-	-	-	2	2
Jar	-	-	-	-	-	-	-	-	-	2	2
Crock	-	-	-	-	-	-	-	-	-	1	1
Chamberpot	-	-	-	-	-	-	-	-	-	1	1
Ewer	1	-	-	-	-	-	-	-	-	-	1
Basin	1	-	-	-	-	-	-	-	-	-	1
Cosmetic jar	-	-	-	-	1	-	-	-	-	-	1
Unidentified	2	-	-	-	1	-	-	-	-	2	5
Total	16	9	2	16	2	2	1	1	3	16	68

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"SYRIA/ COCHRAN & CO" (print)	R. Cochran & Co (Glasgow)	Syria whiteware dinner plate	c.1856- 1896	Kowalsky & Kowalsky 1999: 155
"...SHWORTH/ REAL/ IRONSTONE/ CHINA" (stamp)	G L Ashworth (Staffordshire)	Two undecorated whiteware plates	c.1862- 1883	Kowalsky & Kowalsky 1999: 96

Mark	Manufacturer	Vessel(s)	Date Range	Reference
Beehive, "TRADEMARK/...T & SIMPSON" (print)	Pratt & Simpson (Staffordshire)	Undecorated whiteware plate	1878-1883	Kowalsky & Kowalsky 1999: 312
"STONE CHINA/ WARRANTED/ ANTHONY SHAW/ BURSLEM" (print)	Anthony Shaw (Staffordshire)	Undecorated whiteware ?vessel	c.1860- 1882	Godden 1991: 571
"DOULTON/ LAMBETH" (stamp)	Doulton & Co (Lambeth)	Salt-glazed stoneware ink bottle	c.1858- 1956	Godden 1991: 214

Dating

Twenty-nine ceramic vessels from F185 were able to be assigned dates, including nine banded, eight UGTP, seven gilt Tea Leaf, three undecorated and one salt-glazed stoneware vessel. The average manufacture period was 1850-1894 (1952) and the combined peak popularity period was 1858-1891. The maker's marks provide a *terminus post quem* of 1878 which can refine this date range further.

Glass Vessels

Six glass vessels were recovered complete from F185 (three salad oil, two rectangular panelled bottles and a butter dish).

	Manufacture								Total
	Free blown	Dip mould	Closed mould	Post mould	Cup mould	Turn mould	Pressed	?	
Dark Olive round C- Section	-	1	-	-	-	-	-	-	1
Bordeaux	-	6	-	-	-	-	-	-	6
Case Gin	-	-	1	-	-	-	-	-	1
Ring-seal	-	-	-	-	-	6	-	-	6
Spirit	-	1	-	-	-	-	-	-	1
Breffit	-	-	-	1	-	-	-	-	1
Codd	-	-	-	3	-	-	-	-	3
?Soda	-	2	-	-	-	-	-	-	2
Salad oil	-	-	-	-	10	-	-	-	10
Castor oil	-	1	-	-	1	-	-	-	2
Rectangular panelled	-	-	-	-	4	-	-	1	5
Square sectioned	-	-	-	-	1	-	-	-	1
Tumbler	-	-	-	-	-	-	1	-	1
Dish	-	-	-	-	-	-	3	-	3
Vase	3	-	-	-	-	-	-	-	3
?	-	2	-	-	3	-	-	-	5
Total	3	13	1	4	19	6	4	1	51

Maker's marks

Three of the F185 glass vessels had identifiable maker's marks on the base or body. Two Codd bottles were embossed with "DAN RYLANDS LD/ MAKERS/ BARNESLEY" (used from 1888 to 1897(Potten 2002)) and one with "E BREFFIT & CO MAKERS LONDON" (used by Edgar Breffit & Co from the 1870s to around 1900(Lindsey 2015)).

Products and/or Brands

Eight of the bottles from this feature also had embossing and/or paper labels which allow for their original contents to be identified, at least to brand. Three rectangular panelled bottles were marked with the popular patent medicine "DAVIS/ VEGETABLE/ PAIN KILLER." Another rectangular panelled bottle, represented by only a body fragment, has "...E SINGER/...FACTURI.../...MPANY" embossed on it, which can be

attributed to the ubiquitous sewing machine manufacturers Singer. This company has been making sewing machines and related products since 1851. Two Codd bottles bear the mark of Edwin Hodren, a Whanganui aerated water and cordial manufacture active from 1883-ca. 1900 (Luff) in the form of "HODREN" printed twice on the base in a cross and "E. HODREN/ WANGANUI" on the body, while another soda style bottle has "H" and a cross etched on the base which is likely also the work of Hodren. A salad oil bottle has "EDWARD PINK & SONS/ LONDON S E" embossed on its body which is the name of a jam, pickle and confectionary company established in the late 1880s (Behm 2010).

Dating

Of the F185 glass vessel assemblage forty-two artefacts were chronologically sensitive enough to provide an estimated date range. The vessels have a manufacture period of roughly the 1850s to the 1900s and are typical of the period from ca. 1896-1895.

Metal

This feature contained a varied metal assemblage, including:

- An oval brass door lock faceplate
- A curtain ring
- The head of an iron curry comb
- A complete stirrup iron
- Fragments from two wax vesta matchboxes
- A fragment of a circular can
- A small length of zinc drainpipe
- Part of a zinc grate from a drain cover
- Fragments of iron chicken wire
- Three pieces of strip iron
- A short length of iron wire

Other Artefacts

Also collected from F185 were:

- A fragment of a salt-glazed coarse earthenware infrastructure pipe
- A rectangular sandstone sharpening stone
- A small piece of a pressed milk glass lampshade
- Colourless plate window glass, 2.45mm thick

- Two pieces of leather offcut
- An unmarked piece of clay tobacco pipe stem with one end re-shaped to form a new bite

Interpretation

F185 appears to have been a purpose-dug domestic rubbish pit dating to the end of the nineteenth or possibly the very early twentieth century. This property was owned and occupied by Walter Edwards at this time so this is presumably waste from his household.

F185 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1850-present	1850s-1910s	n/a
Peak Popularity	1878-1891	1888-1895	n/a
Proposed Deposit Date Range:		1890s- early 1900s	

F186

The excavation report and notes do not go into detail about F186 aside from saying it was oval in shape, measured 1800mm X 150mm and was 250mm deep and was cut into “mottled topsoil.” It was located towards the southern corner of TS192 within the footprint of the stables building visible in the 1908 plan.

F186 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	333	66	4378.89g
Glass Vessels	0	0	0g
Metal	270	215	3482.50g
Other	17	10	43.07g
Total	620	291	7904.46g

Another 6636.21g of unidentifiable metal was recovered from F186.

Ceramic Vessels

The only complete vessels recovered from F186 were two salt-glazed stoneware ink bottles. No maker’s marks were found on any of the fragments.

Ware types

	Ware										Total
	Whiteware	Buff-bodied e/w	Tin-glazed earthenware	Dyed-body	Bone China	European porc-h	Japanese porc-h	Salt-glazed st-w	Slip-glazed st-w	Bristol-glazed st-w	
Plate	5	-	-	-	2	-	-	-	-	-	7
Ashette	1	-	-	-	-	-	-	-	-	-	1
Tureen	1	-	-	-	-	-	-	-	-	-	1
Jug	-	-	-	-	-	1	-	-	-	-	1
Cup	15	-	-	-	3	3	-	-	-	-	21
Saucer	11	-	-	-	2	-	-	-	-	-	13
Teapot	-	1	-	-	-	-	-	-	-	-	1
Mixing bowl	1	-	-	-	-	-	-	-	-	-	1
Bottle	-	-	-	-	-	-	-	4	1	1	6
Jar	1	-	1	-	-	-	-	-	-	-	2
Ewer	1	-	-	-	-	-	-	-	-	-	1
Basin	1	-	-	-	-	-	-	-	-	-	1
Unidentified	7	-	-	1	-	-	1	-	1	-	10
Total	44	1	1	1	7	4	1	4	2	1	66

Decoration Styles

	Decoration									Total
	UGTP	Banded	Sponged	Painted	Gilt	Enamelled	Sprigged	Moulded	None	
Plate	5	1	-	-	1	-	-	-	-	7
Ashette	1	-	-	-	-	-	-	-	-	1
Tureen	1	-	-	-	-	-	-	-	-	1
Jug	-	-	-	-	-	-	-	-	1	1
Cup	4	3	1	-	4	2	2	-	5	21
Saucer	4	5	1	-	1	-	2	-	-	13
Teapot	-	-	-	-	-	-	-	1	-	1
Mixing bowl	-	-	-	-	-	-	-	-	1	1
Bottle	-	-	-	-	-	-	-	-	-	6
Jar	-	-	-	1	-	-	-	-	1	2
Ewer	1	-	-	-	-	-	-	-	-	1
Basin	1	-	-	-	-	-	-	-	-	1
Unidentified	3	-	1	2	-	1	-	1	2	10
Total	20	9	3	3	6	3	4	2	10	66

Dating

Twenty-five ceramic vessels from this feature could be dated (ten UGTP, nine banded, four gilt and two spongeware vessels), giving an average manufacture range of 1846-present and a combined peak popularity period of 1858-1888.

Metal

Among the metal assemblage from F186 the following items were able to be identified:

- Five used cut iron nails
- Eight used wire iron nails
- Fragments from at least 193 used iron nails of unknown manufacture
- Three brass one-piece buttons, one two-hole, one four hole and one dome type
- Two complete copper alloy pins
- Fragments of the head of an iron spade

- A short length of iron wire
- A heavily accreted horseshoe, roughly 135mm X 125mm

Other Artefacts

Also recovered from this feature were:

- Three one piece, four hole sew through buttons, white shell, porcelain and unpolished wood
- A black plastic one piece two hole sew through button
- Scraps of linoleum flooring with a geometric design in various shades of yellow and red
- Part of a moulded porcelain toy teapot and cup
- The bowl and stem of an unmarked clay tobacco pipe
- Two fragments of clay tobacco pipe stems, one incised with “PERFECTION” and the other “DAVIDSON/GLASGOW”

Interpretation

F186 is similar in form, date and contents to F185 so has been interpreted as another Edwards domestic rubbish pit.

F186 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1846-present	n/a	n/a
Peak Popularity	1858-1888	n/a	n/a
Proposed Deposit Date Range:	1890s		

F334

The excavation report and notes do not go into great detail about F334 other than describing it as an “amorphous shallow pit” which was cut into other earlier features. It was located along the northern border of the excavated portion of TS192, roughly in the centre, and lay within the footprint of the stables building in the 1908 plan. The artefacts assemblage contains several military related items, as well as ceramics which are typical of the very earliest period of European settlement in the city (eg. London style tea cups). Its location would also suggest that it may be related to one of the Maria Place cottages visible in the 1866 plan, which were housing for soldiers and their families. The presence of artefacts traditionally associated with women (perfume bottles, sewing kit) alongside the military objects support this hypothesis.

F334 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	194	66	1337.13g
Glass Vessels	30	25	1811.91g
Metal	86	49	2174.10g
Other	36	18	205.85g
Total	346	158	5528.99g

A further 319.73g of unidentifiable metal was collected from F334.

Ceramic Vessels

No complete vessels were recovered from F334.

Ware Types

	Ware							Total
	Whiteware	Yellowware	Buff-bodied e/w	Bone China	Salt-glazed st-w	Slip-glazed st-w	?	
Plate	13	-	-	-	-	-	-	13
Ashette	1	-	-	-	-	-	-	1
Tureen	2	-	-	-	-	-	-	2
Jug	1	-	-	-	-	-	-	1
Eggcup	2	-	-	-	-	-	-	2
Cup	9	-	-	5	-	-	-	14
Saucer	11	-	-	6	-	-	-	17
Teapot	-	-	1	-	-	-	-	1
Mixing bowl	1	-	-	-	-	-	-	1
Roasting dish	-	1	-	-	-	-	-	1
Bottle	1	-	-	-	1	1	-	3
Jar	1	-	-	-	-	-	-	1
Cosmetic jar	2	-	-	-	-	-	-	2
Unidentified	6	-	-	-	-	-	1	7
Total	50	1	1	11	1	1	1	66

Decoration Styles

	Decoration								
	UGTP	Banded	Gilt	Enamelled	Engine turned	Sprigged	Incised	None	Total
Plate	13	-	-	-	-	-	-	-	13
Ashette	-	1	-	-	-	-	-	-	1
Tureen	2	-	-	-	-	-	-	-	2
Jug	1	-	-	-	-	-	-	-	1
Eggcup	2	-	-	-	-	-	-	-	2
Cup	8	1	3	-	-	1	-	1	14
Saucer	10	1	1	1	-	4	-	-	17
Teapot	-	-	-	-	-	-	-	1	1
Mixing bowl	-	-	-	-	-	-	-	1	1
Roasting dish	-	-	-	-	-	-	-	1	1
Bottle	-	-	-	-	-	-	-	3	3
Jar	-	-	-	-	-	-	-	1	1
Cosmetic jar	2	-	-	-	-	-	-	-	2
Unidentified	5	-	-	-	1	-	1	-	7
Total	43	3	4	1	1	5	1	9	66

Dating

Twenty-three of the F334 ceramic vessels could be used to date the assemblage (twenty UGTP and three banded vessels). The manufacture range was 1831-present and the peak popularity for this combination of styles was 1844-1871.

Glass Vessels

No complete glass vessels were recovered from this feature.

Manufacture Methods

	Manufacture Method					Total
	Dip mould	Cup mould	Turn mould	Pressed	Unidentified	
Dark olive round	4	-	-	-	-	4
Squat green beer	-	-	-	-	1	1
Bordeaux	4	-	-	-	-	4
Ring-seal	-	-	1	-	-	1
?Soda	-	-	-	-	1	1
Wide mouthed	-	-	-	-	1	1
Club sauce	-	-	-	-	3	3
Rectangular panelled	-	1	-	-	-	1
Oval sectioned	-	-	-	-	1	1
Perfume	-	-	-	-	2	2
Stemmed glass	-	-	-	-	1	1
Lidded dish	-	-	-	1	-	1
Unidentified	-	-	-	-	4	4
Total	8	1	1	1	14	25

Products/Brands

The three club sauce bottles in the F334 glass assemblage were represented by embossed stoppers, two bearing the mark of Lea & Perrins Worcestershire sauce and the other George Whybrow, a pickle and sauce manufacturer.

Dating

The F334 glass assemblage is too small and fragmentary to provide a reliable date for the deposit but the identified bottles are characteristic of the 1870s and early 1880s.

Metal

The F334 metal assemblage consisted of:

- Six cut iron nails
- Two wire iron nails
- Fragments from at least seven iron nails of unknown manufacture
- A copper alloy thimble

- The base and handle of an iron candleholder
- Five copper alloy pins
- Two copper alloy hooks from hook and eyelet fasteners
- Three brass buttons, one plain one piece four hole sew through, one two piece 57th regiment button with “ROGERS & CO/ KING ST/ COVENTRY/ LONDON” on the reverse and a two piece 18th regiment button
- Seventeen wax vesta matchboxes, two with “BELL & CO” embossed on the lid
- Various components of a clock’s internal mechanism, including coiled iron springs in various sizes, lead weight and a brass frame
- The casing from a bullet, 20mm in diameter
- A squashed tin can
- Pieces of strip iron
- Two lumps of iron slag

Other Artefacts

F334 contained a relatively large assemblage of clay tobacco pipes (at least fifteen). One of the seven bowls recovered was moulded to look like a man’s face, four had spurs and one was incised with the letter “T.” Only one original bite was found but two stem fragments showed evidence of having been broken and re-shaped to form new bites, and another was glazed so probably came from close to the original bite. Six of the stems were incised, one with a pattern which looks like cherries and Chinese characters and the others with manufacture names (two “W WHITE/ GLASGOW,” one “GLASGOW/...DOUGALL,” one “BURNS/CUTTY” and another with “LON[DON]...”

The only other artefacts collected from this feature were rim and body fragments from two oil lamps and the base of a white plaster figurine.

Dating

The two regimental buttons are precise chronological markers: the 18th regiment was stationed at the Rutland stockade from December 1846 until 1870 while the 57th resided in the York stockade for a much shorter period (1861-1866).

Interpretation

The highly fragmented nature of the F334 assemblage is atypical for a purpose-dug domestic or commercial rubbish pit, which tend to larger pieces and some complete items. This suggest that the material accumulated over time, perhaps falling through the slats in a wooden floor or surface which originally lay above the feature. The range of domestic items represented within this deposits points towards this being created

by material from the inside floor of a house being swept out the back door, perhaps over a wooden door step. The doorstep hypothesis is supported by the high number of clay tobacco pipe fragments and matchboxes as this would have made a convenient spot for someone to site and smoke tobacco. The presence of military uniform components hints at occupants whom were involved with the military and this fits with the idea that these Maria Place cottages provided homes for members for the various regiments stationed in Whanganui. While it was not possible to attribute this deposit to a specific individual or family, it still provides an intimate snapshot of Garrison period life in this area, and can be used to add to the interpretations surrounding other contemporaneous deposits at the site.

F334 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1831-present	1850s-1900s	1861-1866
Peak Popularity	1862-1871	1860s-1870s	1861-1866
Proposed Deposit Date Range:	1860s- early 1870s		

F372

Feature 372 was a rectangular pit feature that was located along the boundary with TS189, where it just cuts into F362. It was only half-sectioned as part lay under a modern concrete footing. The excavation notes and report note that the fill was very similar to that in F362 and it is likely these were filled in at the same time. It contained two iron buckets, one of which was left in situ, as well as the material described below.

F372 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	63	26	920.37g
Glass Vessels	0	0	0g
Metal	4	2	525.07g
Other	2	2	780.87g
Total	69	30	2226.31g

Another 1507.42g of unidentifiable metal came from this feature.

Ceramics

Only one complete ceramic vessel was collected from this feature: a blue UGTP whiteware saucer.

Ware Types

	Ware					Total
	Whiteware	Buff-bodied e/w	Bone China	Salt-glazed st-w	Slip-glazed st-w	
Plate	7	-	-	-	-	7
Tureen	1	-	-	-	-	1
Cup	7	-	-	-	-	7
Saucer	4	-	1	-	-	5
Teapot	-	1	-	-	-	1
Bottle	-	-	-	-	1	1
Jar	1	-	-	-	-	1
Water filter	-	-	-	1	-	1
Unidentified	2	-	-	-	-	2
Total	22	1	1	1	1	26

Decoration Styles

	Decoration					Total
	UGTP	Banded	Gilt	Moulded	None	
Plate	7	-	-	-	-	7
Tureen	1	-	-	-	-	1
Cup	6	1	-	-	-	7
Saucer	3	1	1	-	-	5
Teapot	-	-	-	1	-	1
Bottle	-	-	-	-	1	1
Jar	-	-	-	-	1	1
Water filter	-	-	-	-	1	1
Unidentified	2	-	-	-	-	2
Total	19	2	1	1	3	26

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"CHAIN/ H & C" (print)	Hope & Carter (Staffordshire)	Chain whiteware saucer	c.1862-1880	Godden 1991: 334

Dating

Thirteen of the F372 ceramic vessels could be dated (eleven UGTP and two banded vessels). The manufacture range was 1836-present and average peak production range 1848-1877. The Chain pattern saucer provides a *tpq* of 1862.

Metal

The only identifiable metal artefacts from F372 were a barrel hoop and three pieces of strip iron.

Other Artefacts

Part of a ceramic decoy chicken's egg and a black glazed ceramic plinth were also collected from this pit.

Interpretation

F372 has been interpreted as a domestic rubbish pit associated with the southernmost Maria Place cottage on TS192, although it lacks any strong contextual ties to any individual occupants. The turnover of inhabitants was also quite rapid during the projected deposit date range for this assemblage, making it more difficult to match it with a particular person.

F372 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1836-present	n/a	n/a
Peak Popularity	1862-1877	n/a	n/a
Proposed Deposit Date Range:	1860s-1870s		

F373

Feature 373 was a square pit, roughly 1000mm X 1000mm and 500mm deep. It was located along the TS189 boundary and was cut into a cultural topsoil (F166). The top portion of the fill reputedly contained a lot of ginger beer bottles, although there is no evidence of them in the material received for analysis.

F373 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	32	14	856.22g
Glass Vessels	59	43	9825.45g
Metal	14	12	1831.39g
Other	0	0	0g
Total	105	68	12522.06g

Another 436.34g of unidentifiable metal was recovered from F373.

Ceramic Vessels

A Holloway's ointment jar and the base of another generic cosmetics jar were recovered intact from this feature.

Ware Types

	Ware				Total
	Whiteware	Bone China	Salt-glazed st- w	Bristol-glazed st- w	
Plate	1	-	-	-	1
Cup	2	2	-	-	4
Saucer	1	-	-	-	1
Bottle	-	-	1	2	3
Jar	1	-	-	-	1
Basin	1	-	-	-	1
Cosmetic jar	2	-	-	-	2
Unidentified	1	-	-	-	1
Total	9	2	1	2	14

Decoration Styles

	Decoration				
	UGTP	Gilt	Moulded/gilt	None	Total
Plate	1	-	-	-	1
Cup	2	1	1	-	4
Saucer	1	-	-	-	1
Bottle	-	-	-	3	3
Jar	-	-	-	1	1
Basin	1	-	-	-	1
Cosmetic jar	1	-	-	1	2
Unidentified	1	-	-	-	1
Total	7	1	1	5	14

Dating

Five of the F373 ceramic vessels were datable (all UGTP). The average manufacture period was 1821-present and the peak popularity 1836-1868.

Glass Vessels

Fifteen of the bottles collected from this feature were intact.

Manufacture Methods

	Manufacture Method							Total
	Dip Mould	2-piece mould	Cup Mould	Turn mould	Pressed	Machine-made	Unidentified	
Dark olive round	7	-	-	-	-	-	-	7
Case gin	1	-	-	-	-	-	-	1
Spirit	3	-	-	-	-	-	-	3
Ring seal	-	-	-	2	-	-	-	2
Torpedo	-	1	-	-	-	-	-	1
Club Sauce	-	-	1	-	-	-	-	1
Wide-mouth	-	-	-	-	-	-	4	4
?Sauce/pickle	-	-	2	-	-	-	-	2
Jar	-	-	-	-	-	1	-	1
Rectangular-bevelled	-	-	2	-	-	-	-	2
Rectangular-panelled	-	-	1	-	-	-	-	1
Oval sectioned	1	-	4	-	-	-	-	5
Patent medicine	1	-	1	-	-	-	-	2
Hair oil	-	-	1	-	-	-	-	1
Perfume	2	-	-	-	-	-	-	2
Tumbler	-	-	-	-	2	-	-	2
Unidentified	2	-	-	-	-	-	-	2
Total	17	1	12	2	2	1	4	39

Maker's marks

Four of the F373 bottles had maker's marks on their bases, some of which were able to be assigned to manufacturers and/or time periods.

Mark	Vessel(s)	Manufacturer	Date Range
"A C B CO"	Worcestershire sauce bottle	Aire & Calder Bottle Company (Scotland)	1860s-1900s

Mark	Vessel(s)	Manufacturer	Date Range
"C W & CO"	Squat black beer	Could be Cooper & Wood (Portobello)	1859-1866
"YORK GLASS COS PATENT"	Machine made jar	?	20 th Century
"K"	Sauce/pickle	Kinghorn Glassworks (Scotland)	?

Products/Brands

Product	Vessel(s)	Manufacturer	Date Range
Worcestershire sauce	Club sauce	Lea & Perrins	1851-2015
Mrs Winslow's Soothing Syrup	Patent medicine	Curtis & Perkins	1845-1930
Pharmaceutical	Rectangular bevelled	Blumsberg & Co (London and Paris)	?
Perfume	One oval-sectioned and one rectangular perfume bottle	Rimmel (London and Paris)	1834-2015
Hair oil (Macassar)	Rectangular sectioned	Rowlands (London)	1793-1950s

Metal

The metal assemblage from this feature included:

- A copper alloy Jew harp
- Two iron harness buckle frames, one "D" shaped and the other rectangular with a central bridge
- Fragments from two wax vesta matchboxes
- Part of an iron can
- A rectangular iron chamber lock (155mm X 107mm)
- One piece of strip iron

- Fragments form at least four used iron nails of unknown manufacture

Interpretation

F373 was interpreted as a domestic rubbish pit which, judging by its location and projected deposit date range, is associated with the Anderson household who lived in the Maria Place cottage from the late-1860s to the mid-1870s.

F373 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1821-present	1730s-1900s	n/a
Peak Popularity	1837-1868	1860s-1870s	n/a
Proposed Deposit Date Range:	1870s		

F374

Feature 374 was a large oval rubbish pit measuring 1700mm X 1600mm with a depth of 1100mm. It lay close to the TS189 boundary and continued slightly under a modern concrete footing. The matrix was described as “mottled fine silty-sand” and most of the artefacts apparently came from lower down in the pit. This feature contained a relatively large artefact assemblage made up almost entirely of ceramic and glass vessels, many of which were complete. This suggests F374 was probably a commercial dump of unwanted or damaged shop goods.

F374 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	560	122	13171.30g
Glass Vessels	50	38	13281.25g
Metal	0	0	0g
Other	3	3	92.08g
Total	613	163	26544.63g

Ceramic Vessels

A large assemblage of ceramic vessels were collected from F374 (over 13kg). Around half of these were cups and saucers and many of these were deposited complete but were broken, perhaps as a result of being thrown into the pit.

Ware Types

	Ware							Total
	Whiteware	Yellowware	Buff-bodied ew	Bone China	European porc-h	Salt-glazed st-w	Bristol-glazed st-w	
Plate	18	-	-	-	-	-	-	18
Table bowl	2	-	-	-	-	-	-	2
Ashette	2	-	-	-	-	-	-	2
Tureen	4	-	-	-	-	-	-	4
Mug	2	-	-	-	-	-	-	2
Jug	1	-	1	-	-	-	-	2
Eggcup	-	-	-	-	1	-	-	1
Cup	14	-	-	19	1	-	-	34
Saucer	19	-	-	11	1	-	-	30
Mixing Bowl	3	1	-	-	-	-	-	4
Roasting Dish	-	1	-	-	-	-	-	1
Bottle	-	-	-	-	-	4	1	5
Jar	4	-	-	-	-	-	-	4
Ewer	1	-	-	-	-	-	-	1
Basin	1	-	-	-	-	-	-	1
Chamberpot	1	-	-	-	-	-	-	1
Unidentified	6	-	-	1	1	1	1	10
Total	78	2	1	31	4	5	2	122

Decoration Styles

	Decoration									Total
	UGTP	Banded	Painted	Gilt	Enamelled	Sprigged	Moulded	Incised	None	
Plate	15	2	-	-	-	-	-	-	1	18
Table bowl	1	1	-	-	-	-	-	-	-	2
Ashette	1	1	-	-	-	-	-	-	-	2
Tureen	4	-	-	-	-	-	-	-	-	4
Mug	1	1	-	-	-	-	-	-	-	2
Jug	1	-	-	-	-	-	1	-	-	2
Eggcup	-	-	-	1	-	-	-	-	-	1
Cup	4	3	2	14	1	5	-	-	5	34
Saucer	7	5	2	6	-	7	-	-	3	30
Mixing Bowl	-	-	-	-	-	-	1	-	3	4
Roasting Dish	-	-	-	-	-	-	-	-	1	1
Bottle	-	-	-	-	-	-	-	-	5	5
Jar	1	-	-	-	-	-	-	-	3	4
Ewer	1	-	-	-	-	-	-	-	-	1
Basin	1	-	-	-	-	-	-	-	-	1
Chamberpot	1	-	-	-	-	-	-	-	-	1
Unidentified	5	-	-	2	-	-	1	1	1	10
Total	43	13	4	23	1	12	3	1	22	122

Dating

Fifty-three ceramic vessels from F374 were able to be dated (25 UGTP, fifteen gilt and thirteen banded vessels). The average manufacture period was 1841-present and peak popularity 1851-1887.

Glass Vessels

Of the thirty-eight glass vessels represented in the F374 glass vessel assemblage eighteen were recovered intact. These intact bottles appear to mostly be food related

(for example salad oil and sauce bottles) but some beverage and pharmaceutical bottles were also included.

Manufacture methods

	Manufacture Method						Total
	Dip Mould	2-piece mould	Post mould	Cup mould	Turn mould	Pressed	
Dark olive round	4	-	-	-	-	-	4
Bordeaux	1	-	-	-	-	-	1
Ring-seal	1	-	-	-	5	-	6
Torpedo	-	2	-	-	-	-	2
Breffit	-	-	-	1	-	-	1
Lamont	-	-	1	-	-	-	1
Club Sauce	2	-	-	1	-	-	3
Ketchup	-	-	-	1	-	-	1
?Sauce	-	-	-	1	-	-	1
Salad Oil	-	-	-	5	-	-	5
Rectangular bevelled	-	-	-	3	-	-	3
Rectangular panelled	-	-	-	2	-	-	2
Cylindrical pill	1	-	-	-	-	-	1
Perfume	-	-	-	1	-	-	1
Ink	-	-	-	1	-	-	1
Bon-bon dish	-	-	-	-	-	1	1
Unidentified	1	-	-	1	2	-	4
Total	10	2	1	17	7	1	38

Maker's marks

Mark	Vessel	Manufacturer	Date Range
"R. COOPER & CO/ PORTOBELLO"	Black beer	Richard Cooper & co (Portobello, Scotland)	1868-ca. 1928
"A C B CO"	Club Sauce	Aire & Calder bottle Company (Yorkshire)	1850s-1900s
"BATHBY CUNLIFFE/ MANCHESTER"	Lamont patent soda	Bathby Cunliffe (Manchester)	?
"BARRETT & ELERS/ LONDON"	Breffit patent soda	Barrett & Elers (London)	?
Peacock head	Bon-bon dish	?	?

Products/brands

Product	Vessel(s)	Manufacturer	Date range
Davis Vegetable Pain Killer	2x Rectangular panelled	Perry Davis (USA) (Christchurch)	1840-20 th century
Bonnington's Irish Moss	Rectangular panelled	(Christchurch)	1870s-20 th century
Worcestershire Sauce	Club Sauce	Lea & Perrins (Worcestershire)	1850s-20 th century
Sauce	2x Club sauce	R. Miller & Co (London)	?
?Food product	Round cross- sectioned bottle	Joseph Burnett & Co (Boston)	1847-20 th century
Aerated water/soda	Lamont and Breffit patent sodas	Edwin Hodren (Whanganui)	1880s
Aerated water/ soda	Torpedo	George Gower (Whanganui)	1865-1879
Perfume	Perfume bottle	Piesse & Lubin (London and Paris)	?

Other Artefacts

The shoulder of an unglazed porcelain doll's head, a porcelain drawer handle, and a fragment of salt-glazed coarse earthenware infrastructure pipe were also recovered from F374.

Interpretation

F374 has been interpreted as a commercial dump, mainly of crockery and glass bottles. It is larger than the domestic dumps found on various parts of the site and contains far more intact, complete or nearly complete objects than would be expected from a household context. In this case it is difficult to definitively distinguish between them but it appears that the ceramics and glass make up two separate deposits, albeit which happened within a short space of time. Just across the fence on TS189 two businesses were identified which fit well with the contents of F374: Edwin Moulton, a crockery dealer who switched to selling furniture in the early 1890s, and John Coburn, a general grocer.

F374 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1841-present	1840s-1900s	n/a
Peak Popularity	1860-1887	1884-1890s	n/a
Proposed Deposit Date Range:		Early 1890s	

F379

Feature 379 was a rectangular rubbish pit measuring 1250mm X 950mm and 750mm deep. It lay partly under a modern concrete footing in the southern corner of TS192 and cuts into F385. The matrix was a dark grey sand with a rust-stained lens ca. 500mm down which marked the start of the main artefact bearing deposit. The analysis of the artefacts suggests that this deposit is a single event or short term accumulation as fragments from the same vessels were found from each spit. It is likely the rust stained lens was all that remained of some metal item deposited amongst the other material.

F379 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	287	90	6331.20g
Glass Vessels	23	13	2995.18g
Metal	0	0	0g
Other	4	4	37.29g
Total	314	108	9363.67g

Ceramics

Two vessels were recovered from F379 complete (a small salt-glazed stoneware ink bottle and a Bone China gilt Tea Leaf cup) but several more were nearly complete. This, combined with the disproportionately large ceramic assemblage could suggest that this was another commercial dump.

Ware Types

	Ware											Total
	Whiteware	Yellowware	Tin-glazed ew	Buff-bodied ew	Dyed-body ware	Bone China	European porc-h	Salt-glazed st-w	Slip-glazed st-w	Bristol-glazed st-w	?Stoneware	
Plate	15	-	-	-	-	4	1	-	-	-	-	20
Table bowl	1	-	-	-	-	-	-	-	-	-	-	1
Tureen	1	-	-	-	-	-	-	-	-	-	-	1
Mug	-	-	-	-	-	1	1	-	-	-	-	2
Jug	1	-	-	-	-	-	-	-	-	-	-	1
Eggcup	2	-	-	-	-	-	-	-	-	-	-	2
Cup	15	-	-	-	-	5	1	-	-	-	-	21
Saucer	15	-	-	-	-	3	1	-	-	-	-	19
Teapot	-	-	-	1	-	-	-	-	-	-	-	1
Mixing bowl	-	2	-	-	-	-	-	-	-	-	-	2
Strainer	1	-	-	-	-	-	-	-	-	-	-	1
Bottle	-	-	-	-	-	-	-	1	-	2	-	3
Crock	-	-	-	-	-	-	-	-	1	-	-	1
Jar	2	-	1	-	-	-	-	-	-	-	1	4
Basin	1	-	-	-	-	-	-	-	-	-	-	1
Cosmetic Jar	1	-	-	-	-	-	-	-	-	-	-	1
Toothbrush holder	1	-	-	-	-	-	-	-	-	-	-	1
Candleholder	-	-	-	-	-	-	1	-	-	-	-	1
Unidentified	4	-	-	1	1	1	-	-	-	-	-	6
Total	60	2	1	2	1	14	5	1	1	2	1	90

Decoration Styles

	Decoration									Total
	UGTP	Banded	Painted	Gilt	Enamelled	Lustre	Sprigged	Moulded	None	
Plate	15	-	-	1	1	-	1	-	2	20
Table bowl	1	-	-	-	-	-	-	-	-	1
Tureen	1	-	-	-	-	-	-	-	-	1
Mug	-	-	-	1	1	-	-	-	-	2
Jug	1	-	-	-	-	-	-	-	-	1
Eggcup	1	-	-	1	-	-	-	-	-	2
Cup	9	4	-	3	2	-	3	-	-	21
Saucer	10	4	-	3	-	1	1	-	-	16
Teapot	-	-	-	-	-	-	-	1	-	1
Mixing bowl	-	-	-	-	-	-	-	1	1	2
Strainer	1	-	-	-	-	-	-	-	-	1
Bottle	-	-	-	-	-	-	-	-	3	3
Crock	-	-	-	-	-	-	-	-	1	1
Jar	-	-	-	-	-	-	-	-	4	4
Basin	1	-	-	-	-	-	-	-	-	1
Cosmetic Jar	-	-	-	-	-	-	-	-	1	1
Toothbrush holder	-	1	-	-	-	-	-	-	-	1
Candleholder	-	-	-	1	-	-	-	-	-	1
Unidentified	3	-	1	-	-	-	-	1	2	7
Total	43	9	1	10	4	1	5	3	14	90

Maker's Marks

Mark	Manufacturer	Vessel(s)	Date Range	Reference
"CHAIN/ H & C"	Hope & Carter (Staffordshire)	Chain whiteware plate	c.1862- 1880	Godden 1988: 334
"[Asia]tic P[heasants]/ OHEC..."	Old Hall Earthenware Pottery Co. Ltd (Staffordshire)	Asiatic Pheasant whiteware plate	1862-1886	Kowalsky & Kowalsky 297
"WATER LILY," Rd diamond (print), "IRON/STONE/CHINA" (stamp)	unknown	Water Lily whiteware saucer	26 th October 1863	Godden 1988
"1882" (stamp)	unknown	Red banded whiteware saucer	1882	n/a
"2/76" (stamp)	Unknown	Red UGTP whiteware saucer	February 1876	Godden 1988
"B & C" in knot (print)	Bridgwood & Clarke (Staffordshire)	Flow blue whiteware cup	c.1859- 1864	Kowalsky & Kowalsky 1999: 126

Dating

Thirty-three of the F379 vessels were able to be dated (22 UGTP, seven banded and four gilt vessels). The average manufacture period was 1841-present and peak popularity 1851-1877. A *tpq* of 1882 can be taken from the red banded saucer. This falls outside of the calculated peak popularity period so a rough estimate determined by the dated maker's marks has been used in its place.

Glass Vessels

Manufacture Methods

	Manufacture Method					Total
	Dip Mould	Post Mould	Cup Mould	Machine made	Unidentified	
Case Gin	1	-	-	-	-	1
Coffin flask	-	-	1	-	-	1
Salad Oil	-	-	1	-	-	1
Wide-mouthed	-	1	1	-	-	2
Jar	-	-	-	1	-	1
Rectangular-bevelled	-	-	2	-	-	2
Cylindrical Pill	1	-	-	-	-	1
Square-sectioned	-	1	-	-	-	1
Unidentified	1	-	1	-	1	3
Total	3	2	6	1	1	13

Products/Brands

Only two of the F379 bottles had identifiable body embossing. A rectangular bevelled bottle held Bonnington's Irish Moss (a patent medicine made in Christchurch first produced in the 1870s) and a wide-mouthed bottle contained F. Whitlock's Delhi Chutney Sauce. Whitlock & Sons was a sauce and pickle manufacturers based in Whanganui from 1877 and the name is still used today.

Other Artefacts

Shoulder fragments from two porcelain dolls (one glazed and one unglazed) were found in Spit 1 and an aqua green glass tube (15mm diameter) and part of a porcelain toy plate were collected from Spit 3.

Interpretation

F379 appears to be another commercial crockery stock dump, probably related to Edwin moult's business on the neighbouring section.

F379 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1841-present	1877-1900s	n/a
Peak Popularity	1882-ca.1890	1880s	n/a
Proposed Deposit Date Range:	Late 1880s-early 1890s		

F385

Feature 385 appears to have been a well, measuring 950mm x 620mm and 1450mm deep, and was located in the eastern corner of TS 192. It was cut by a later rubbish pit (F379) and a concrete footing. The fill was described as “mainly loose sand with organic silt inclusions” and at the base lay a barrel hoop filled with clay containing pieces of ceramic. It is hypothesised that this clay base acted as a kind of water filter for the well. This feature was excavated in three spits, but for this analysis the spits are being considered together due to multiple joins and matches in the ceramics.

F385 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	26	10	1557.67g
Glass Vessels	12	5	895.99g
Metal	0	0	0g
Other	1	1	16.80g
Total	39	16	2470.46g

None of the metal recovered from F385 (2439.21g) was able to be identified.

Ceramics

A small assemblage of twenty-six sherds was collected from F385, representing a MNV of ten.

	Ware				Total
	Whiteware	Bone China	European porc-h	Bristol-glazed st-w	
Plate	2	-	-	-	2
Ashette	1	-	-	-	1
Tureen	1	-	-	-	1
Cup	1	-	-	-	1
Saucer	-	1	-	-	1
Bottle	-	-	-	1	1
Jar	1	-	-	-	1
Card holder	-	-	1	-	1
Unidentified	1	-	-	-	1
Total	7	1	1	1	10

Decoration styles

	Decoration				Total
	UGTP	Sprigged	Moulded	None	
Plate	2	-	-	-	2
Ashette	-	-	-	1	1
Tureen	1	-	-	-	1
Cup	1	-	-	-	1
Saucer	-	1	-	-	1
Bottle	-	-	-	1	1
Jar	-	-	-	1	1
Card holder	-	-	1	-	1
Unidentified	1	-	-	-	1
Total	5	1	1	3	10

Dating

No manufacturer's marks were found on any of the ceramic vessels, and the only datable vessels were decorated with patterns that were popular for most of the second half of the nineteenth century (Asiatic Pheasant and Rhine).

Glass

The glass assemblage from F385 is even smaller than the ceramic collection, consisting of twelve fragments from five vessels. The only complete glass vessel is a Lea and Perrins Worcestershire Sauce bottle with the "A C B Co" stamp on the base, made in a two-piece cup-bottom mould. The neck of a turn-moulded ring-seal, top of a Case Gin with tapered-up finish and base of an unidentified aqua green bottle with a round cross-section, along with the base of a colourless pressed glass tumbler make up the remaining glass vessels.

Dating

The glass vessels from F385 display a range of manufacture techniques and forms that cover a wide period of time. The single complete bottle, a Lea and Perrins Worcestershire Sauce bottle must date to after 1851 when this condiment was first imported into New Zealand, and the "A C B Co" embossing on the base dates to after about 1860. The pressed glass tumbler base is heavy and appears to have the characteristic geometric form popular from the 1840s to the 1870s (Jones 2000: 163).

Other Artefacts

The only other artefact collected from this feature was the flared rim of a glass oil lantern.

Interpretation

This well is located close to several related rubbish deposits located at the back of this portion of TS192, all of which appear to spatially relate to the small cottage which existed on this site from the early 1860s to the 1870s. This particular dwelling had a relatively high turnover of occupants, so pinpointing exactly to which occupant the deposits belong proved difficult. The fact that F385 is a well also complicates matters as the deposit could have accumulated over a long period of time.

F385 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	1834-present	1860s-1900s	n/a
Peak Popularity	ca.1860-1900	1880s-1900	n/a
Proposed Deposit Date Range:		1860s-1880s	

F497

Feature 497 was a round/oval pit located right in the southern corner of TS192. It is not mentioned in the excavation report but in the feature register it is described as measuring 1300mm X 1100mm and being 1300mm deep.

F497 Deposit Summary

	NISP	MNI/V	Weight
Ceramic Vessels	0	0	0g
Glass Vessels	29	21	4676.43g
Metal	0	0	0g
Other	1	1	23.11g
Total	30	22	4699.54g

Glass Vessels

Nine of the F497 glass bottles were recovered from the feature intact.

Manufacture methods

	Manufacture Method				Total
	Dip Mould	Cup mould	Turn mould	Unidentified	
Ring-seal	-	-	3	-	3
Coffin flask	-	1	-	-	1
?Soda	-	-	1	-	1
Club sauce	-	3	-	-	3
Ketchup	-	1	-	-	1
Rectangular bevelled	-	-	-	1	1
Rectangular panelled	-	1	-	-	1
Oval-sectioned	-	1	-	-	1
Patent medicine	-	1	-	-	1
Cylindrical pill	2	-	-	-	2
Perfume	-	1	-	1	2
Unidentified	2	2	-	-	4
Total	4	11	4	2	21

Products/Brands

Product	Vessel(s)	Manufacturer	Date Range
Atkinson & Barker's Royal Infants' Preservative	Patent medicine	Atkinson & Barker	1790s-1880s (1850-1880s with cup mould)
Florida water	Perfume	Murray & Lanman (New York)	1835-1861
Scott's Emulsion	Rectangular panelled	Scott & Bowne Company (New York)	>1876
Worcestershire sauce	2x Club sauce	Holbrook & Co	1875-1900s

Other Artefacts

The only other artefact from this feature found amongst the material received for analysis was a colourless glass stirring rod.

Interpretation

The small artefact assemblage recovered from F497 is mostly made up of complete pharmaceutical bottles. This, along with the glass stirring rod, suggests that it relates to a chemist or other medical context. The dates from the glass vessels roughly correlate with the occupation of this corner of the site by Dr Edward Marshall (mid-1870s to 1880s) and so this has been interpreted as a clean out event by him.

F497 Calculated Date Ranges

	Ceramics	Glass	Other
Manufacture	n/a	1870s-1900s	n/a
Peak Popularity	n/a	1876-1880s	n/a
Proposed Deposit Date Range:		1880s	