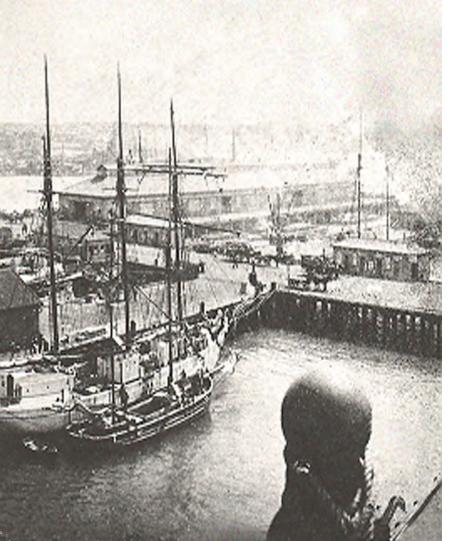


Clough and Associates Monograph Series

no. **2**

Middle Class Spread

Archaeology at the Corner of Wynyard Street and Grafton Road



Archaeological Report for The University of Auckland, 2007



MIDDLE CLASS SPREAD ARCHAEOLOGY AT THE CORNER OF WYNYARD ST AND GRAFTON RD

Report in Fulfilment of NZHPT Authority No. 2003/232

Prepared for

Haines Planning/University of Auckland

Ву

Simon H. Bickler (PhD)

Rod Clough (PhD)

Glen Farley (MA Hons)

Marianne Turner (PhD)

Dante Bonica

Tania Mace (MA Hons)

Kate Hill (MA Hons)

Jennifer Low (MA Hons)

2007

(v2.0)

Clough & Associates Ltd Heritage Consultants 321 Forest Hill Rd, Waiatarua, Auckland 0612 Tel./Fax (09) 814-1946 Mobile (0274) 850-059 Email: heritage@clough.co.nz www.clough.co.nz

EXECUTIVE SUMMARY

Summary

The excavations around Wynyard St have added significantly to an evolving picture of 19th and early 20th century inner-suburban Auckland life. The original subdivision of the properties along both Wynyard St and Grafton Rd appears to have been well organised and engineered. Drainage systems put in on the property were substantial, consisting of 0.5-1m deep trenches filled with basalt rocks running diagonally across the slope and channelling water down into Grafton Gully. The first houses generally consisted of single storey villas which were then modified substantially during their history. At least two and possibly three of the earlier houses were removed during the 20th century. Infilling of the allotments continued in the 20th century and there is evidence of garden landscaping and new and improved drainage added to the site.

During the 19th and early 20th centuries, the houses appear to have been occupied by relatively wealthy Aucklanders. The most prominent Aucklander identified was George Fraser, owner of the Phoenix Foundry, who lived at 36 Wynyard St and probably built his own private gold assaying laboratory in the land behind his house. He had good access down to the Foundry buildings in Grafton Gully below.

A disturbed midden excavated in Allotment 20 is also the first archaeologically recovered remnant of the pre-colonial use of the general area by Maori, and suggests the possibility that future work may uncover further information. The on-going development of the area makes this a priority for future research.

Twenty years after the arrival of Europeans on the shores of the Waitemata to create the new capital of New Zealand at Auckland, the area had undergone significant change. Around Commercial, Official, Freemans and Mechanics Bays, the early whares built for settlers had given way to a burgeoning industrial, retail, bureaucratic and domestic entrepot serviced by a network of transport routes serviced by horse and cart, train and sail. On the hills above Queen Street, Government House and Albert Barracks dominated the ridge line. However, the growing population demanded more land for housing near the centre of town and land sales were common. The sale of Wynyard Street properties, first to a developer and subsequently to families, laid the basis of a middle class suburb. The artefacts recovered from the excavations suggest a relatively wealthy group of families living along the street. The White and the Fraser families were both visible in the archaeological record. While we have yet to turn up information about the Whites, we were fortunate to have the assistance of the Fraser family during our investigations, including George Fraser (V).

With the growth of the University, the houses along Wynyard Street were gradually either occupied by different departments or removed. The new School of Business represents a new phase in the history of the Street.

TABLE OF CONTENTS

Middle Class Spread	i
Archaeology at the Corner of Wynyard St and Grafton Rd	
Executive Summary	
Table of Contents	
List of Figures	
List of Tables	
Chapter 1: Archaeology of Wynyard St	
Introduction	
History of the Site	4
Site Assessment	
Methodology	
Chapter 2: Grafton Rd Properties	
Allotment 15	
20 Grafton Rd	
18 Grafton Rd	
Allotment 15 Excavations	
Chapter 3: Carpark Area	
Allotment 16	
Allotment 16 Excavations	
Allotment 17	
The Fraser Family at 36 Wynyard St	
Allotment 17 Excavations	
'The Lab'	
Chapter 4: 28-34 Wynyard St	
Introduction	
Allotment 18	63
Allotment 18 Excavation	64
Allotment 19	69
Allotment 19 Excavation	71
Brick Drain (Allotment 19)	75
The 'Cellar' (Allotment 19)	77
Bottle Drain (Allotment 19)	83
Garden Feature (Allotment 19)	88
Rubbish Pit 2 (Allotment 19)	94
Discussion (Allotment 19)	
Allotments 20 and L18	
Features (Allotment 20)	99
Midden Excavation (Allotment L18)	105
Discussion (Allotments 20 and L18)	109
Chapter 5: Material Culture	
Introduction	
Ceramics	
Drink	116
Food	130
Tobacco	136
Household	137

Pharmaceutical	141
Grooming	144
Assaying	149
Other Items	153
Discussion of Artefact Assemblage	159
Chapter 6: Discussion and Conclusions	162
Site History	162
Artefacts	
Summary	170
Appendix	172
Acknowledgements	172
Bibliography	173

LIST OF FIGURES

Figure 1. Location of Project showing old allotments in project area	1
Figure 2. Aerial view of site prior to demolition of buildings	2
Figure 3. Notice of Sale, Southern Cross newspaper, 3 August 1860 (pp.2-3)	5
Figure 4. 1860 plan SO 2A, showing structure on Allotment 19	7
Figure 5. Close-up of 1866 Vercoe & Harding map (Auckland Public Libraries)	7
Figure 6. 1882 Hickson map showing structures in project area. Note the Phoenix Foundry on Stanley	St
in Grafton Gully	
Figure 7. Birds-eye view from Stevens 1885 showing structures in project area; note Phoenix Foundry.	9
Figure 8. 1908 map	
Figure 9. The project area, showing the location of modern buildings (in blue outline) and earlier buildi	
shown in 1860, 1866 and 1908 maps	
Figure 10. View of initial areas of excavation: Areas A, B, C, and D	
Figure 11. 1908 plan of structures on Allotment 15 and excavated features	
Figure 12. Plan of rubbish scatters at the back of Allotment 15, with contents identified below	20
Figure 13. View of the back of Allotment 15 looking north	
Figure 14. Ceramics found in fill, Allotment 15	
Figure 15. 'Olympia' plate from fill	
Figure 16. Metal objects from fill including nails and bottle cap	
Figure 17. Horseshoe from Allotment 15 fill	
Figure 18. Plan of rubbish pits behind 18 and 20 Grafton Road, with Pit 1 stratigraphy	
Figure 19. View of metal (milk?) container, in situ. Allotment 15 rubbish pit 1	
Figure 20. Allotment 15 rubbish pit 2	22
Figure 21. Well behind the 20 Grafton Rd house	
Figure 22. Ceramics form the well	
Figure 23. Square drain at north-eastern corner of 20 Grafton Rd	
Figure 24. Drain at north-eastern corner of 20 Grafton Rd (square drain removed)	
Figure 25. Garden tiles from 20 Grafton Rd backyard	
Figure 26. Metal fragments from Allotment 15 (clockwise from top left): flat metal disk; base of a round	
metal container; possibly parts of a shell casing from a large firearm round	
Figure 27 Allotment 16 - Auckland City Plan 1908. Red shaded areas indicate structures shown on 186	
plan	
Figure 28. Brick and concrete fill under paving and asphalt at Wynyard St frontage of Allotment 16	
Figure 29. Building debris in Allotment 16	
Figure 30. Guichard Brothers roof tile	
Figure 31. Winstone Ltd roof tileFigure 32. Fill at back of Allotment 16	29 20
Figure 33. Building rubble used as fill below car park	
Figure 34. G. Boyd and F.W. Hunt (Auckland) bricks found in rubble. Baxters bottle also recovered	
Figure 35. View of Allotment 16 looking east showing old drainage	
Figure 36. Plan of excavated material in Allotment 16 (see table below for description of features)	
Figure 37. Harris Matrix of features in Allotment 16 excavation (ArchEd v1.4)	
Figure 38. View of excavated features in Allotment 16 (looking east)	
Figure 39. Close-up of 'H' structure (chimney/fireplace) in Allotment 16, looking east	
Figure 40. Collapsed brick and slate near structure	
Figure 41. Brick and concrete base course under concrete floor	
Figure 42. Brick foundation and hole in concrete	
Figure 43. The Laun-dry-ette washing machine (Keith 1984:120)	
Figure 44. View of drain feature in north-eastern corner	. 37
Figure 45. Plan and section drawing of drain feature in north-eastern corner	
Figure 46. Buildings on Allotments 17 and 18 in 1908 (Auckland City Maps). Red shaded areas show	50
buildings on the properties in 1866	40
Figure 47. George Fraser and staff of the Phoenix Foundry (Courtesy George Fraser V)	

Figure 48.	The Fraser house in 1870s (photographer: Henry Winkelmann; Auckland City Libraries,	
Heri	tage Images Online, W1-281)	48
Figure 49.	Fraser House in 1963 (courtesy George Fraser [V])	48
	Phoenix Foundry 1864 (courtesy George Fraser)	
	Phoenix Foundry 1875 (courtesy George Fraser)	
	'Foundry' by John Weeks (courtesy University of Auckland Art History Department)	
Figure 53.	Results of conductivity survey in car park.	52
	Initial excavations showing northern section through site and plan of brick foundations	53
	Section (looking north) though Allotment 17 showing slag filled used for levelling	
	naeologist Mat Campbell at right)	
	Section (looking south) through car park area	
	View of foundation wall for bay window (Fraser house)	
	Base of chimney (southern end of house)	
	Nails and other metal objects	
Figure 60.	Glass fragments found in drain	55
	Plan of the 'Laboratory'	
	View of the 'Lab' looking east	
	Close-up of area of 'Lab' where artefacts found	
	Basalt blocks in flooring showing grooves	
	Excavation of angel figurine.	
	Post hole in south west corner	39
	re-left	60
	Basalt drain underneath the 'Lab'	
	Large metal pot containing burnt ash	
Figure 70	Angel figurine from the laboratory floor	60 60
	Features excavated in Allotments 18-20.	
	Allotment 18 buildings (red outline) overlying 1908 plan, with 1866 buildings (red)	
	Brick feature and broken ceramics in the vicinity of 18/4	
	Eastern end of Allotment 18 showing shade house and parking area	
	View of Allotments 17-19 after preliminary clearance (18 in centre)	
	View of northern boundary wall	
	Close up of ceramic drain between Allotments 18 and 19	
	View of northern boundary wall in Allotment 18 looking east	
	Stratigraphy of area between Allotments 18 and 19	
	Plaster fragments, pin and bottle - on base in a circle is written 'S 610/U G B". Outside the	
	e is 'C' on one side and '42' on the other	68
	Plan of buildings on Allotment 19 (red outline) overlaid on 1908 plan, with buildings from 1	
plan	(red) and 1860 plan (green)	70
Figure 82.	View of excavations in Allotment 19 (after preliminary clearing)	73
Figure 83.	View of area behind crèche building showing old post holes and puriri post (inset)	73
	'T' brick used in old foundations	73
Figure 85.	Items found at the end of the foundation line, including a grey painted ball, a test tube with	
holes	s and a small bottle with 'Canadian Wineries Limited Canada' on the base	74
	View of well at front of Allotment 19	
	Sectioned view of well	
_	View of frogged brick drain at the front of Allotment 19 (looking west)	
_	View of frogged brick drain showing yellow 'B.B.C.' bricks at west end (looking east)	
_	'B.B.C.' brick from drain	
	Red, rectangular frogged brick from drain	
	Removal of upper fill in the cellar	
	Marianne Turner excavating in the cellar	
	View of cellar looking south	
	Close up of brick work showing different types of brick used	
Figure 96.	View of internal stratigraphy of cellar	80

Figure 97. Stratigraphy of 'cellar'	81
Figure 98. Objects from 'cellar' fill	
Figure 99. Belt buckle from the base of the 'cellar'	
Figure 100. Glass fragments including a wine glass fragment	
Figure 101. Tumblers from 'cellar'	
Figure 102. Penny ink bottles	
Figure 103. View of bottle drain prior to excavation	
Figure 104. Excavating bottle drain	
Figure 105. View of basalt drain below bottle drain	
Figure 106. Excavation of basalt drain	
Figure 107. Door knob found in bottle drain	
Figure 108. White stone ball from bottle drain	
Figure 109. Nail from drain	
Figure 110. Exposure of the garden feature behind crèche	
Figure 111. Garden feature fully excavated	
Figure 112. Close up of brick work	
Figure 113. Debris from fill	90
Figure 114. Domino set from garden feature	
Figure 115. Lenses recovered from garden feature	
Figure 116. Stamp with decorative handle and base. Letters inserted in the base read 'J.White'	
Figure 117. Objects from garden feature including metal nail, metal brush handle and boot heel	
Figure 118. Rubbish Pit 1 looking south-east (prior to excavation)	
Figure 119. Rubbish Pit 1 east section.	
Figure 120. Plan and section of Rubbish Pit 19/1	
Figure 121. Terracotta figurine	
Figure 122. Allotments 20 and L18 with modern buildings overlaid on the 1908 plan and main excav	
features (1866 structures in mottled red)	
Figure 123. View of location of Rubbish Pit behind crèche building (inset – plan looking west)	
Figure 124. Half sectioned view of Rubbish Pit showing shallow base	
Figure 125. Plan and section drawing of Rubbish Pit 1	
Figure 126. Plan of brick feature	102
Figure 127. View of lower brick structure prior to removal of corrugated iron	
Figure 128. View of lower brick structure after removal of corrugated iron and excavation	
Figure 129. Upper brick structure showing drain running east to lower structure (above), with close-u	
drain (right), and Boyd brick (below)	
Figure 130. Ceramic chamber pot with 'Lasso' pattern mark	
Figure 131. Cross section through fill material showing building rubble used to level the land	
Figure 132. Baulk of midden excavation showing old shell deposits	
Figure 133. Examples of aerated water bottles (E. Dixon, J. Grey and Sons and Waiwai Ltd)	
Figure 134. Metal cigarette case	
Figure 135. Clay pipes from Allotment 19	
Figure 136. Glassware (from left: wine glasses and tumblers from Allotment 19 Cellar; etched glass to	
Allotment 17)	
Figure 137. Blacking and boot polish containers (left: two-tone Lambeth pottery blacking jar; middle	
Spooners Boot polish, right: Tappans Reluent)	
Figure 138. Sperm whale oil for sewing machine (front and back)	
Figure 139. Medicinal bottles (from left: Eno Fruit Salts, Frederick Sterns & Co., Sharland & Co.)	
Figure 140. Examples of ceramic bathroom wares	
Figure 141. Brushes from garden feature Allotment 19	
Figure 142."WARRANTED" amd Elephant symbol on toothbrush handle	
Figure 143. Toothbrush handle with 'THE BEATRICE LAMBERT & CO' (L)	
Figure 144. Rimmel perfume bottle	
Figure 145. Crucibles recovered (right: view from the top)	
Figure 146. Crucible lid 1 with 'Morgan Crucible Ltd Battersea England'	
Figure 147. Crucible lid 2	

Figure 148. Base of graphite crucible	151
Figure 149. Bone ash cupel	151
Figure 150. Quartz fragment	151
Figure 151. Morganite Crucible Ltd (Morgan MMS), UK	151
Figure 152. Glass fragments found around assaying equipment	152
Figure 153. Parts of a metal grill found next to the lab.	152
Figure 154. Obverse (left) and reverse of Somerville's 1857 penny token	154
Figure 155. Looking up Shortland Street showing City Mart. Richardson 1865. APL Neg 4-183	154
Figure 156. Looking towards City Mart from across Queen Street. Richardson 1865. APL Neg 4-404.	155
Figure 157. Advertisement for City Mart produce, The Southern Cross 5 June 1857:1	155
Figure 158 Gun flint fragment from Lot 17	156
Figure 159. Animal bones from Lot 19 "Cellar"	157
Figure 160. Bone from Lot 19 "Garden Feature"	158
Figure 161. Bones from Lot 20 Brick Feature 2 (Rodent bone, in bottom right)	158

LIST OF TABLES

Table 1. 1860 plan SO 2A with modern address information	6
Table 2. Structures to be investigated	
Table 3 Description of features (see Figure 36)	
Table 4. Glassware from Cellar	
Table 5. Stoneware from the Cellar	79
Table 6. Types of bottle in the bottle drain	84
Table 7. Glass, stoneware and metal objects from the garden feature	
Table 8. Miscellaneous items from the garden feature	93
Table 9. MNI of Midden Shell Species	
Table 10. Ceramic fabric and decoration	
Table 11. Colour of patterns on ceramics	112
Table 12. Vessel function and form	113
Table 13. Patterns identified in assemblage	114
Table 14. Manufacturer's and maker's marks	
Table 15. Black beer bottles	123
Table 16. Champagne bottles	125
Table 17. Tobacco-related artefacts	
Table 18. Glassware	137
Table 19. Personal items found on Wynyard St excavations	146
Table 20. Animal bone from Wynyard St contexts	
Table 21. Ratio of black beer to champagne for Wynyard St features	

CHAPTER 1: ARCHAEOLOGY OF WYNYARD ST

INTRODUCTION

Project Background

The University of Auckland is building a new Business School on land at the corner of Wynyard Street and Grafton Road (Figure 1). Buildings located at 18-20 Grafton Rd and along the southern side of Wynyard St, which included crèche and office facilities, and associated carparks were removed to make way for the development. Since a number of 19th century buildings had formerly occupied the site and parts of the area were relatively undeveloped, the NZ Historic Places Trust advised the University that there was potential for archaeological remains relating to 19th century Auckland.

An authority to modify an archaeological site within the area of the Business School complex was granted in 2003 (No. 2003/232), conditional on an archaeological investigation being carried out and monitoring of earthworks for the project. This report describes the archaeological investigations in this Victorian middle-upper class inner suburban street.

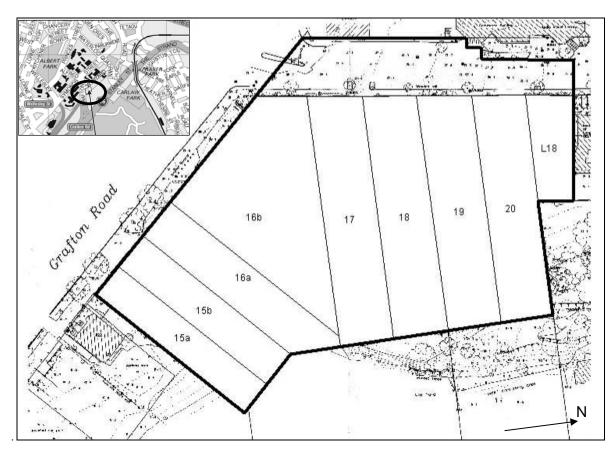


Figure 1. Location of Project showing old allotments in project area

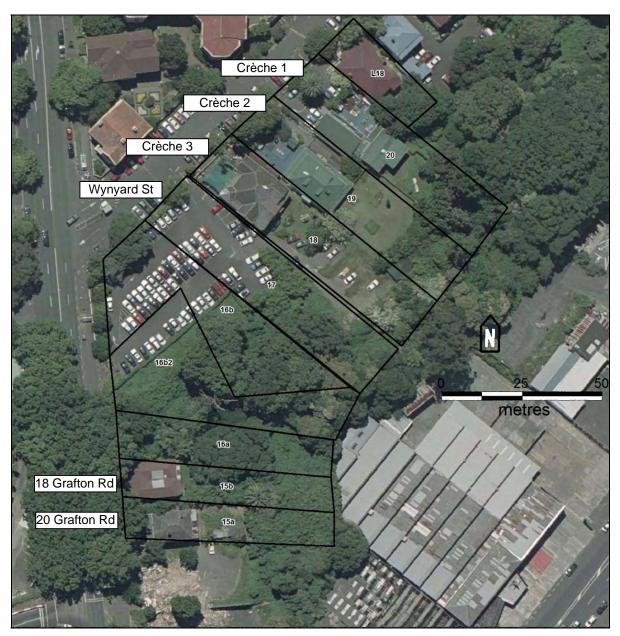


Figure 2. Aerial view of site prior to demolition of buildings

Historical Archaeology in Auckland

Redevelopment of many areas of Auckland has resulted in a number of archaeological projects investigating the growth of the colonial town in Auckland during the 19th century. From its founding in 1840, overlooking the mangrove swamps of the Waitemata Harbour, Auckland has grown substantially both north and south of the harbour with an ever expanding sprawl coupled with increasing density of occupation. Today, areas of Greater Auckland that had been used for agricultural purposes in colonial times and remained in production during the 20th century are now succumbing to the pressures of urbanisation.

Such changes have been part of the historical development of Auckland, but the systematic archaeological investigation of the transformation of Auckland during the 19th and 20th centuries has always been difficult to achieve. However, since the introduction of the Historic Places Act in 1980 followed by the Resource Management Act in 1991, together with their subsequent amendments, it has been possible to examine areas being developed and explore the earlier development of parts of Auckland.

Macready (1991) has summarised the nature of investigations in urban Auckland up to that date, highlighting the investigations of major infrastructure elements of central Auckland including Auckland's Gaol and Courthouse (Best 1987, 1992), Victoria Hotel (Brassey and Macready 1994), Fort Ligar (Smith 1989; Brassey 1988), and Brown's Mill (Brassey 1990). More recent investigations at Britomart have highlighted the growth of Auckland's harbour and inner-city transport (Bickler *et al.* 2005) and provided a wealth of information on industrial, domestic and maritime activities on Auckland's waterfront during the 1870s and 1880s. The opening of the new Britomart Railway Station in 2003 within land that was reclaimed specifically to build the 1885 Queen St Railway Station, as well as the co-opting of the old Central Post Office building as part of the new station, illustrates the social and economic cycles evident in Auckland's material cultural remains.

Investigation of various industrial sites has also taken place, most notably at the Pollen brick works and pottery (Best and Clough 1988) and Te Whau pottery works (Best 1993). This has been followed up more recently with excavation of parts of the Phoenix Foundry in Grafton Gully, neighbouring the Wynyard St properties reported on here (Clough *et al.* 2004a).

Brassey and Macready's excavations of areas in downtown Auckland which were traditionally considered 'slum areas' provided insight into the material signature of these communities. In contrast to these 'slum areas', the properties subdivided off along Wynyard St and Grafton Rd appear to have been sold to middle class Aucklanders, with a number of villas soon erected on the properties. The extent to which class and wealth were reflected in the archaeological record represented a significant focus for the investigations.

HISTORY OF THE SITE

Background Research

Historic research was carried out by Tania Mace during the archaeological assessment of the property (see below). Early maps and plans held at Land Information New Zealand (LINZ) were examined and relevant archival material was researched including early photographs, plans and maps and street directories. The New Zealand Archaeological Association regional site file was searched for archaeological sites recorded on and in the vicinity of the property. Haines Planning provided plans of the development. This research is summarised here but the details of the occupation of individual allotments is presented in later chapters. Further research was carried out following the excavation, including interviews with the Fraser family, former owners of one of the properties.

Maori Occupation

Pre-European Maori occupation of the area was centred on the kainga of Horotiu, an undefended village located approximately where the current Old Arts Building on Princes St now stands (Sinclair 1983:128). The area of the current Wynyard Street project may have been used for horticultural and food storage activities associated with the settlement. Subsequent 19th and 20th century occupation has substantially modified the area was considered likely to have destroyed any evidence of earlier occupation.

Early European Land Use

European occupation started with sale of the land by the Government in August 1860. Prior to this date it had been reserve land, though the purpose for which it was reserved is not known. The subsequent ownership of the various allotments and the buildings constructed are detailed in this report up to 1902, with additional information derived from a map compiled in 1908. This information was used to focus the archaeological survey to determine whether archaeological remains such as old building foundations were likely to be present. The University bought the land in the early 20th century and later closed off Wynyard St.

Land Sale

The August 1860 land sale was part of a substantial sale of government land in Auckland. Included in the sale by auction were several sections on the southern side of Wynyard Street and the eastern side of Grafton Road near the intersection of these streets. The sections were sold for prices well above the reserve with many selling for as much as three or four times the reserve price. Most of the land near the northeast corner of Grafton Road and Wynyard Street was purchased by William Aitken, who also invested heavily in other blocks of land offered at the auction. Aitken did not develop his land, preferring to sell it, presumably at a profit. During the 1860s the first buildings appeared on the land. (See following chapters for ownership of individual lots)

Notice of Sale

A notice of the result of the Government land sale including the lots at Wynyard and Grafton Streets was published in the *Southern Cross* newspaper, 3 August 1860 (pp.2-3). It lists the Wynyard Street lots sold to William Aitken and other buyers.

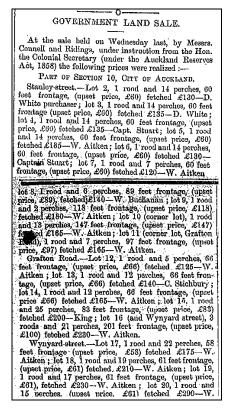


Figure 3. Notice of Sale, Southern Cross newspaper, 3 August 1860 (pp.2-3)

Allotments

The archaeological and archival research is best described with reference to the allotment numbers of the original 1860 subdivision (Figure 4, see also Figure 1). Although subsequent subdivision has occurred, most of the structures present in the area are centred in their original allotments. The details of the allotments are given below in Table 1. The original allotments numbers were 15 to 20, plus a later allotment also numbered 18. The latter has been labelled L18 in this report and two of the allotments have been further divided (a and b) for convenience.

Continued on next page

Clough & Associates Ltd. Page 5 Middle Class Spread

Code	Allotment	Street Address
15a	Part Allotment 15 Section 10, City of Auckland, DP 924	20 Grafton Road
15b	Part Allotment 15 Section 10, City of Auckland, DP 924	18 Grafton Road
16a	Part Allotment 16 Section 10, City of Auckland	
16b	Lot 1 DP19659 & Lot 2 DP 19659 (corner of Grafton Road and Wynyard Street)	38 Wynyard St
17	Allotment 17 Section 10, City of Auckland, DP 27319	36 Wynyard St
18	Crèche 3 (Allotment 18 Section 10, City of Auckland, DP 27319)	34 Wynyard St
19	Crèche 2 (Allotment 19 Section 10, City of Auckland, DP 27319)	32 Wynyard St
20	Crèche 1 (Allotment 20 Section 10, City of Auckland, DP 27319)	30 Wynyard St
L18	Institute of Linguistics (Allotment 18 Section 10, City of Auckland, DP 27319)	28 Wynyard St

Table 1. 1860 plan SO 2A with modern address information

Maps

The 1866 (Vercoe and Harding) and 1908 (Wrigg) maps offer the most detailed historic information on the structures built on the allotments. Within 6 years of the subdivision, William Aitken had sold most of the properties and their new owners had built houses on them of relatively small sizes (Figure 5). Smaller subsidiary buildings of various functions are also visible and for the most part probably represented outhouses, although a larger L-shaped structure at the front of Allotment 18 might have been a stable. The 1882 (Hickson) map shows a similar number of buildings to the 1866 map, but shows a house on Allotment 17. This property was owned by George Fraser, the owner of the Phoenix Foundry, which is clearly identified to the south on Stanley St (see Clough et al. 2004a).

Stephens' 1886 view of central Auckland presents an idealised view of the town, but Wynyard St (Figure 7) looks like a well-to-do neighbourhood with landscaping and tall elegant trees. To the south the buildings of the Phoenix Foundry area clearly apparent with its owner's, George Fraser's, house just visible nestled amongst the trees behind Wynyard St. By 1908 (Figure 8), some of the smaller structures have gone, although others have appeared and many of the houses appear to have been modified, shifted or possibly replaced. During the 20th century, at least three of the buildings along Wynyard St disappeared, with one modern prefabricated building appearing in Allotment 20. The houses in Allotment 16 and 17 were demolished after the University took over the properties in the 1960s and replaced with an asphalt carpark.

The identification of previous structures identified by the historical research are summarised in Table 2 and Figure 9. This information then provided the basis for the archaeological assessment carried out in the project area.

> Page 6 Middle Class Spread

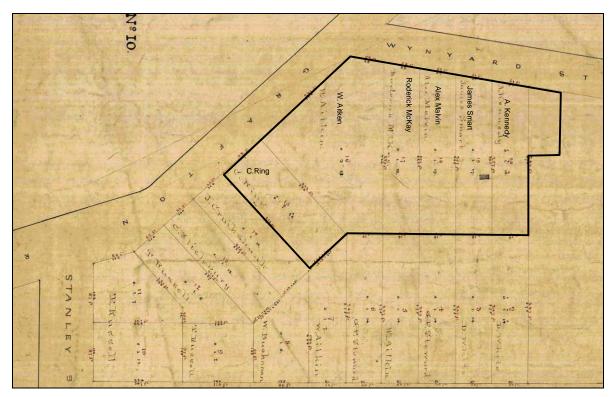


Figure 4. 1860 plan SO 2A, showing structure on Allotment 19



Figure 5. Close-up of 1866 Vercoe & Harding map (Auckland Public Libraries)

Figure 6. 1882
Hickson map
showing
structures in
project area.
Note the Phoenix
Foundry on
Stanley St in
Grafton Gully

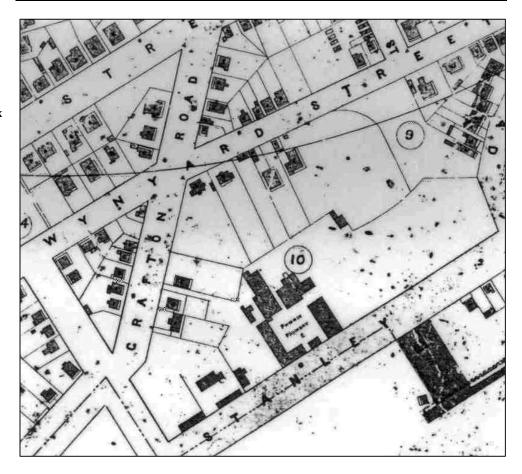


Figure 7. Birdseye view from Stevens 1885 showing structures in project area; note Phoenix Foundry

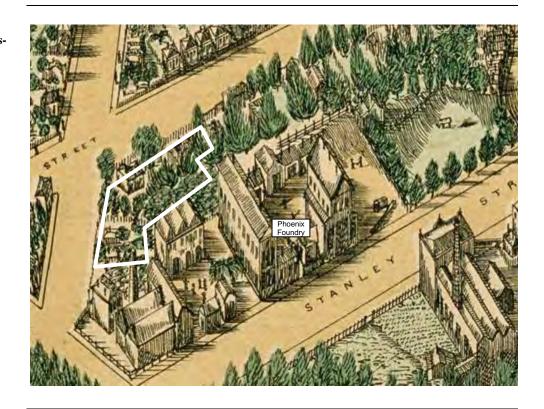


Figure 8. 1908 map

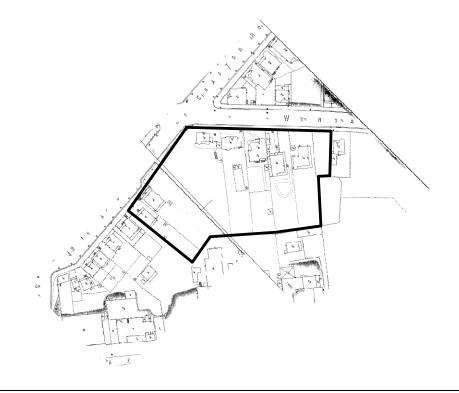


Table 2. Structures to be investigated

Structure	Allotment	Description from 1908 and 1866 Plans	
15a/1	15a	20 Grafton Road; 1 storey wooden building, shingle roof (1908&1866)	
15a/2		1 storey wooden building (outhouse?) (1908)	
15a/3		1 storey wooden building (outhouse?) (1908)	
15b/1	15b	18 Grafton Road; 1 storey wooden building (1908)	
15b/2		1 storey wooden building (outhouse?) (1908)	
16b/1	16b	38 Wynyard St; 1 storey large wooden building (1908)	
16b/2		1 storey wooden building (outhouse?) (1908)	
16b/3		Staircase (1908)	
16b/4		1 storey wooden building, shingle roof (1866)	
17/1	17	36 Wynyard St; 1 storey large wooden building (1908 and 1882)	
17/2		1 storey wooden building (outhouse?) (1908)	
17/3		1 storey wooden building (outhouse?) (1908)	
18/1	18	34 Wynyard St; 1 storey wooden building (outhouse?) (1908)	
18/2		1 storey wooden building (outhouse?) (1908)	
18/3		1 storey wooden building (outhouse?) (1908)	
18/4		1 storey wooden building, slate roof (1866), replaced by 18/1	
18/5		L-shaped wooden building (stable/outhouse) (1866)	
19/1	19	32 Wynyard St; 1 storey large wooden building, slate roof (1908 &	
		1866)	
19/2		Unknown structure (1860 SO 2A plan)	
19/3		1 storey wooden building (outhouse?) (1908, 2 smaller structures	
		shown here 1866)	
20/1	20	30 Wynyard St; 1 storey large wooden building (1908)	
20/2		1 storey wooden building (outhouse?) (1908)	

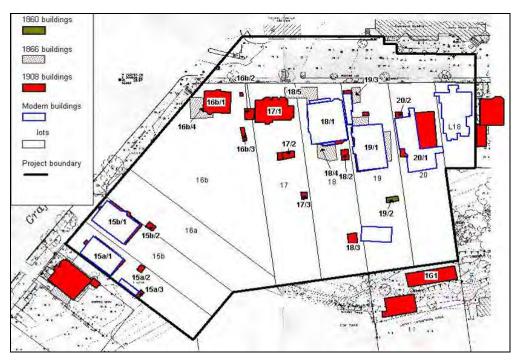


Figure 9. The project area, showing the location of modern buildings (in blue outline) and earlier buildings shown in 1860, 1866 and 1908 maps

Clough & Associates Ltd. Page 10 Middle Class Spread

SITE ASSESSMENT

Introduction

Field survey was carried out on the property in 2002 and 2003 with the information generated from the background historical research used to guide identification of possible earlier structural remains. A 1.2m long hand-probe was used to locate features and small test pits were dug to investigate possible archaeological features encountered. Not all areas could be examined owing to current uses of the property with buildings, asphalt and vegetation hampering efforts to establish the presence of sub-surface archaeological remains.

An area to the south of the property was also briefly examined in 2003 although outside the major development area (Bickler *et al.* 2002). Here the remains of some earthworks were apparent and included a small trench, possibly part of a defensive structure related to Albert Barracks used for guarding the area across Grafton Gully or part of 19th century landscaping for the houses. Test pits suggested that much of the area had been in-filled during the early 20th century. (See Clough *et al.* 2004b).

Assessment Results

The archaeological assessment established that:

- A large portion of the proposed project area, which included the majority of recorded 19th century structures, could not be investigated owing to present uses of the site.
- Where testing could be carried out, probable evidence of 19th century structural and artefactual remains was encountered in the vicinity of outhouse structures 15/2, 18/2 and 19/2 (see Figure 9).
- Adjacent areas to the south of the proposed project area showed clear indications of earthwork structures which might be associated with either military activities of the 19th century or landscaping relating to other 19th century buildings.
- The results of the assessment were used to develop a strategy for investigation of the property during the earthworks. This methodology, along with necessary protocols, was submitted to the NZ Historic Places Trust and formed the basis of the archaeological investigations carried out under Authority No. 2003/232.

Continued on next page

Clough & Associates Ltd. Page 11 Middle Class Spread

METHODOLOGY

Research Aims

The archaeological investigations aimed to:

- Establish the full extent and nature of surviving archaeological evidence on the development site.
- Establish the nature of mid to late 19th century occupation of the site on the basis of archival evidence, structural remains and evidence of lifestyle revealed by associated artefacts.
- Focus particularly on the relationship between the site and the neighbouring Phoenix Foundry in Grafton Gully. Fraser, the Foundry manager, was known to have occupied part of the site, and materials (slag) from the foundry had been observed beneath Crèche 1 when it was removed. Since the Foundry had been archaeologically investigated as part of the Grafton Gully monitoring exercise (Clough *et al.* 2004a) this would provide the opportunity to explore the relationship between the commercial and residential aspects of the foundry operation.
- Add to existing knowledge of the material remains/artefact assemblages recorded from 19th century archaeological sites in Auckland.

Excavations

The following procedure was adopted:

- 1. Tarmac and surface debris were removed by machine under archaeological supervision.
- 2. During the initial removal, recording of artefacts was broadly categorised into 4 general areas (Areas A-D), but as features were exposed, the original property allotments were used for cataloguing (Figure 10).
- 3. Areas of fill (including slag infill in Allotment 17) were stripped down by machine under archaeological supervision to expose the 19th century ground surface.
- 4. Archaeological features uncovered in each allotment were manually excavated and recorded using standard archaeological techniques.
- 5. Additional features were then recorded and excavated as they were exposed during bulking out of the predominantly natural base (e.g., features such as wells)
- 6. Recording of houses that were demolished was also carried out during the project (see below).

Continued on next page

Clough & Associates Ltd. Page 12 Middle Class Spread



Figure 10. View of initial areas of excavation: Areas A, B, C, and D

Demolition

The development project involved the moving of a number of buildings on the property and the demolition of three buildings: 32 Wynyard St and 18 and 20 Grafton Rd. A photographic record of the demolition process was made and construction details recorded. These are provided in a separate report (Bickler 2004).

METHODOLOGY, CONTINUED

Artefact Sampling and Recording

Artefact sampling and recording was based on the following procedure:

- 1. The locations of individual artefacts or deposits of artefacts (as appropriate) were recorded on the site plan.
- 2. All diagnostic artefacts from significant primary deposits were retained.
- 3. Artefacts from other contexts were sampled, based on completeness of artefacts, uniqueness and rarity, and retention of a representative sample of each category of artefact (e.g. glassware, ceramics, clay pipes, metalwork).
- 5. Artefacts not kept were disposed of on site having been briefly recorded.
- 6. Artefacts were classified by type and analysed by appropriate specialists.
- 7. Selected artefacts were digitally photographed and the photographs either featured in the final report or submitted on an accompanying CD.

Project Personnel

The following personnel were involved in the project:

Archaeology Team	Responsibilities	
Simon Bickler, PhD	Co-Director, IT, Photography	
Rod Clough, PhD	Co-Director, Metals Analysis	
Glen Farley, MA	Field Archaeologist, Monitoring, Mapping	
Marianne Turner, PhD	Field Archaeologist, Bottles & Stoneware Analysis	
Dante Bonica	Field Archaeologist, Artefacts	
Barry Baquié, MA, Mathew Campbell, PhD Jacqui Craig, MA Mathew Felgate, PhD	Field Archaeologists	
	Additional Specialists	
Mica Plowman, MA	Ceramics Analysis	
Tania Mace, MA	Historical Research	
Kate Hill, MA	Historical Research (Fraser Family)	
Sarah Macready, MA	Editor	
Jennifer Low	Artefacts	

Structure of Report

The report is designed to place the range of artefacts and structures recovered by the archaeological investigations within their historical context. The report is structured according to investigations of the major historical allotments, providing a 'culture history' of each allotment based on both archival and material cultural remains (Chapters 2-4). A summary of the artefacts recovered (Chapter 5) is also provided and comparison is made with other historical archaeological investigation reports, focusing particularly on bottles and ceramics found on the site. Finally (Chapter 6), the results of the Wynyard St excavations are integrated into more general historical archaeological themes relating to Auckland's history. A separate report on the demolition of three of the buildings (Bickler 2004) was also included.

Clough & Associates Ltd. Page 14 Middle Class Spread

CHAPTER 2: GRAFTON RD PROPERTIES

ALLOTMENT 15

Introduction

Two houses (18 and 20 Grafton Rd) remained on this allotment at the time of development. Both were demolished. Details of the buildings are provided in a separate report (Bickler 2004). Both houses represented the earliest structures built on the allotment and both the houses and adjoining land had undergone substantial modification during their lifetimes. Archaeological investigation of the area was therefore limited, although both properties on the allotment were examined after demolition of the houses. This section briefly summarises the history of the houses and the investigation of features exposed.

Initially it was thought that the house at 20 Grafton Road had been located in the area of an earlier structure, but subsequent investigation suggested that the standing house was the original building. The locations of two other smaller structures identified in the original plans had been investigated by probe and spade during the initial assessment. Tests in the vicinity of structure 15a/3 had exposed a concrete rim and a single china fragment but no further information. The area around structure 15a/5 had proved impossible to probe as it was covered in compacted gravel. Dense bamboo at the eastern end of the allotment had made survey impossible there.

The house at 18 Grafton Road was the original building, later than its neighbour at No. 20, but in substantially better condition. It was, however, significantly modified internally and had been re-piled relatively recently. Again, bamboo at the eastern end had prevented some areas being surveyed. Elsewhere, modern rubbish and a track leading northeast had been located but no 19th century remains.

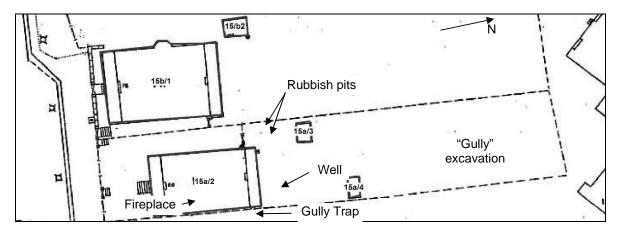


Figure 11. 1908 plan of structures on Allotment 15 and excavated features

Clough & Associates Ltd. Page 15 Middle Class Spread

20 GRAFTON RD

Historical Background

This is the southern half of Allotment 15 (15a), which was sold in 1860 to Mr King. By September 1866 there was a single storey wooden building with a shingle roof on the southern side of the site, occupied by merchant Charles Green. By 1885 Charles Ring owned the site and wooden building. A drawing of the city done in 1885 and 1886 shows a picket fence surrounding Allotment 15 and a house located at the southern side of the allotment. The position of the building on the southern side allowed a later subdivision of the property, creating the site for 18 Grafton Road. Ring leased his property to several tenants over the coming years. While no contemporary plans of this house survive, it is shown on the 1908 map of the city as being a single storey wooden dwelling with two outbuildings.

By 2003, this building was in relatively poor condition but of the three houses recorded (Bickler 2004) it is the one that had probably retained most of its original features, particularly on the top floor. Investigation at the Auckland City Archives suggested that there was an attempt in the late 20th century to convert the property to either 3-4 units. There is no good evidence that this was carried out, although there was substantial work in the basement during the 1960s (established from the newspaper used on the walls and the relatively modern panelling found in many of the basement rooms). Some relatively poor quality partitions and doorways were added to the top floor rooms, probably in the 1980s-90s, creating a mock-oriental look.

The major changes to the building are summarised below:

?1866	House built
Early 20 th Century?	Enclosure of the verandah rooms
1960	Refurbishment and use of basement
1990s?	Additional partitioning 'oriental style'
2003	Demolition

-

¹ Southern Cross, 3 August 1860, p.3.

² Mitchell & Seffern's Directory of the City and Suburbs of Auckland, 1866-1867, p.26 and Vercoe & Harding Map of the City of Auckland, September 1866, Special Collections, Auckland Public Library, and Alphabetical Descriptive Schedule to Accompany Map of the City of Auckland, by John Vercoe, January 1867, W.C. Wilson, Auckland.

³ Valuation List for the City of Auckland for the year ending 15th January 1885, ACC 210, Item 60, Auckland City Archives, p.9.

⁴ George Tracy Stevens, 'Birds eye perspective of Auckland', 1886, Auckland Public Library, Special Collections. ⁵ Wises New Zealand Post Office Directory, 1887-1888, p.27; 1896-1897, p.55; and Cleave's Auckland City and Suburban Directory, 1889, p.51.

⁶ 1908 map G14, Auckland City Archives.

18 GRAFTON RD

Historical Background

This site is the northern half of Allotment 15 (15b), which was sold in 1860 to Mr King. By 1885 Charles Ring owned the property but he had not built on this portion of lot 15. It appears that a dwelling was erected around 1900. It was owned and occupied by surveyor Charles Spencer. While no contemporary plans of this house survive, it is shown on the 1908 map of the city as being a single storey wooden dwelling with an outhouse. 10

The demolished house had undergone substantial modification during its lifetime and retained few original internal features. Many of the rooms had been combined to provide large rooms on the top floor and all fireplaces had been removed.

Although possibly only a single storey building originally (the basement may not have been fully lined), the house was distinctive in having a single bay window on the western wall and this was visible on the 1908 map. This suggests this structure represented the Spencer house. An internal staircase providing access between the floors is present but does not appear to have been part of the original construction. Stained glass windows found on the eastern and southern sides of the house probably date to this period of modification.

A building consent was issued in 1979 and relates to the major refurbishment of the house so that it could be used for practice rooms for the Music Department. The work involved major changes to the floor plan resulting in fireplaces and several major walls being removed. Refurbishment included replacement of sarking, new framing and flooring as well as relining many of the rooms some with soundproofing and skylights in the ceiling above the hallway. The creation of two small kitchens, one on each floor, as well as the toilets on the north-eastern corners of the back porches also dates to this period. Some additional windows not on the building consent plans were also added.

Fuller details of the house are presented elsewhere (Bickler 2004). No archaeological remains were found after demolition of the house.

¹⁰ 1908 map G14, Auckland City Archives.

_

⁷ Southern Cross, 3 August 1860, p.3.

⁸ SO 2A, Land Information New Zealand, Auckland.

⁹ Valuation List for the City of Auckland for the year ending 15th February 1900, ACC 210, Item 161, Auckland City Archives, p.8 and *Wises New Zealand Post Office Directory*, 1900, p.58.

ALLOTMENT 15 EXCAVATIONS

Gully Area

During the early part of the development, the backyards of both Grafton Rd properties on Allotment 15 were cleared. The land here initially sloped gently to the east providing small gardens for the houses, before dropping down more steeply to the east and north into Grafton Gully. Small outbuildings were removed along with vegetation and in particular the dense bamboo stands. No archaeological features were identified during this process.

Clearance down the bank in the gully, however, suggested that small amounts of rubbish had been deposited there (Figure 12, Figure 13). The removal of the overburden from this area was conducted by machine excavator. This exposed a surface in which a number of artefacts were visible. This surface appeared to be the upper levels of fill that had slowly accumulated in the floor of the gully. The natural slopes surrounding this gully appeared to be particularly steep and conducive to the movement of artefacts down slope.

Small fragments of ceramics, bottles, terracotta drainage pipes as well as nails were identified and appeared to be late 19th century to 20th century material (e.g., Figure 14, Figure 15, Figure 16, Figure 17). A few small concentrations where artefacts and charcoal were quite dense suggested that some small pits had been dug for some of the rubbish. One collection included a number of black beer bottle fragments. Other material was clearly just surface debris. Also noted was the presence of shells (particularly oyster, but also mussel and cockle), animal bone (with butchery marks), charcoal and some rusted metal fragments.

Other artefacts recovered along the western edge of the gully included mostly ceramic, glass and some bone. The scraping of the surface indicated that these artefacts had tumbled down the relatively steep hill slope. Some shell material was identified in this area and proved to be a thin lens with slate and ceramics mixed in. The materials from this area were largely out of context, and it seems likely that much of this material was re-deposited in the area as fill during earthworks relating to landscaping in Allotment 16.

Continued on next page

Clough & Associates Ltd. Page 18 Middle Class Spread

Backyards of Grafton Rd Houses - Pits 1 and 2 The removal of the topsoil from the area behind the two buildings facing Grafton Rd was conducted by machine excavator and exposed two rubbish pits (Figure 11). Two small rectangular patches of dark soil were noted in the otherwise yellowish natural clayey subsoil. Both pits were excavated.

Pit 1 measured 600 x 500 mm with a maximum depth of 100 mm (Figure 18). The edges of the pit were straight and the base of the pit was regular. The soil matrix from this pit was dominated by ash and charcoal. This pit contained a number of ceramic remains (Figure 19). None of the material showed evidence of burning, nor did the natural base of the rubbish pit, suggesting the deposition of hearth rake out. Examination of the ceramic patterns recovered suggested two, possibly three, vessels deposited in this pit. A preliminary refitting exercise revealed that the two vessels were likely to have been pitchers. A thin layer (c.50 mm) of clay capped the edges of this pit. It is possible that this cap continued across the rest of the surface of this pit.

Pit 2 (Figure 20) measured 700 x 700 mm and was found to have a maximum depth of 100 mm. The soil matrix was dominated by ash and charcoal, with some amorphous rusted metal. No artefacts were recovered from this pit. The sides and base of this pit were also straight and regular. The texture and composition of the ash and charcoal recovered from this pit suggested that it was a deposit for hearth rake out.

Both pits were clearly spade dug and regular in shape. Both appeared to be in the backyard of 20 Grafton Rd, although Pit 2 was very close to or on the boundary with 18 Grafton Rd. The contents of both pits were dominated by very fine charcoal and ash, and it seems likely that this comprised waste material from a hearth. While the first of the pits contained some ceramic remains, these came from very few vessels. This would suggest that the pits were in use for a limited time, and then capped.

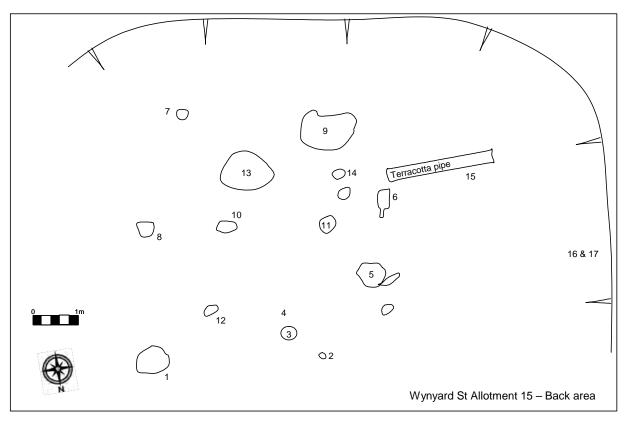


Figure 12. Plan of rubbish scatters at the back of Allotment 15, with contents identified below

Bag	Contents	Notes
1	Doll fragments, ceramics	Charcoal rich material
2	Various	
3	Willow plate fragments	
4	Plate fragments	
5	Large plate, Blue bottle	Dense charcoal rich soil
6	Barry's Tricopherous bottle	
7	Schaeffer's ink pot	
8	Wine, ceramics, glass, metal bottle caps	
9	Bottles, ceramics, animal bone	With plastic bag
10	Portobello bottle	
11	Friable pot	
12	Pencil, ceramics, bottle	
13	Black beer	"bottle dump"
14	General collection	
15	Champagne bottle	
16	Modern debris	Area to west ~5m
17	Asiatic pheasants plate fragment in west baulk	



Figure 13. View of the back of Allotment 15 looking north



Figure 14. Ceramics found in fill, Allotment 15



Figure 16. Metal objects from fill including nails and bottle cap

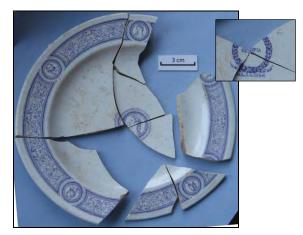
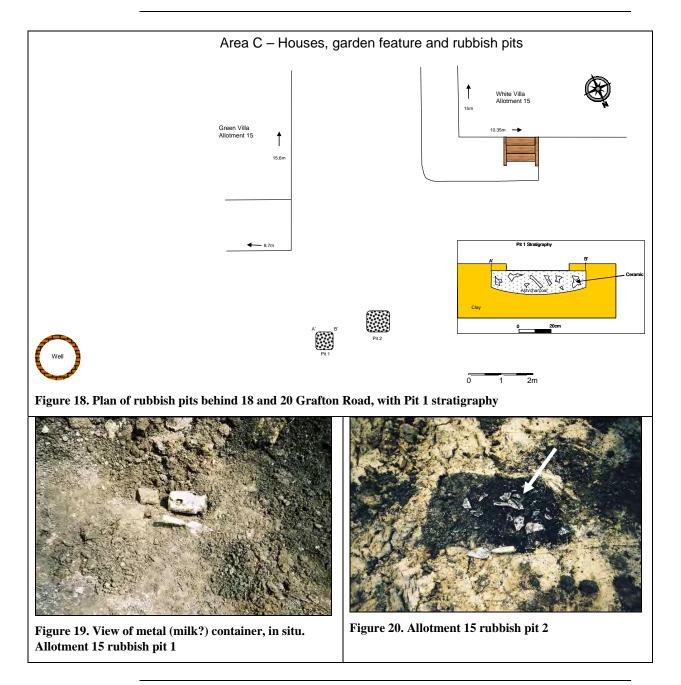


Figure 15. 'Olympia' plate from fill



Figure 17. Horseshoe from Allotment 15 fill



Continued on next page

Clough & Associates Ltd. Page 22 Middle Class Spread

The Well at 20 Grafton Rd

A small well was uncovered at the back of the house about 5m from the northeast corner (Figure 21). Unfortunately, bottlers raided the well prior to professional excavation and although it is unlikely much was recovered. The remaining artefacts were fairly typical of the late 19th century and possibly later (Figure 22). The well was probably filled during the 20th century. It was probably at least 3m deep.

Artefacts from the SE Chimney

The demolition of the house did yield one context relating to the 19th Century within its walls. A collection of glass and ceramics were found around the chimney in the SE corner of the house in the basement. The artefacts are discussed in Chapter 5.

Drain and Garden Tiles (20 Grafton Rd)

The only other interesting feature of the house found after demolition was the drain along the north eastern corner which consisted of a square grate (Figure 23) made with a terracotta pipe underneath (Figure 24). Small fragments of garden tiles were also recovered and possibly relate to early garden landscaping on the property (Figure 25).

Continued on next page

Clough & Associates Ltd. Page 23 Middle Class Spread



Figure 21. Well behind the 20 Grafton Rd house









Green/gold pattern on white semivitreous cup

Figure 22. Ceramics form the well

Continued on next page

Clough & Associates Ltd. Page 24 Middle Class Spread



Figure 23. Square drain at north-eastern corner of 20 Grafton Rd



Figure 24. Drain at north-eastern corner of 20 Grafton Rd (square drain removed)



Figure 25. Garden tiles from 20 Grafton Rd backyard



Figure 26. Metal fragments from Allotment 15 (clockwise from top left): flat metal disk; base of a round metal container; possibly parts of a shell casing from a large firearm round

Clough & Associates Ltd. Page 25 Middle Class Spread

CHAPTER 3: CARPARK AREA

ALLOTMENT 16

16a. Part Allotment 16 Section 10, City of Auckland This was originally part of the large corner site purchased in 1860 by William Aitken (Figure 27). It was subdivided from the neighbouring site in 1901. The site remained empty until after 1908. No early structures were recorded on this allotment, with the exception of an outbuilding belonging to the neighbouring property (15b/2), which appears to extend onto this allotment. Probe testing during the assessment did not reveal any 19th century structural remains and modern rubbish was present including ceramics and glass bottles.

16b. Lot 1 DP19659 & Lot 2 DP 19659 (corner of Grafton Road and Wynyard St) Lot 1 was originally part of the large corner site purchased in 1860 by William Aitken (Figure 27).¹⁴ This section was not subdivided until well into the 20th century. It was surveyed into two adjoining sections when blocks of flats were built in the mid 1930s.¹⁵

Lot 2 was originally much larger, with a long street frontage facing Grafton Road which extended down to the western boundary of number 18 Grafton Road (Allotment 15b). William Aitken purchased it in 1860. The Vercoe & Harding map of September 1866 shows a single storey wooden dwelling with a shingle roof at the corner of Wynyard Street and Grafton Road. By the late 1870s insurance agent George S. Graham owned the property and resided there. During the 1880s and 1890s it was leased to numerous tenants. John Reid owned the property during the early 1890s and in 1896 Jane Oliphant purchased it. Reid briefly lived there. At some stage the 1860s building was demolished and another building constructed, as the 1908 map of the city shows a single storey wooden dwelling with an outhouse built closer to the eastern boundary of the allotment.

Continued on next page

Clough & Associates Ltd. Page 26 Middle Class Spread

¹¹ Southern Cross, 3 August 1860, p.3.

¹² DP 2452, Land Information New Zealand, Auckland.

¹³ 1908 map F14, Auckland City Archives.

¹⁴ Southern Cross, 3 August 1860, p.3.

¹⁵ Valuation Field Sheets, 14 and 16 Grafton Road, Auckland City Archives.

¹⁶ Southern Cross, 3 August 1860, p.3.

¹⁷ Vercoe & Harding Map of the City of Auckland, September 1866, Special Collections, Auckland Public Library, and accompanying schedule (see note 2).

¹⁸ Valuation List for the City of Auckland for the year ending 15th January 1878, ACC 210, Item 1, Auckland City Archives, p.11 and *Electoral Roll East Ward Auckland*, 1878, p.7.

¹⁹ Valuation List for the City of Auckland for the year ending 15th January 1880, ACC 210, Item 20, Auckland City Archives, p.5; *Auckland City and Suburban Directory*, Ingram & Gardner, 1882, p.65 and *Wises New Zealand Post Office Directory*, 1885-1886, p.55; 1887-1888, p.61; 1892-1893, p.375; 1894-1895, p.103.

²⁰ Certificate of Title 56/189, Land Information New Zealand, Auckland.

²¹ Wises New Zealand Post Office Directory, 1894-1895, p.103 and 1896-1897, p.98.

²² 1908 map G14, Auckland City Archives.

16b. Lot 2 DP 19659 (continued) The building is still present on the Auckland City Plans dating to 1927 but interestingly, George Fraser (V) [pers.comm] who lived in the neighbouring house has no recollection of the building there.

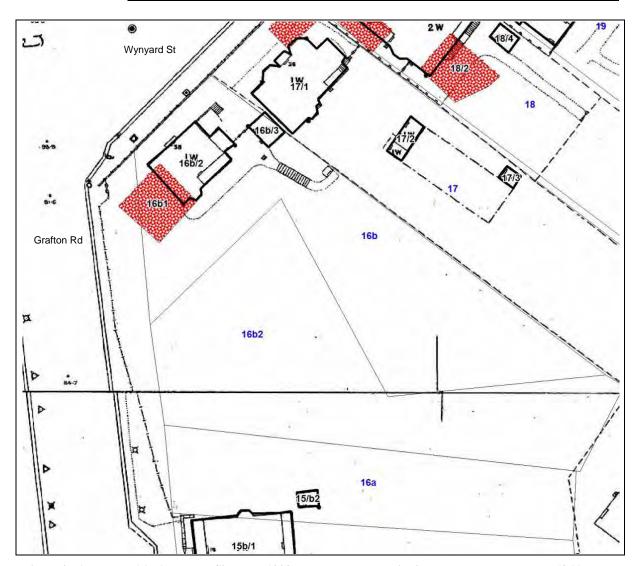


Figure 27 Allotment 16 - Auckland City Plan 1908. Red shaded areas indicate structures shown on 1866 plan

Clough & Associates Ltd. Page 27 Middle Class Spread

ALLOTMENT 16 EXCAVATIONS

Assessment

The southern end of the allotment adjoined Allotment 15b. No structures were recorded on this part of the allotment, and no evidence of 19th century occupation was encountered during the assessment. However at the eastern end, palm trees were thought to be possible indicators of earlier landscaping of an area that by the 1990s was covered in rough secondary vegetation.

At the northern end, on the corner of Wynyard Street and Grafton Road, the area had been covered in asphalt for car parking. There was a steep drop from the car park down to the rest of the allotment, although it was not initially clear from earlier survey information whether this was simply a natural drop or enhanced by landscaping. Indications of stairs on earlier plans suggested that some landscaping may have occurred during the building of the car park as the location of the stairs did not match the main drop. Four structures were recorded in this area (16b/1-4), but testing could not be carried out at the time owing to its use as a car park.

A small portion of this block was examined using geophysical techniques, but nothing of obvious interest was identified despite the fact that the area surveyed would have only bordered the original house location. The results of the survey were more effective in the car park area that included the front of the neighbouring Allotment 17 (discussed in the next section).

At the front of the property, bricks and other rubble had been used to back fill a retaining wall during the construction of the original car park in this area (Figure 28). This became evident during the development.

Building material found at the back of the car park included a small collection of Marseilles terracotta tiles. These tiles, popular during the early 20th century, were interesting as they included both imported French tiles (Figure 30) and local copies made by Winstones Ltd (Figure 31), which was located in Grafton Gully. It is likely that these tiles relate to the house at 38 Wynyard St, although it is possible they could have belonged to the neighbouring house at 36 Wynyard St owned by the Fraser family.

Vegetation clearance at the back of the car park (Figure 32) during the development allowed a view of some substantial landscaping including a significant amount of fill and stone walls. These all appeared to relate to the 20th century based on the material found in the fill (Figure 33), including a large quantity of bricks (Figure 34). Other items found included a 1943 penny and the remains of a door lock.

The fill and retaining wall appeared to have been constructed to provide a flatter back area to the allotments and involved substantial amounts of fill. A few fragments of 19th century material were seen in the fill but the majority of the items dated to the 20th century. The fill was cleared off down to the original clay surface and parts of the original basalt stone drains were seen in this material (Figure 35).

Continued on next page

Clough & Associates Ltd. Page 28 Middle Class Spread



Figure 28. Brick and concrete fill under paving and asphalt at Wynyard St frontage of Allotment 16



Figure 29. Building debris in Allotment 16



Figure 30. Guichard Brothers roof tile



Figure 31. Winstone Ltd roof tile



Figure 32. Fill at back of Allotment 16

Continued on next page

Clough & Associates Ltd. Page 29 Middle Class Spread



Figure 33. Building rubble used as fill below car park



Figure 34. G. Boyd and F.W. Hunt (Auckland) bricks found in rubble. Baxters bottle also recovered



Figure 35. View of Allotment 16 looking east showing old drainage

Continued on next page

Clough & Associates Ltd. Page 30 Middle Class Spread

Excavations

The results of the geophysical survey suggested that remains of the earlier building did exist under the car park. After the asphalt was removed it was clear that some deep features had survived demolition and included parts of the house built in Allotment 16a, as described below.

The 'Laundry'

The last known house on the property was just over 120m² based on the 1927 plans. The main building was a two-storey building probably with a small single storey block at the southern end measuring another 2m x 5m. Excavations of the foundations, however, only allowed recovery of the north-western corner of the house (Figure 36). Details of the features and their stratigraphic relations are shown in Figure 37 and Table 3.

The remains were defined by a ~50mm thick concrete pad overlying a brick floor built directly onto the basal clay (Figure 36, Figure 38). Trenching for the floor was visible in the north-western corner of the house. No pile foundations were apparent in this area. The concrete floor was roughly rectangular but broken up to the south-east side. Here the ground sloped away and more traditional brick foundation blocks were recovered (Figure 36) which suggested that the concrete floor may only have been present in the northern half of the house. The bricks used in the floor were plain red bricks and probably handmade.

Dominating the remains was a brick structure against the back wall shaped like an 'H' but bricked off at the front face (Figure 39). The feature had partly collapsed to the west side. The brick structure was built on the concrete floor with 4-5 courses of brick still standing – 80-90cm high. Portland cement was used to build the structure and many of the bricks had apparently been used previously. A base course of sandy mortar had also been used. The bricks, though, were different to those used for the floor bricks. Some were wire cut, others were identified as being made by the 'Avondale P & B Co', mostly located in the front wall of the features. Most bricks were plain. Inside the structure, many of the bricks showed blackening caused by fires. The cavity of the structure had been filled with large blue stones. Slate, perhaps the result of collapsed roofing, was also found above the structure (Figure 40).

A raised lip in the concrete was clearly visible in the northern end of the structure (Figure 39). This suggests that water overflow was an issue for this space. Underneath the concrete flooring here, a fill of concrete and brick fragments had been used as a base (Figure 41) rather than the brick foundation.

Continued on next page

Clough & Associates Ltd. Page 31 Middle Class Spread

Interpretation

This structure was probably built to house and support the copper. The brick floor dips into a depression (Figure 42) or wide tunnel like feature to the front of the H shaped structure and goes underneath it. This allowed a fire to be made under the copper for heating (probably using coal). Running just inside of the north wall is a shallow drain-like depression in the concrete running from a raised L-shaped ridge for directing the water into the drain. Washing tubs may have been placed alongside the copper (as seen in a wash house plan for a 19th century cottage shown by Petersen (2001:139), from which water was drained away (see also 'NZ yesterdays' H. Keith editor, 1984:120, Figure 43 here):

The centre piece of a wash-house was "a copper set in a massive brick or concrete stand....fire had to be built underneath it. In the copper whites were boiled, producing clouds of unpleasant-smelling steam. The hot washing was transferred...to tubs for rinsing and soaking in Rickett's blue".

Narrow trenches either side of the feature had been cut through concrete. It is not clear what these were for and may have been a later modification to the system, perhaps to have allowed additional drains to be put in place.

Overall, however, the concrete features found suggested that elements of this house structure were 20th century in date, suggesting that the original house had been significantly modified for the laundry.

Other Features

The other main feature found was a complex ceramic and concrete drain outside the north-eastern corner of the house (Figure 44, Figure 45). This drainage area included a glazed terracotta pipe leading into a moulded concrete drain structure which took the water down the slope of the property.

A small number of postholes were also found on the west side but are of unknown origin.

Artefacts

A small number of artefacts were recovered from the main 'H' structure. These included buttons, pins, and beads. These items were suggestive of small articles perhaps from clothes pockets dropping out during washing. A toothbrush and a pencil lead were also found. Ash and charcoal was found in the centre of the 'H' structure probably representing rake out from around the grate area.

Continued on next page

Clough & Associates Ltd. Page 32 Middle Class Spread

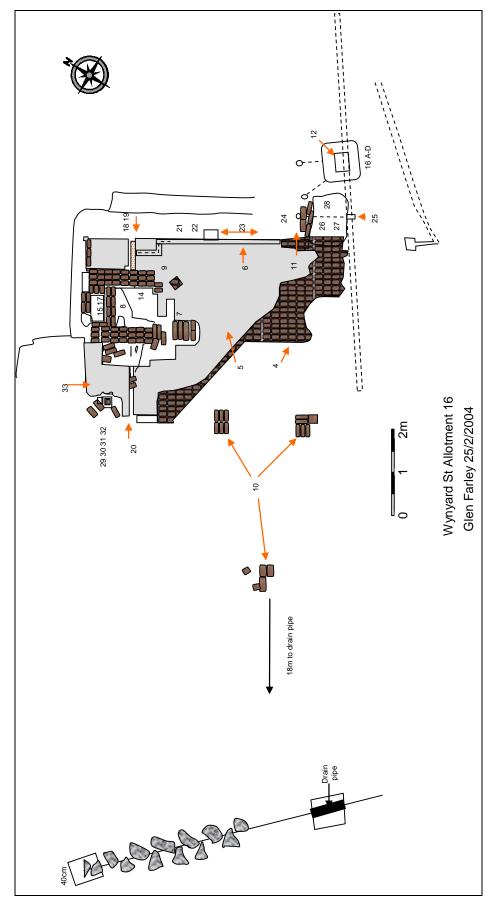


Figure 36. Plan of excavated material in Allotment 16 (see table below for description of features)

Continued on next page

Clough & Associates Ltd.

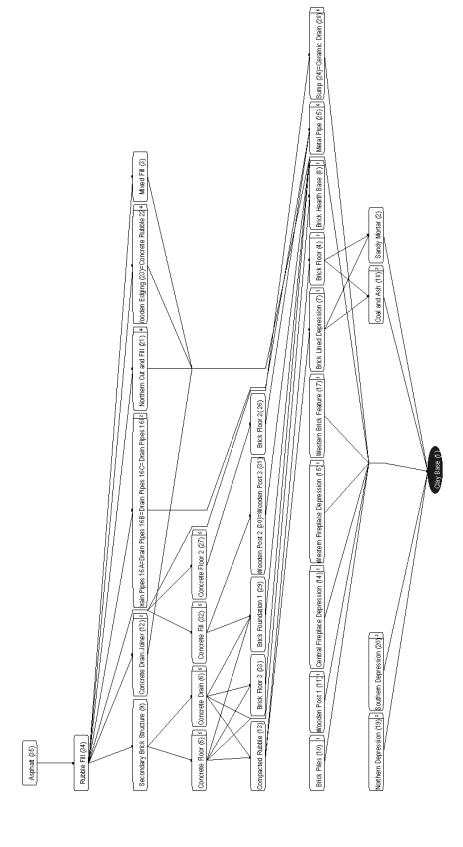


Figure 37. Harris Matrix of features in Allotment 16 excavation (ArchEd v1.4)

 Table 3 Description of features
 (see Figure 36)

No	Label	Description
1	Clay Base	Natural layer, below all other features.
2	Sandy Mortar	Placed directly on top of the clay base (1), and has the brick floor (4) placed on top.
3	Mixed Fill	Contains topsoil, clay and a few artefacts, later than the clay base (1) but earlier than the rubble fill (?).
	Brick Floor	Regular brick floor, placed on side, placed above the sandy mortar (2) and below the concrete floor (5) and drain (6). In some locations there was a layer of compacted rubble (13) between the bricks and the concrete. In some locations (near northern depression 19) has coal and ash (18) beneath it. Brick floor two (26) and three (33) are classified as different features, on the basis of slightly different brick orientation, though probably all the same event.
5	Concrete Floor	A regular concrete floor placed directly above the compacted rubble (13) and the brick floor (4). There is a second concrete floor (27) that is on the second brick floor (26) – probably same concrete floor as (5).
6	Concrete Drain	Formed by shaping part of the concrete floor (5) into a depression. The wooden edging (23) is to grid north.
7	Brick Lined Depression	Formed by bricks within the brick floor, contemporary with the brick floor (4). Lies directly beneath the concrete floor (5). The brick base consists of bricks lying on their base.
	Brick Hearth Base	Formed by bricks an additional course higher than the brick floor (4). Contemporary with the brick floor (4) but older than the concrete floor (5) and the secondary brick structure (9).
9	Secondary Brick Structure	An additional four courses of bricks placed on the concrete floor (5). Basically this may be the fireplace
10	Brick Piles	Two separate but related features, consists of 4-5 bricks together as piles to the south of all the other features. Cut directly into the clay base (1). No known relationship with other features. Placement within the matrix but suspected to be contemporary with the brick floor (4).
11	Wooden Post 1	A wooden post cut into the clay base (1). Placed in amongst the brick floor (4) and concrete floor (5). Suspected to be contemporary with the brick floor (4).
	Concrete Drain Joiner	A concrete lined, brick bordered drain intersection. Cut into the clay base (1). Has four drain lines (16 Drain Pipes A-D) running into and out of it.
	Compacted Rubble	A mix of scoria, brick fragments and loose concrete. Situated directly above the brick floor (4) and below the concrete floor (5).
	Central Fireplace Depression	A section in the centre of the fireplace, no bricks are present. Surface is either clay or mortar, cut into clay base (1).
15	Western Fireplace Depression	A deep depression formed with the western edge of the brick hearth base (8). Some blue stone rocks and bricks with early mortar (17). Cut into clay base (1).
16	Drain Pipes (A-D)	A series of four drain pipes running into and out of the concrete drain joiner (12). The western two have elbows turning the pipes up. Cut into the clay base (1).
17	Western Brick Feature	Consists of several bricks with early mortar and some blue stone rocks. Cut into clay base (1).
18	Coal and ash	Rake out of coal and ash found in the northern depression (19). And below the brick floor (4), only found near the northern depression (19).
	Northern Depression	A trench cut into the floor from the secondary brick structure (9) to the northern cut and fill (21). Cut through the brick floor (4) and concrete floor (5), also has coal and ash (18) present.
	Southern Depression	A trench cut in the floor from secondary brick structure (9) south. Cut through the brick floor (4) and concrete floor (5).
21	Northern Cut and Fill	Cut into the clay base (1). Adjacent (north of) the brick floor (4) and concrete floor (5). Contains mixed fill. Also adjacent to the concrete rubble (22).
	Concrete Rubble	A layer of fragmented concrete to the north of the northern cut and fill (21), cut into clay base (1). Also has the wooden edging (23) bordering it.
23	Wooden Edging	A wooden plank running roughly E-W. Situated between northern cut and fill (21) and the concrete rubble (22) and contemporary with both.
24	Sump	A ceramic sump to the east of the brick floor (4), and cut into the clay base (1). Pipes lead from the sump to the metal pipe (25). Has brick and fill packed around it.
25	Metal Pipe	To the north of wooden post one (11), and directly below brick floor two (26) and concrete floor two (27). Cut into clay base (1). Described as contemporary with the sump (24), though uncertain. Older than drain pipe A (16), although the metal pipe runs over it.
26	Brick Floor 2	Section of bricks to the north of the concrete drain (6) that has been laid in a different orientation to the brick floor (4) – though most likely contemporary
27	Concrete Floor 2	Placed directly above brick floor two (26). Probably contemporary with concrete floor (5).
28	Ceramic Drain	Runs roughly N-S orientation to the east of the sump (24). Cut into the clay base (1). A pipe from the sump (23) runs into this ceramic drain.
29	Brick Foundation 1	Two bricks surrounded by concrete fill (30) to the south of the southern depression (20). Older than both the concrete floor (5) and the concrete fill (32).
30	Wooden Post 2	Contemporary to wooden post three (31). Cut into the clay base (1).
	Wooden Post 3	Contemporary to wooden post two (30). Cut into the clay base (1).
32	Concrete Fill	A section of concrete fill that surrounds brick foundation one (29), wooden post two (30), and wooden post three (31). The fill is younger than brick foundation one (29). It is possibly contemporary with the concrete floor (5).
33	Brick Floor 3	On the western edge of the site. Situated to the west of the southern depression (20). Cut into the clay base (1), it is older than the concrete floor (5).
34	Rubble Fill	A mass of brick rubble, mixed fill, concrete debris, scoria and soil. This material covered the entire site and is later than every feature except the asphalt (35).
35	Asphalt	Modern asphalt parking lot, post dates every feature on the site.

Clough & Associates Ltd. Page 35 Middle Class Spread



Figure 38. View of excavated features in Allotment 16 (looking east)



Figure 39. Close-up of 'H' structure (chimney/fireplace) in Allotment 16, looking east



Figure 40. Collapsed brick and slate near structure



Figure 41. Brick and concrete base course under concrete floor



Figure 42. Brick foundation and hole in concrete



Figure 43. The Laun-dry-ette washing machine (Keith 1984:120)



Figure 44. View of drain feature in north-eastern corner

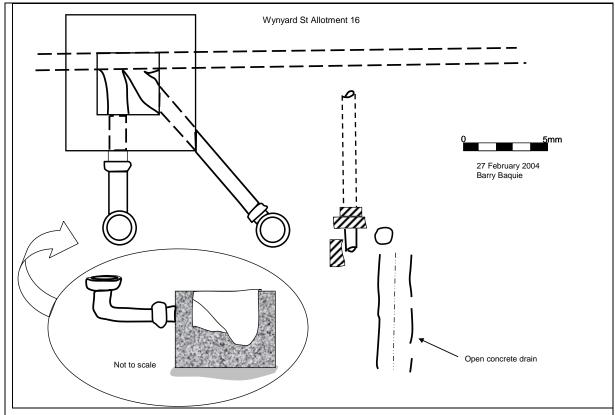


Figure 45. Plan and section drawing of drain feature in north-eastern corner

Clough & Associates Ltd. Page 38 Middle Class Spread

ALLOTMENT 17

Allotment 17 Section 10, City of Auckland, DP 27319

William Aitken originally purchased this allotment in 1860. It was sold in the same year to George Fraser, engineer and son of one of the founders of Fraser & Tinne's Phoenix Foundry on Stanley Street.²³ By September 1866 an L-shaped building located on Allotment 18 extended along part of the front boundary of Allotment 17.²⁴ By 1871 Fraser was living in a dwelling on this site.²⁵ He owned the property until the early 20th century.²⁶ While no plans of this house survive, it is shown on the 1908 map of the city as being a single storey dwelling with three outbuildings at the rear (Figure 46).²⁷ However, a photograph taken during the 1870s or 1880s (Figure 48) shows the house as a two storey structure and this was subsequently determined to be the same house that was on the allotment until 1963.

Initial Assessment

The northern half of this allotment was the continuation of the car park. To the south the ground fell away, with slips and rubbish covering much of the ground surface. Tracks leading east-west to Allotment 16 had been bulldozed through the zone. The presence of the car park prevented testing in the vicinity of structures 17/1 and 2 and attempts to locate 17/3 were unsuccessful.

A retaining wall that provided terracing for additional parking started in this area and continued at the southern end of Allotment 18. A wooden beam was exposed in this retaining wall and rubbish such as old car parts was present.

The Fraser Family

During the excavation we were able to make contact with the members of the Fraser family and take the opportunity to discuss some of the results with them. George Fraser (V), who was born in Wynyard Street, generously offered his time to discuss his memories of the house and share precious photos and other memorabilia to assist in the reconstruction presented here. George was interviewed by Simon Bickler and Kate Hill on 2 July 2005.

Continued on next page

2:

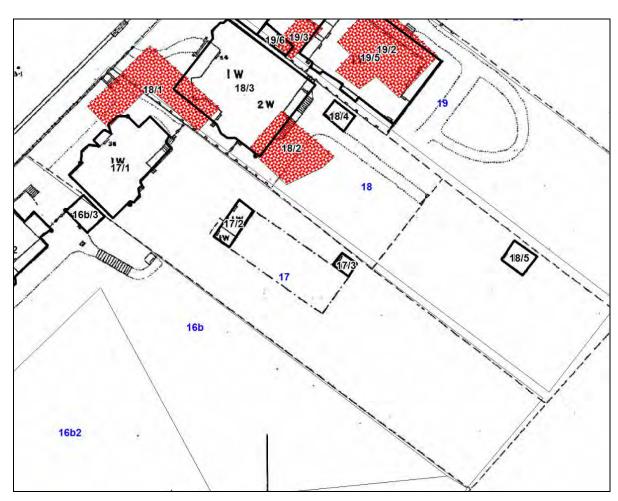
²³ Southern Cross, 3 August 1860, p.3.

²⁴ Although this may have been an error, as it is shown entirely within Allotment 18 on the 1882 plan.

²⁵ Electoral Roll, Auckland City East, 1871-1872, p.7.

²⁶ Certificate of Title 113/203, Land Information New Zealand, Auckland.

²⁷ 1908 map F14, Auckland City Archives.



Figure~46.~Buildings~on~Allotments~17~and~18~in~1908~(Auckland~City~Maps).~Red~shaded~areas~show~buildings~on~the~properties~in~1866

Clough & Associates Ltd. Page 40 Middle Class Spread

THE FRASER FAMILY AT 36 WYNYARD ST

George Fraser (II)

George Fraser II's father arranged with his friend Alexander Davidson that he, aged 14 at the time, should serve his apprenticeship with Hall, Catto, Thompson & Co. When George was 20, it was decided he should go to Glasgow for more experience. Before long he was appointed manager of the Caulton Foundry in Glasgow and soon attracted the attention of Messrs. Hopkins and Wilson of Campbellfield, Glasgow, who asked him to go to New Zealand to help erect and manage the flax mills they proposed to establish there.

During this time George was carrying on a courtship with Christina, eldest daughter of Alexander and Elizabeth Davidson, and on 8 October 1854 in Barony, Lanark the two were married. George was 22 at the time and Christina 18. The happy couple set off for New Zealand from London in the barque *Cornubia* on 23 December 1854 and arrived in Auckland on 28 April 1955. Also on board the vessel were about 30 others, including wives and children, to set up and operate the plants. The reports they sent back must have been very encouraging, because not only did his parents and their surviving children also emigrate to New Zealand but Christina's parents and their family did likewise.

After arriving they moved immediately to Matakana, about 70km north of Auckland, where the first flax processing plant was to be installed. About the end of 1856 it became obvious that the flax processing equipment was totally unsuited for handling the New Zealand flax and the operation was abandoned. For the next five years or so, George worked for Thornton, Smith & Firth in Auckland (forerunners of the Northern Roller Mills). In 1862 he bought a small iron foundry in Mechanics Bay from the original owners, Messrs. Allwright and Kinloch. In 1864 George took into partnership Theodore Frederic Sandbach Tinne, an engineer recently arrived from Liverpool and at Stanley Street, on a two acre site, the firm of Fraser & Tinne came into being.

In 1882 Theodore Tinne retired and returned to England. The Company was renamed George Fraser & Sons. Around the turn of the century, George handed over the Company, which was renamed George Fraser & Sons Ltd, to his sons George, William and Joseph to run (Figure 47). He did not live long into retirement.

There is an excellent summary of George's early engineering career in Scotland and his exploits in New Zealand, culminating in the formation of George Fraser & Sons' Phoenix Foundry in Stanley Street and taking the story through into the 1900s. It appeared in a special Auckland Centennial supplement of the *New Zealand Herald* of 31 October 1939. A history of the Fraser Foundry was also published and written by Hampton-Reynolds in 1958.

Continued on next page

Clough & Associates Ltd. Page 41 Middle Class Spread



Figure 47. George Fraser and staff of the Phoenix Foundry (Courtesy George Fraser V)

Continued on next page

Clough & Associates Ltd. Page 42 Middle Class Spread

The Fraser House

The exact date the house at 32 Wynyard St is not known although the Frasers were clearly living at the property by 1866 as the *Daily Southern Cross* 2 June 1866 reported:

DARING BURGLARY

A serious burglary was yesterday morning discovered to have taken place at Messrs. Fraser and Tinne's Phoenix Foundry, Stanley-street. The premises are surrounded by a fence, and near the entrance gate are the offices of the establishment. The burglars, after getting over the fence, broke into the offices by raising a window. Here they came upon the object which they evidently had in view from the first, for the burglars must have been in some degree acquainted with the premises. In the office was kept the safe; and this being locked, the burglars commenced operations to break it open. A number of files were taken from a drawer, and with these it was attempted to "wedge" the safe. It would have required, however, a far better set of tools than these men possessed to enable them to succeed. After apparently spending a long time in the effort, during which they broke several of the files and some implements which they brought with them, they gave up the attempt to open the safe in this way. A heavy bar of iron was then used apparently m the effort to knock the hinges from the safe, but this attempt was also fruitless. The safe had then been turned over, and tried to be broken open at another place. Evidently the burglars tried all they knew, but were utterly foiled; the safe stood every test. It contained the books of the establishment, and a small sum in cashbetween £5 and £10. The burglars must have been engaged at their nefarious and useless labour about half-past twelve, for at that time Miss Fraser heard, from the house at the rear of the yard, a pretty loud noise, caused, it is conjectured, by the safe being hurled over, but which she believed was occasioned by some person working in Mr. Kirk wood's brewery. However, the burglars had at last to decamp, without getting the slightest reward for their labour.

The proximity of the foundry to Miss Fraser's backyard is indicated, so George (II) must have built the house sometime around 1866, although it is not indicated on the plans dated to 1866.

Two photos of the house at 36 Wynyard St illustrate significant changes to the structure during its life. An 1870s photo (Figure 48) by Winkelmann shows a T-shaped two-storey villa which is relatively subdued in decoration except for two pillars marking the entrance way. By the time the house was knocked down in the 1960s, it is clear that verandas with decorative fretwork had been added to both floors at the front (Figure 49). Along the south side of the house a rectangular enclosure had also been added to the bottom floor, with fire escapes a late addition. The kauri (G. Fraser pers. comm.) pillars at the front are still visible under the veranda. The upper window on the western side had been removed with at least one window added to the southern side on the upper floor. A third chimney in the middle of the house, probably for the kitchen, is also visible.

Continued on next page

Clough & Associates Ltd. Page 43 Middle Class Spread

George Fraser (V) Memories of the House

George Fraser (V) was born in the Wynyard Street house c.80 years ago and spent the first 10 years of his life there – between 1926 and 1936. He was one of three children. Subsequently, his family moved to Northcote where his uncle built the Bridgeway Theatre and ran the Northcote Bus Company. The Frasers had interest in properties on the North Shore as early as 1875 as a newspaper report (*Daily Southern Cross* 20 March 1875) describes a fire consuming a small cottage owned by George Fraser (presumably II) although it was not occupied by the family.

George's memory of the old Fraser house on Wynyard Street was that the rooms were spacious and built from heart kauri with polished timber floors covered with mats. The stud was about 11ft high. The roof had slate tiles. The lounge was situated on the right hand side of a wide hallway which ran through to the kitchen where there was a large coal range. There were three big fireplaces. There was a big bedroom on the other side of the hall and, at the back, a sun porch. The toilet and bathroom were situated at the back of the house. Upstairs there were three bedrooms but the children were not allowed there as the staircase was steep. From upstairs one had an excellent view of the Domain and the hospital. George does not remember anyone sleeping up there. George's father had an office in the back bedroom. He was a ship's engineer and then was employed by his father at the foundry.

There were two large kauri pillars at the front door and a small garden in the front. His father would walk from the house down a sometimes muddy track to the foundry. Often he would have to wear gumboots.

Continued on next page

Clough & Associates Ltd. Page 44 Middle Class Spread

Life at the Fraser House

George (V) had fond memories of life in the Wynyard St house. One of his main memories was the presence of a pet monkey given to his grandmother:

"...they had a pet monkey... a lot of the sailors, they'd work at the foundry and then... after a few years on the ship they'd come back and they'd bring these parrots and they brought a monkey for my grandmother... You know those old gas pipe things that used to hang down from the ceiling... the monkey used to get up and swing from these... it just got out of hand, it got quite big and... I think the old grandma got sick of the monkey and the grandfather was quite keen on it but she said its either the monkey or me goes!"

George had many early memories relating to the soccer ground at nearby Blanford Park. 'That was a great attraction for us young kids'. 'Dad used to take us up to Albert Park and we would play up there'. On the weekends he used to go to the Civic Theatre to watch continuous newsreels.

Once a week, he used to go to the local grocer (Dunford's Grocery Store, now the Centre for Archaeological Research, formerly the University of Auckland Press, University of Auckland) to pay the bills and was often given a bag of lollies. He described how they were also rewarded with biscuits or lollies if they went to St Paul's (Anglican) Sunday school. Despite being raised a Roman Catholic he found the lure of sweets irresistible. George's grandfather built the ship *Rotomahana*, which did a passenger run to Thames.

Religion

His grandmother was a Roman Catholic and his grandfather a Presbyterian. She was a devout Catholic while he was only 'so so'. To please his wife he converted to Catholicism on his deathbed (1933?). He was 'a very good man'. People '...couldn't speak well enough of him'. He was given 'wonderful send-off from St Andrews church... it was one of the big funerals of Auckland'.

The Phoenix Foundry

The Phoenix Foundry (recorded as site R11/2134) owned by Fraser & Tinne (later George Fraser) was one of the early businesses in this area and was an extensive enterprise (Clough et al. 2004a). They were operating by 1866 and would remain on the site for another 85 years (Figure 50 and Figure 51). The Phoenix Foundry was one of the largest and longest lived industries in Mechanics Bay (1866-1950), being surpassed only by the Ropeworks which were in operation from the 1840s and demolished in 1984.

Continued on next page

Clough & Associates Ltd. Page 45 Middle Class Spread

²⁸Mitchell & Seffern's Directory of the City & Suburbs of Auckland, 1866-7, p.25 and Wises New Zealand Post Office Directory, 1950-1, p.177a.

The Phoenix Foundry in the 19th Century

The foundry was also one of the largest foundries serving Auckland City and the surrounding districts, supplying everything from domestic items to large scale industrial equipment (e.g. water wheels, and grinding and crushing equipment) and agricultural and maritime equipment.

As early as 1868, the *Daily Southern Cross* (Volume XXIV, Issue 3494, 26 September 1868, p.3) reported:

'On visiting the Phoenix Foundry yesterday, we were surprised to see the quantity of machinery that is being turned out, as well as at the extent of the premises and the mechanical appliances. Some idea of this may be formed when we state that the works cover half an acre of ground and some eighty hands are constantly employed.'

Various successes in fixing visiting ships made the papers in the early 1870s and this continued throughout the latter half of the 19th century with all manner of ship components created as well as the *Rotomahana* mentioned earlier.

Much of the credit for the boom in activity for Fraser and Tinne during the 1860s, however, related to opening up of the Thames goldfields and the demand for heavy machinery such as stamping batteries. Fraser and Tinne supplied the first battery to Thames (Hampton-Reynolds 1958). Indeed the Frasers were to get more involved with the gold mining industry, and particularly with the Waitekauri Gold Mine near Thames.

During the 1870s the Foundry was a major exemplar of Auckland business and was referenced by a correspondent of the *Daily Southern Cross* (Volume XXXII, Issue 5746, 26 February 1876, p,2) during a debate on smoke restrictions in central Auckland:

'Take such a firm as Messrs. Fraser and Tinne, who employ about 150 persons in their works. These may be taken to represent from 400 to 500 souls, who are dependant on the weekly wages which the family bread - winners employed in Messrs. Fraser and Tinne's establishment earn, and in the main spend in the town.'

The success of the Phoenix Foundry during the 19th century was summarised in 1868:

'On the whole, the Phoenix Foundry is a credit to the city, and the machinery turned out of it, we need hardly add, is acknowledged to be equal to any constructed throughout this and the neighbouring colonies.' (*Daily Southern Cross*, Volume XXIV, Issue 3494, 26 September 1868, Page 3).

Continued on next page

Clough & Associates Ltd. Page 46 Middle Class Spread

The Phoenix Foundry in the 20th Century During the 20th century the Foundry would find itself in good company. The metal trades were well represented along Stanley Street. There were engineers, iron yards, iron and wire rope manufacturers, pressed moulding manufacturers and electroplaters.

George Fraser (IV) took over the foundry after the death of his great-grandfather. The foundry closed down for a while during the depression (1931-33) and around this time, George (IV) worked from home. 'He used to do planning... and stuff like that' (George Fraser [V] pers. comm. 2005). Around 1935 the foundry picked up again, with things going well.

From the 1930s industries associated with motor vehicles became more common. Mechanics, car painters and coach builders joined the other metal workers in the street. Around 1925 the Post Office took over several lots bordered by Stanley Street and Commercial Road (now Churchill Road) and set up a telegraph pole department and workshop for Post Office vehicles. Other businesses in the area were manufacturers of various kinds including furniture factories, a box manufacturer, a manufacturing chemist and a shoe factory. With the beginning of WWII the foundry had a lot of war contracts. This was a boom time for the business.

In spite of its size and length of occupation of the foundry site, recent archaeological research in the area (Clough *et al.* 2004a) recovered very few features that could be related to the main foundry and it was apparent that subsequent developments on the site had removed most of it. The furnace remains exposed during the excavations for the Freeflow Motorway Project were not expected in the location where they were found: to the south of the foundry site. Additional archival research determined that the property on which the furnace and related materials were recovered was leased by the foundry from 1912 for part of its operation. The archaeological finds have provided considerable insights into the foundry operation and in particular the metal recycling trade in the early 20th century city. Slag from foundry operations was recovered from a number of places during the earthworks and had been used widely as infill material.

John Weeks and the Foundry as Art In the 1940s, John Weeks, artist and teacher at Elam, used to bring his students to the foundry to draw the workers in action. Three paintings have been identified from the Foundry, one of them illustrated in Figure 52.

Continued on next page

Clough & Associates Ltd. Page 47 Middle Class Spread

²⁹Wises New Zealand Post Office Directory, 1906, p.90; 1910, p.128d; 1915, p.132; 1920, p.143; 1925, p.146; 1950-1, p.177a; 1960-1, p.227; 1970-1, p.267; and Leightons Auckland Provincial Directory, 1930-1, p.294; 1940-1, p.388.



Figure 48. The Fraser house in 1870s (photographer: Henry Winkelmann; Auckland City Libraries, Heritage Images Online, W1-281)



Figure 49. Fraser House in 1963 (courtesy George Fraser [V])

Continued on next page

Clough & Associates Ltd. Page 48 Middle Class Spread

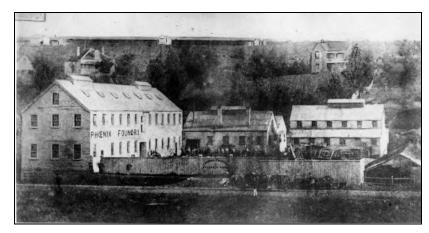


Figure 50. Phoenix Foundry 1864 (courtesy George Fraser)



Figure 51. Phoenix Foundry 1875 (courtesy George Fraser)

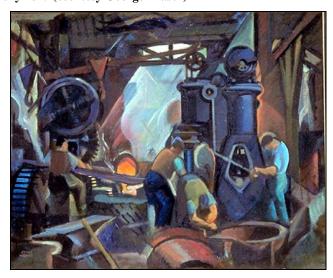


Figure 52. 'Foundry' by John Weeks (courtesy University of Auckland Art History Department)

Clough & Associates Ltd. Page 49 Middle Class Spread

ALLOTMENT 17 EXCAVATIONS

Initial Investigation

The car park prevented an initial assessment of the archaeological potential of the area and so it was decided to use basic geophysical techniques in an attempt to establish whether anything remained under the asphalt. Conductivity measurements were made of the central area of the car park. The results are illustrated in Figure 53 and indicated an area of high scores in the centre of the surveyed area. By overlaying the earlier maps of the area it seemed likely that this might relate to remains of the Fraser house, and this proved to be the case when the area was excavated.

As the area was being redeveloped, however, the results were not that significant in guiding the excavation strategy. Parts of the asphalt were removed early on during removal of fill in Allotments 16 and 17, but the bulk of the material was removed after other areas of the project had been cleared since the car park provided a useful platform for machinery and trucks. The previous section (Allotment 16) provides more detail regarding the car park excavation.

Excavation of the Fraser House

The excavation of the Fraser house consisted initially of a trench dug along the east-west axis down to the clay subsoil (Figure 54). The northern section (Figure 54 and Figure 55) of this trench exposed a slag fill that would have been used to level the property. The slag was similar to material found in excavations down in the Gully below, relating to the Phoenix Foundry (see Clough *et al.* 2004a) and the Foundry is the likely source of the material found on Wynyard St. It is concentrated around the Fraser house.

The southern section (Figure 56) of the trench shows the piles and footings of various structures of the Fraser house and the stratigraphy is more complex than that visible in the northern section, which is outside the boundary of the house itself. The southern section shows that the slag fill was laid with the holes dug through for the brick piles and foundation walls.

The area was subsequently cleared of the slag fill and the remains of the piles and foundation walls were exposed (Figure 57).

The brick foundation walls consisted of 1-2 rows of bricks laid lengthwise against each other for the main walls. The bay windows areas were based on a foundation of a single row of bricks lengthwise with another line of bricks laid perpendicular along the outside edge (Figure 57). The pilings in other areas were squarish brick foundations usually made up of around 4 bricks per layer. Interior features included a chimney stack found at the southern end of the property (Figure 58).

Continued on next page

Clough & Associates Ltd. Page 50 Middle Class Spread

Artefacts

Not many artefacts were recovered from the excavations. The demolition of the house during the 1960s was probably carried out using bulldozers and much of the building debris was probably used in landscaping the back of Allotments 16 and 17 and perhaps also for backfill in the retaining wall along the Wynyard St frontage (see the section on Allotment 16).

A small number of ceramics dating from the late 19th century and early 20th century were found at various levels but were not particularly diagnostic. Rusting nails, metal debris and glass fragments (Figure 59 and Figure 60) were found across the site. Generally, though, the material recovered was typical of what might be expected in a domestic site of the period late 19th and early 20th centuries.

Clough & Associates Ltd. Page 51 Middle Class Spread

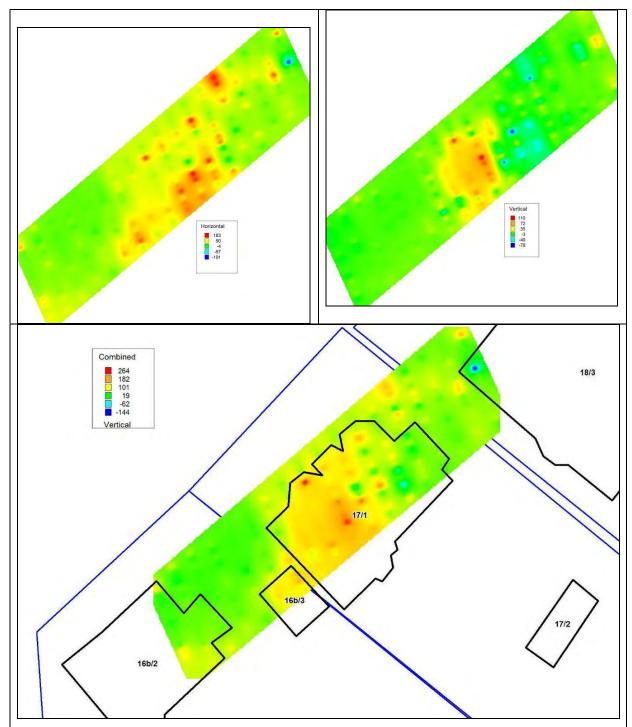


Figure 53. Results of conductivity survey in car park.

Showing horizontal (top left), vertical (top right) and combined results overlaid with 1908 building structures (bottom)

Clough & Associates Ltd. Page 52 Middle Class Spread

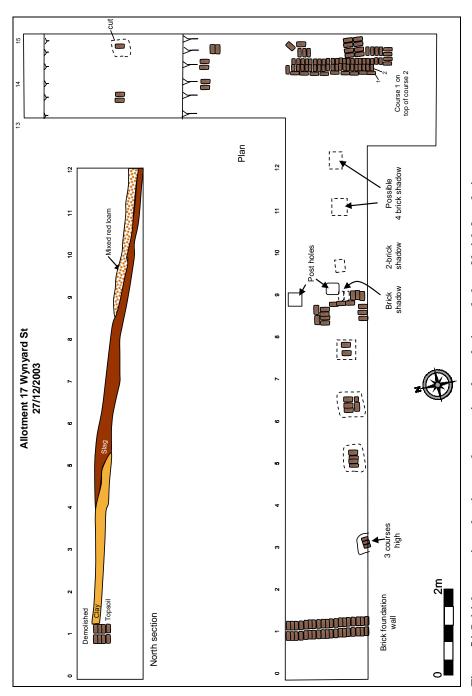


Figure 54. Initial excavations showing northern section through site and plan of brick foundations



Figure 55. Section (looking north) though Allotment 17 showing slag filled used for levelling (archaeologist Mat Campbell at right)





Figure 57. View of foundation wall for bay window (Fraser house)



Figure 58. Base of chimney (southern end of house)



Figure 59. Nails and other metal objects

In channel feature up against ceramic drain in clay



Figure 60. Glass fragments found in drain

Clough & Associates Ltd. Page 55 Middle Class Spread

'THE LAB'

The 'Laboratory'

According to the 1908 plans of the property (Figure 46), there were two structures to the rear of the main house. One was an old 'woolshed' according to George Fraser (V), but no indication of this building was recovered during archaeological investigations. It was probably the building 17/2 on the 1908 plans (Figure 46). The other structure, however, proved more interesting.

Large basalt blocks (Figure 61 and Figure 62) were uncovered during the earthworks and on closer investigation it was clear that this was the floor of a small shed-like structure (indicated 17/3 on Figure 46). A number of 'flowerpots' were recovered in the upper layers which suggested the remains of a garden shed. However, closer inspection of these pots made clear that they were crucibles. This suggested that the building related to some form of assaying facility and artefacts subsequently collected from the upper layers confirmed this. The artefacts found were mainly concentrated in the northwestern corner of the building and included fragments of glass tubing, crucibles, part of a metal grill, and a large bowl full of ash (Figure 63, Figure 69). A fragment of quartz was also found although whether it was part of gold bearing rock is not known (see Chapter 5).

The basalt block floor did not extend across the whole surface and was probably used to provide a levelling of the northern end of the structure. Much of the eastern wall, however, may have been lost during earlier landscaping. The remains of the concrete floor (Figure 67) over the top of the basalt were still visible. Fragments of wooden wall were also found along the northwestern edge of the concrete fragment (Figure 67). The blocks showed signs of having been used elsewhere originally, with many of them showing grooves suggesting wheel ruts and others with smaller grooves perhaps relating to use of the blocks in the nearby Foundry (Figure 64).

In the south-western corner, in the upper fill material between the corner stones, excavation revealed a small angel figurine (Figure 65, Figure 70) standing upright. This appeared to have been placed there on purpose. Below, a post hole was clearly visible in the basal clay (Figure 66). Such buried figurines are not uncommon in Victorian period buildings and are reminiscent of the type of objects found particularly in Catholic households both in New Zealand and elsewhere. At Pompallier House in Russell, 'miraculous medals' were found behind some of the doorframes and also other objects in postholes (S. Best, pers. comm.).

Continued on next page

Clough & Associates Ltd. Page 56 Middle Class Spread

'THE LAB', CONTINUED

Identification of the Laboratory

As mentioned earlier, George Fraser (III) only became a Catholic on his death-bed in 1933 and this clearly post-dates the construction of the house. If George (III) was the builder of the laboratory it is possible he put the figurine there on behalf of his wife or perhaps some of the workmen. No clear date for the construction of the laboratory, though, has been determined. The laboratory's construction certainly post-dated the earliest European features found on the Wynyard St properties: the large basalt drains. The Lab was clearly built on a level terrace cut back into the basal clay and into part of a drain running to the south-east (Figure 61 and Figure 68).

While the presence of the laboratory was an intriguing find, identification of the crucibles from the Morganite Crucible Ltd, UK clearly indicated gold assaying (see Chapter 5 for further details of the artefacts and their use). This was not an obvious link to the Phoenix Foundry, which was not explicitly involved with gold. However, George Fraser (V) was able to clarify this and some of the other mysteries of this building.

George (V) has vivid memories of the laboratory. He describes it as being about 30-40m to the back of the house. George remembers papers and books in the shed. At the age of 4 or 5 he found some boxes of matches lying around in the laboratory and decided to set fire to some of these papers and, as a result, nearly burnt the lab down:

'Dad was in the back porch and saw all the smoke... I was so terrified I just stood there... he came down and put the fire out'.

The laboratory was used for processing the gold samples brought up from Waitekauri at Thames. George's (V) great-grandfather (George II) had 'had the idea of looking for gold at Thames' and had set up the Waitekauri mining operation with various partners.

George's father used the laboratory as an office for many years and particularly when the Foundry was closed during the Depression.

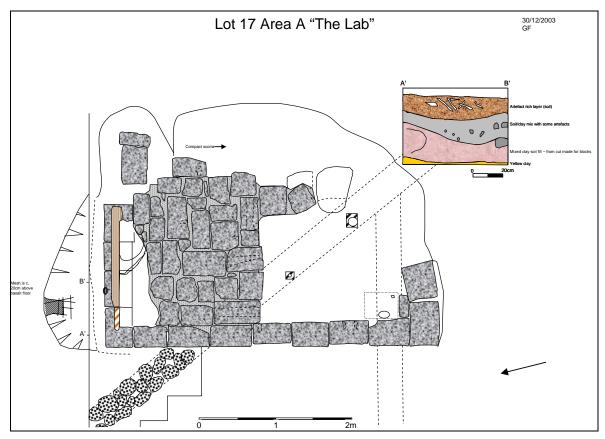


Figure 61. Plan of the 'Laboratory'



Figure 62. View of the 'Lab' looking east



Figure 63. Close-up of area of 'Lab' where arrefacts found



Figure 64. Basalt blocks in flooring showing grooves



Figure 65. Excavation of angel figurine



Figure 66. Post hole in south west corner

'THE LAB', CONTINUED



Figure 67. Northern edge of 'Lab' looking east, showing basalt block, concrete floor. Metal grating at centre-left



Figure 68. Basalt drain underneath the 'Lab'



Figure 69. Large metal pot containing burnt ash



Figure 70. Angel figurine from the laboratory floor

CHAPTER 4: 28-34 WYNYARD ST

INTRODUCTION

Excavations

The bulk of features excavated on the property came from the northern half of the project area. The street frontage from 28 to 34 Wynyard Street (Allotments 18, 19, 20 and L18) had remained after the University took over Wynyard Street, demolished the Fraser house and created the carpark. Three buildings here had been converted into crèche facilities and additional buildings were also used for housing staff.

The removal of the buildings along Wynyard Street allowed excavation of a number of different features representing different phases of the site (Figure 71). These included midden probably pre-dating European subdivision of the land, basalt drains from the time of the subdivision and a number of brick features related to landscaping and drainage, along with parts of foundations of some of the smaller building.

Most of the excavations of Allotments 18 and were carried out simultaneously, but the allotments are described separately to provide better continuity between the archival and archaeological data.

Continued on next page

Clough & Associates Ltd. Page 61 Middle Class Spread

Figure 71. Features excavated in Allotments 18-20

ALLOTMENT 18

Crèche 3 (Allotment 18 Section 10, City of Auckland, DP 27319) William Aitken purchased this allotment in 1860.³⁰ By September 1866 a two storey wooden dwelling with a slate roof had been erected on the site (Figure 72). At the front boundary an L-shaped building was also present and this extended over the boundary into neighbouring allotment 17,³¹ although this may have been an error as the 1882 plan shows this to have been contained within Allotment 18. The schedule which accompanies the 1866 map records that there was a stable and outhouse on the site. It appears that the L-shaped building performed the dual function of stables and outhouse.

However, it appears that the original buildings on this site were destroyed. There is no mention in the street directories or valuation lists of a person living on this site from the late 1870s through to the dawn of the 20th century. A dwelling was erected on the site in 1901-1902 and in 1902 it was the home of Johanna O'Sullivan.³² On the 1908 map of the city the house is shown as a wooden dwelling one storey high at the front and two storeys at the rear with two outbuildings at the rear.³³

Crèche 3 occupied the site of an earlier building (18/1), which appears to have been built on or near the site of an 1860s building (18/4). At the back was a relatively flat garden area (Figure 72) where an outhouse was recorded (18/2). When the area was probed during the assessment some bricks, apparently in their original location, were encountered together with some broken ceramics (Figure 73). This suggested that excavation would be profitable. A small shade house was also present at the back of the property, although it had fallen into disuse (Figure 74). Terracing of the back property, however, was evident and possibly part of landscaping of the gardens prior to the University taking ownership in the 1960s.

Excavation of Allotment 18 was carried out at the same times as that of Allotment 19. The house (Crèche 3) had previously been moved off the site.

Clough & Associates Ltd. Page 63 Middle Class Spread

-

³⁰ Southern Cross, 3 August 1860, p.3.

³¹ Vercoe & Harding Map of the City of Auckland, September 1866, Special Collections, Auckland Public Library.

³² Valuation List for the East Ward City of Auckland for the year 1902, ACC 210, Item 173, Auckland City Archives. ³³ 1908 map F14, Auckland City Archives.

ALLOTMENT 18 EXCAVATION

Clearance of the Site

The removal of the crèche building enabled the area to be cleared down to allow excavation. Perhaps the most interesting feature of the excavations of the foundations of the house was that it emphasised how close together some of the buildings were along the Wynyard St frontage, despite the large amount of land available. Crammed up against 34 Wynyard St were the out-buildings from 32 Wynyard St. The gap between the Fraser house at Number 36 and 34 Wynyard St was possibly not so tight but still presented a continuous frontage.

The excavations here were not as revealing as those on the neighbouring allotments. No sign was found of the earlier stables (18/1) along Wynyard St, or of the earlier house (18/2) which was demolished when the later house was built (Figure 72).

Around the House

Clearance around the crèche building did reveal some of the earlier landscaping of the property after the topsoil and any upper fill material were removed from the surface with a digger (Figure 75). This exposed a small number of brick foundations in the northern part of the section, but little else in the southern section. The main component recovered was a small brick foundation wall running down the northern boundary of the property, not quite parallel to the brick foundation walls of the out-houses and main house of the structure of Allotment 19. Excavation of the wall uncovered a deep wall with at least 10 courses of red brick still remaining under the ground, stepped at the base for additional support (Figure 76).

Test pits dug between this wall and the foundation walls for the structures in Allotment 19 (Figure 76) showed that the area had been disturbed by the building of drainage ditches using ceramic pipes (Figure 77). To the east and down the slope towards the original gardens (Figure 78), the stratigraphy (Figure 79) suggested that:

- The Allotment 18 wall was cut through clean natural fill.
- A shelly tarmac material had been placed in Allotment 19 running right up against the boundary with Allotment 18. This material had subsequently been cut into for the foundation walls for the house in Allotment 19 and subsequent amenities had destroyed much of the tarmac (see below).

A photograph of the house next to the Fraser House shown in the previous chapter suggests a larger house running back to the northern boundary. However, its demolition was relatively thorough, probably because the land sloped higher to the north, so earthworks for the University car park probably resulted in most of the footings of the original house being removed.

Continued on next page

Clough & Associates Ltd. Page 64 Middle Class Spread

Back of the Property

Clearance at the back of the property did reveal some additional features. The basalt drains ran down the slope to the back of the property as part of the original drainage system for the 1860s subdivision. Furthermore a series of post holes was also uncovered relating to structures on the property, although it is not clear what was placed here (Figure 71). Artefacts recovered in this area included some plaster and bottle fragments and probably dated to the 20th century (Figure 80). However, the posts lined up on the terraced area suggested that small sheds or outhouses had been located here. As no buildings were present on the earlier plans of the site, it is possible that these were constructed during the 20th century and demolished when the University took over the property.

Summary

Although initial assessment indicated that Allotment 18 was one of the most promising areas for investigation, the results were disappointing. Very few artefacts were recovered except for material in the general fill, including bottle glass and ceramics. This material included both late 19th century and 20th century artefacts. The poor results probably relate to the original removal of early structures and earthworks and landscaping carried out in the 20th century. The results did suggest that there had been at least two episodes of construction in the neighbouring Allotment 19 and it is to this we turn next.

Continued on next page

Clough & Associates Ltd. Page 65 Middle Class Spread



Figure 72. Allotment 18 buildings (red outline) overlying 1908 plan, with 1866 buildings (red)



Figure 73. Brick feature and broken ceramics in the vicinity of 18/4



Figure 74. Eastern end of Allotment 18 showing shade house and parking area

Continued on next page

Clough & Associates Ltd. Page 66 Middle Class Spread



Figure 75. View of Allotments 17-19 after preliminary clearance (18 in centre)



Figure 76. View of northern boundary wall



Figure 77. Close up of ceramic drain between Allotments 18 and 19



Figure 78. View of northern boundary wall in Allotment 18 looking east



Figure 79. Stratigraphy of area between Allotments 18 and 19

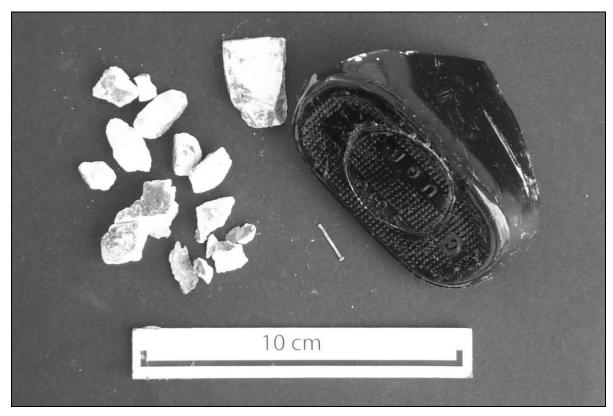


Figure 80. Plaster fragments, pin and bottle - on base in a circle is written 'S 610/U G B". Outside the circle is 'C' on one side and '42' on the other

Clough & Associates Ltd. Page 68 Middle Class Spread

ALLOTMENT 19

Crèche 2 (Allotment 19 Section 10, City of Auckland, DP 27319) William Aitken purchased this allotment in 1860.³⁴ A small building, possibly a shed, was erected soon after this as it appears on a contemporary plan (Figure 81).³⁵ By 1866 a single storey wooden building with a slate roof and two outbuildings graced the site.³⁶ By 1878 the property was owned and occupied by David White.³⁷ White lived in the wooden dwelling until the mid 1880s. Members of his family resided in the house until well into the 20th century. While no plans of this house survive, it is shown on the 1908 map of the city as being a single storey dwelling with three outbuildings at the front (Figure 81).³⁸

Initial Assessment

The northern end of this allotment was covered by Crèche 2 and could not be surveyed during the assessment, but behind the crèche it was possible to probe the garden areas. Although no structural remains were found in the testing, a layer of fragmented shell was encountered in the soil about 25cm down in the vicinity of the old 1860 outhouse (structure 19/2). This suggested that earlier landscaping or structural remains might warrant further investigation. North of the shade house, the vegetation was more tangled and a concrete structure was found at the boundary of the project area. These appeared to relate to 20th century water treatment and were not further investigated.

Demolition of the Crèche

The crèche was removed during the early part of the project. This building was probably the structure present in 1908, although it was clear that it had undergone significant modification during its lifetime. The modifications included the building of a second storey, with major changes to the ground floor. An external fireplace and chimney had replaced an earlier interior fireplace. Enclosing of verandas was also carried out during the late 20th century. Details of the building and its demolition are provided in a separate report (Bickler 2004).

Continued on next page

Clough & Associates Ltd. Page 69 Middle Class Spread

³⁴ Southern Cross, 3 August 1860, p.3.

³⁵ A plan of the area dated 30 June 1860 shows a small building on the site. It is clear that this plan was annotated after it was originally drawn. Since George Fraser's house, which had been built by 1871, is not shown on the plan, it appears that the plan was annotated prior to this date. SO 2A, Land Information New Zealand, Auckland.

³⁶ Vercoe & Harding Map of the City of Auckland, September 1866, Special Collections, Auckland Public Library, and schedule (see note 2).

³⁷ Valuation List for the City of Auckland for the year ending 15th January 1878, ACC 210, Item 1, Auckland City Archives, pp.11-12.

³⁸ 1908 map F14, Auckland City Archives.

ALLOTMENT 19, CONTINUED

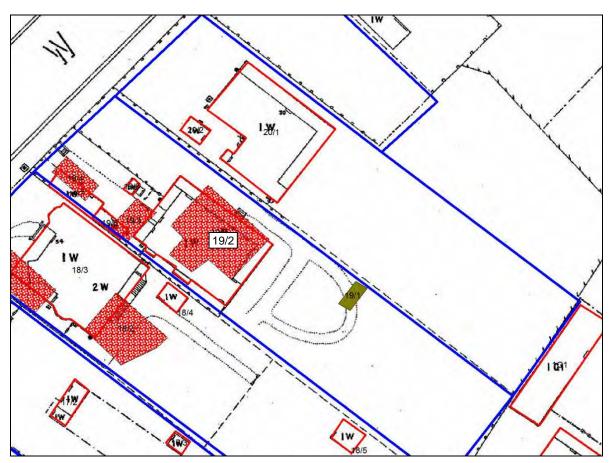


Figure 81. Plan of buildings on Allotment 19 (red outline) overlaid on 1908 plan, with buildings from 1866 plan (red) and 1860 plan (green)

Clough & Associates Ltd. Page 70 Middle Class Spread

ALLOTMENT 19 EXCAVATION

Features Excavated

The excavations of Allotment 19 were carried out after the clearing of the upper fill material across the property. The upper topsoil was removed with excavators and features were investigated; the area was cleared at the same time as the Allotment 18 excavations were being carried out. Two major outbuildings were also present running along the south western boundary of the site in front of the crèche. These structures were present in the 1908 plan and had eliminated earlier structural evidence of outbuildings. Overall, however, the excavations on this allotment proved very productive with several features identified that had not been located during the assessment. The key elements of the excavation (Figure 82) after the clearance of the property were:

- 1. Piles, both brick and wooden, for the crèche building
- 2. A deep well near Wynyard St
- 3. A brick drain
- 4. A small brick lined store or 'cellar' about 10m from the Wynyard St frontage
- 5. Brick foundations of outbuildings
- 6. Bottle drain
- 7. Small round brick garden feature, probably a pond
- 8. Rubbish pits.

Initial Removal

During the initial removal of the topsoil, a small amount of shell material was visible in the area behind the crèche building, which suggested either that a shell path had been there or that some other sort of landscaping involving a crushed shell layer had been used where the property sloped down relatively gently towards the gully. A small number of artefacts were recovered from the fill in this area, which included a small amount of late 19th century and 20th ceramics.

It was also interesting to note how close this building was to its neighbours, particularly to the building in Allotment 18. The original subdivision provided relatively long and narrow plots and the houses took up much of the frontage on Wynyard St.

Piles and Foundation Walls

Clearance of the property exposed a variety of postholes relating to various structures on the site. The most obvious piles and postholes related to the demolished crèche building (Figure 83). It was clear from the demolition that the building had been re-piled, probably during the 20th century, although still mostly using red brick. However, small sandy bricks were found in a number of places, frogged with a 'T' symbol (Figure 84) and these related either to an earlier house or to the original piling of the demolished crèche building.

The remnants of a number of puriri piles were also found (Figure 83). These appeared to be under the east veranda of the crèche building and in some cases were well preserved.

The main foundation walls uncovered related to the outbuildings at the Wynyard St frontage. These consisted of two small brick buildings represented by rectangular structures possibly used as stables. No direct evidence of their early function was identified. Artefacts recovered from the area included small bits of china, glass, metal and a painted grey ball of unknown purpose (Figure 85).

Well

A well was exposed at the front of the property. The bottom was not found and no artefacts were recovered from the fill. The diameter of the well was 1.7m and it probably related to the earliest dwelling on the allotment. It is not clear when it was in-filled but it was done with dense clay to at least a few metres. Some of the bricks found from the upper fill were 'air bricks' usually used for ventilation at the top of foundation walls and these may have come from the original house on the Allotment. Most of the bricks used in the construction of the well were un-diagnostic wire-cut moulded plain red bricks. No artefacts were recovered from the feature.



Figure 82. View of excavations in Allotment 19 (after preliminary clearing)





Figure 83. View of area behind crèche building showing old post holes and puriri post (inset)



Figure 84. 'T' brick used in old foundations



Figure 85. Items found at the end of the foundation line, including a grey painted ball, a test tube with holes and a small bottle with 'Canadian Wineries Limited Canada' on the base



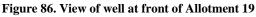




Figure 87. Sectioned view of well

Clough & Associates Ltd. Page 74 Middle Class Spread

BRICK DRAIN (ALLOTMENT 19)

Brick Drain

One unusual drain was recovered at the front of the property. This brick drain appears to have started at the north western end of what was probably building 19/4 running at an angle towards the later outbuildings 19/7 and 19/8. The structure 19/4 might have been a stable and the drain would have run parallel to the northern wall. At the north-western corner, a square made from yellowish bricks with a depression in the centre probably represents the location where the down pipe ran down from the roof. The drain, made from red, rectangular frogged bricks, then channelled the water approximately 10m down to the east probably meeting up with a larger basalt drain destroyed in this area when the later outbuildings were built. Large drains were visible at the back of the property running down the slope.

The cross section of the brick drain was roughly square. On removal of the upper bricks, it was apparent that slate fragments had been used to line the inside of the drain. This would have improved the flow of water through the drain and limited absorption by the porous clay bricks.

Two types of bricks were used in the construction of the drain. The yellowish clay bricks were highly friable and have not lasted well. However, these bricks are relatively distinctive and have been identified in other nearby archaeological projects such as Britomart (R11/1379, Bickler *et al.* 2005) with the stamped marked 'B.B.C.'

It is possible that these bricks were imported from the UK and were 'yellow stock' bricks. Yellow stock bricks were popular in the 19th century as they were generally cheaper to make than the traditional red bricks. Ash was mixed with the clay prior to moulding. Then the bricks were baked over a bed of coke for several weeks with the ash in the clay firing the bricks internally and thereby reducing fuel costs.³⁹

The majority of the bricks were the more common sand stock red bricks. The bricks were wire cut and stacked during drying and the evidence of this is clear on the bricks. The source of the bricks remains unknown.

Continued on next page

Clough & Associates Ltd. Page 75 Middle Class Spread

³⁹ http://www.bricksandbrass.co.uk/deselem/extwall/bricks.htm#001

BRICK DRAIN (ALLOTMENT 19), CONTINUED



Figure 88. View of frogged brick drain at the front of Allotment 19 (looking west)



Figure 89. View of frogged brick drain showing yellow 'B.B.C.' bricks at west end (looking east)



Figure 90. 'B.B.C.' brick from drain



Figure 91. Red, rectangular frogged brick from drain

THE 'CELLAR' (ALLOTMENT 19)

Cellar Excavation

During excavations of the outbuildings 19/7 and 19/8 which had been demolished during the demolition of the crèche building, a rectangular brick feature approximately 1m wide and about 1.5m deep was discovered (Figure 82) underneath what would have been an earlier floor. It had been in-filled with a variety of materials (Figure 92, Figure 93, Figure 94). There was a dense concentration of mainly broken bottle glass present in the top 0.5m of fill. It was decided to sample this dense material as the bulk and the repetitive nature of the artefacts, primarily 'champagne' bottles, made it clear that a good picture of the contents would be obtained from this material. Unfortunately, the remainder was destroyed overnight by bottlers before a plan could be drawn, although the bottom of the cellar was not disturbed. Rubble such as bricks and some large blue stones had also been dumped throughout the deposit and their numbers, particularly the blue stones, increased with depth.

All artefacts in the bottom half of the fill were collected as the number of artefacts had decreased markedly and there was a greater variety of materials represented with more complete items. Ceramic, glass, bone, shell and metal objects were present, including some almost completely rusted metal sheets or/and containers. Ceramic items were more common and a number appeared to have the same patterns, the most common being the 'Tealeaf' pattern (see below for detailed analysis⁴⁰). Like the round brick feature described below, a number of items, such as glasses and ceramic items, appeared to have been thrown into the feature complete (possibly in a chipped state) and were broken after discard.

Bricks

At least two distinct types of bricks were identified on the basis of different frog marks. One had a rectangular frog while the second type had a diamond frog mark (Figure 95). There was no obvious reason for the choice of different bricks and it is likely that they were simply those at hand. No manufacturing marks were found on the bricks.

Continued on next page

Clough & Associates Ltd. Page 77 Middle Class Spread

⁴⁰ The gilt on the 'Tealeaf' pattern appeared to be quite fragile and may have rubbed off a number of vessels.

Stratigraphy and Dating

There was a variety of soils including a gritty material visible in section (Figure 96 and Figure 97). However, despite differences in some of the matrix types (rocks etc) there was very little definable stratigraphy. Links between bottom and top were apparent in the form of ceramic sherds of the same patterns, and the same type of glassware throughout. The differences in matrices found indicated that some fill material was deposited along with the artefacts. This would suggest that the in-filling of this structure was an event of short duration.

An interesting aspect of this feature is that the bottles indicate that it was used as a rubbish pit some time after the 1870s, as reflected by the dominance of champagne bottles compared to black beer bottles – a marked contrast to the bottle drain found behind the old house and described in the next section. However, this difference may reflect a particular preference in household consumption rather than a chronological marker.

The alignment of the cellar appears to fit better with the later outbuilding 19/7 rather than the earlier structure in the area, 19/3, which suggests a date closer to the turn of the century after the 19/3 structure had been demolished.

Contents

Analysis of the contents of the cellar confirmed the observations in the field. Most of the vessels were of the 'Tealeaf' pattern, which is perhaps surprising given the short duration suggested by the deposition. Analysis of the pieces suggested that some items were whole or nearly whole when dumped into the cellar.

Analyses of the glass and stoneware items are summarised in Table 4 and Table 5. As discussed above, the large number of champagne bottles is the most obvious aspect of the assemblage and indeed the proportion of alcohol bottles is high. Additional food related bottles are also present, but not in particularly high quantities except in the upper layers.

The range of other items represented in the collection is interesting. They include personal items such as toothbrush fragments (Figure 98) and a belt buckle (Figure 99), lampshades, glasses and tumblers and glass bowls (Figure 100). Such items are likely to have been thrown in, as they were broken. This suggests that the material may have been deposited over a lengthier period of time than implied by the earlier discussion of the stratigraphy. The stoneware items were predominantly blacking/grease containers which were probably used in the household and as 2 penny ink bottles (Figure 22). The number in the collection is significant, but perhaps represents only a few months' usage.

Continued on next page

Clough & Associates Ltd. Page 78 Middle Class Spread

Table 4. Glassware from Cellar

Layer	Layer Contents Bottle		Total
Bottom Layer			1
	Alcohol	Black Beer	14
		Brandy	1
		Champagne	10
		Wine	1
	Chemist	Medicine	4
	Food	Club sauce	4
		Salad oil	2
		Tomato sauce	1
	Glassware	Decanter	1
		Lamp shade	2
		Tumbler	12
		Wine glass	3
E	Bottom Layer Total	56	
Surface Layer	Aerated Water	Unknown	1
	Alcohol	Bitters	1
		Black Beer	29
		Brandy	3
		Case Gin	5
		Champagne	102
	Chemist	Medicine	2
		Perfume	2
		Perfume	1
	Food	Club sauce	7
		Pickles	1
		Salad oil	7
		Sauce/pickles	26
		Vinegar	7
	Glassware	Bowl	1
		Cup	1
		Dish/bowl	1
		Tumbler	1
		Surface Layer Total	198
Grand Total			254

Table 5. Stoneware from the Cellar

Feature	Туре	Total
Lot 19 Surface Cellar	Blacking/grease	7
	Penny ink	2
Lot 19/Cellar/Bottom Layer	Blacking/grease	1
	Container	1
	Chemist	1
Lot 19/Cellar/conc. Near		
cellar	Unknown	1
Lot 19/Cellar/Surface Layer	Beer/stout	1
Grand Total		14



Figure 92. Removal of upper fill in the cellar



Figure 93. Marianne Turner excavating in the cellar



Figure 94. View of cellar looking south



Figure 95. Close up of brick work showing different types of brick used



Figure 96. View of internal stratigraphy of cellar

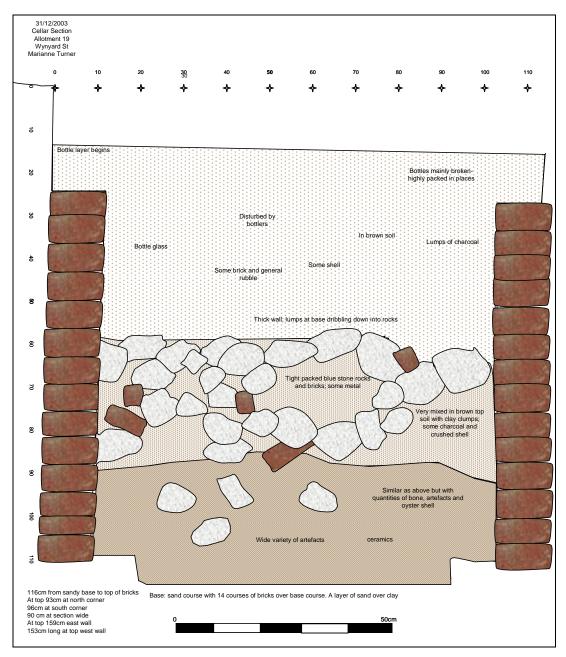


Figure 97. Stratigraphy of 'cellar'

Continued on next page

Clough & Associates Ltd. Page 81 Middle Class Spread



Figure 98. Objects from 'cellar' fill



Figure 100. Glass fragments including a wine glass fragment



Figure 99. Belt buckle from the base of the 'cellar'



Figure 101. Tumblers from 'cellar'



Figure 102. Penny ink bottles

Contents (continued)

The other interesting items recovered from the fill were oyster shells. These were scattered in the fill and suggested refuse from a single meal. The presence of the stones, however, is a bit problematic. While most of the rest of the material can be explained as domestic debris, the source of the stones is unknown.

Clough & Associates Ltd. Page 82 Middle Class Spread

BOTTLE DRAIN (ALLOTMENT 19)

Exposure of the Drain

During clearance of the flat area behind the crèche building on the level surface just above the slope (approx 1.5m away) a feature of some 10m in length and 40-60cm in width was uncovered (Figure 103). A narrow trench was filled with varying amounts of bottle glass and shell in dark topsoil, with blue stone rocks at the base (Figure 104). Large square wooden posts/piles appeared regularly spaced along the extent of the feature.

Excavation of the feature revealed that the piles (puriri logs described earlier and belonging to the crèche building) were dug in later and although parallel were generally not dug directly on top of the feature.

At the base of the feature – underneath the bottle glass and sitting on the natural clay – were small blue stone rocks (fist sized on average) quite tightly packed (Figure 103, Figure 106). To the north end these rocks were packed 270mm deep and 380mm wide. The trench itself was 620mm wide at the top where the fill of glass and shell and dark mixed soil began but was narrower at the south end (400mm). In the northern section, the depth from the top of the fill to the natural was 420mm, but it was deeper at the southern end (490mm).

There was some variation in fill material from north to south. The northern third of the feature has relatively little bottle glass. Instead there is a denser amount of mainly water-rolled shell in a brown silty matrix. The remaining two thirds of the feature, in contrast, contained very dense amounts of bottle glass (and almost no soil) among which 'black beer' bottles seemed to dominate. Much of this glass was fragmentary, but complete and near complete specimens were recovered. It is likely that he bottles were thrown in whole and that most broke on impact with others or with the stone. Slate (purple-grey) was also a common component – including some large flat pieces.

This feature connected with drains that ran at right angles to it down the slope. At the southern end there was a corner where two rows of larger blue stone rocks joined to create drainage for the property. Drains comprising larger blue stone boulders and rocks run at considerable distances and regular intervals from the top of the site to the lower slopes. None of these were additionally filled with bottle glass and is likely that they predate the bottle drain.

A few other artefacts were found in the fill of the bottle drain and included a door knob (Figure 107), a small white stone ball (Figure 108) and nails (Figure 109). The artefacts, however, were not particularly diagnostic.

Continued on next page

Clough & Associates Ltd. Page 83 Middle Class Spread

Dating

One question relating to the construction of the drain was whether the bottle glass, midden and slate were deposited as part of the drain or added to it at a later time – perhaps pushed into it during construction of the crèche building. However, there appeared to be no build up of soil between the rocks and artefact/midden material – indeed this appeared to have filtered down through the rocks. In summary, the bottles appear to have been added at the time of construction or soon after.

Analysis of the contents of the drain (Table 6) supports a relatively early date for this feature, and the quantities of 'black beer' bottles relative to the number of 'champagne' bottles indicates a date of around the 1860s. This is in contrast to the material recovered from the 'cellar', where champagne bottles, which became predominant for beer usage from the late 1870s onward, are the most common bottle recovered.

The use of bottles for fill or to help stabilise fence posts (Best, pers. comm.⁴¹) has been recorded on other historic sites. We do not know of another case, however, where bottle glass has been used to improve drainage, although there is every reason to think it would have been effective, if somewhat dangerous.

Table 6. Types of bottle in the bottle drain

Feature	Contents	Bottle	Total
Bottle	Aerated Water	Unknown	1
Drain	Alcohol	Black Beer	138
		Brandy	1
		Case Gin	1
		Champagne	13
	Food	Club Sauce	3
		Pickle/Sauce	1
		Salad Oil	1
		Sauce	7
		Sauce/Pickles	1
		Vinegar	1
	Stoneware	Blacking/grease	3
		Flowerpot	1
		Total	172

Continued on next page

Clough & Associates Ltd. Page 84 Middle Class Spread

⁴¹ Note: Simon Best, pers.comm.; other examples of bottle glass being used in similar ways – Durham Lane – fill for floor, Russell – to stabilise fence posts.

George Fraser and the Bottle Drain

The bottle drain was an unusual find but the archaeologists may not have been the first to locate it. Our interview with George Fraser (V) who lived a couple of doors down from the property revealed that he may have found it some 70 or so years ago:

George remembers throwing broken bottles into the bush. 'I got one of the bottles and was throwing it into the bush and it caught the top of my finger ... just took the top off it and this part of the finger was just lying over there with just the bone sticking out ... dad rushed me up to Carrick Robertson... a prominent surgeon in Princes Street and he fitted the finger back again then they got me to hospital...'

There he received 'one of the first skin grafts'. Skin was grafted from his arm to the damaged finger.

'There was a line of bottles as you go down the dip.'

The bottle drain may also have been lined with some slate which improved its draining functions and must have been added to improve the capture of water running across the slope. This may have been necessary if an attractive garden had been landscaped there, in which the 'pond', or garden feature described below may have been a centrepiece. The flow may also have been necessary to control water down to the Phoenix Foundry buildings.

Continued on next page

Clough & Associates Ltd. Page 85 Middle Class Spread



Figure 103. View of bottle drain prior to excavation



Figure 105. View of basalt drain below bottle drain



Figure 104. Excavating bottle drain



Figure 106. Excavation of basalt drain



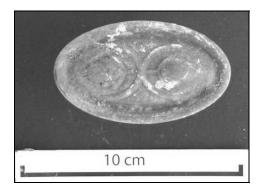
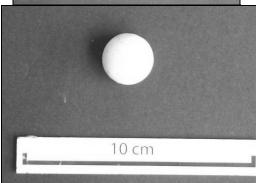


Figure 107. Door knob found in bottle drain



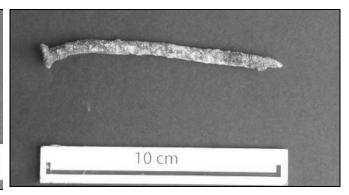


Figure 108. White stone ball from bottle drain

Figure 109. Nail from drain

Clough & Associates Ltd. Page 87 Middle Class Spread

GARDEN FEATURE (ALLOTMENT 19)

Garden Feature ('Pond')

During clearance of the garden area behind the crèche, what appeared to be a well was exposed (Figure 110). The feature was located on gentle slopes down towards the gully. The diggers may have removed the top 1-2 courses of bricks but otherwise the feature appeared intact (Figure 111). The area was cleared and the upper layers were excavated. However, at 1.2 m from the original surface the natural fill was encountered and it was established that this feature was not a well but some sort of garden feature, probably a pond.

It is unlikely that the feature was free standing in its original setting as the pond was at the original ground level or just below. At some point it had been filled in with domestic rubbish and then buried under topsoil.

The garden feature had a diameter of between 1.37m and 1.40m and was between 17 and 18 brick courses deep (this includes the courses removed by mechanical digger). There were about 16 ½ bricks around the circumference and the feature was not completely symmetrical. No mortar was used, which might have impacted on its ability to hold water, but as it was embedded in the surrounding clay it was probably relatively watertight (Figure 112).

The bricks used in the construction were probably recycled. Some had one face chipped at an angle, similar to the type of bricks found in archways. The majority of bricks were plain and handmade. A few, however, had 3 small central holes, as seen on bricks elsewhere on the site. The bricks appeared to be in relatively poor condition and were quite crumbly. Whether this was due to taphonomic processes or from being used to hold water which had been absorbed is unknown, but the latter is a distinct possibility.

The feature was full of a range of materials and soils. Little stratigraphy was discernible, though there appeared to be two artefact layers. Artefacts were present from close to the top through to the bottom of the feature. The material was excavated by two spits – 1 from 0-500mm and the other 500mm-1m. The first 100mm consisted of general rubble including brick pieces, rocks, plaster, slate, rusted iron, charcoal and clay clumps (Figure 113). Underneath this was quite a concentrated artefact layer in a mixed dark brown soil with some concentrations of charcoal and coal and rusted iron – possibly from a large container originally. A number of bone toothbrush pieces were associated with this concentration – possibly dumped while inside the aforesaid metal container. A single plate had been thrown in relatively whole and smashed flat in situ.

Continued on next page

Clough & Associates Ltd. Page 88 Middle Class Spread

Artefacts from the Garden Feature

The wide range of artefacts recovered included leather, cloth, bone, iron, ceramics, glass and metal. Some bone and shell was present, though most of the shell appeared to be of the beach rolled variety and perhaps derived from landscaping rather than cooking refuse. Although excavated in two spits there was continuity between them. For example, a teapot lid was found in the lower artefact layer which fitted the teapot in the upper spit. This suggests that all the material in this feature was deposited in a short period of time if not during the same dumping event. The ceramics appeared to be from a limited number of 'sets', as might be expected from a single household. Some of the vessels also appeared to be complete when they were deposited, only to break on the bricks and rocks on which they were thrown. This is similar to what was observed in the 'cellar' where many of the glasses and cups were also complete.

Perhaps the most interesting artefact found was a partial set of dominoes (Figure 114). These appeared to be ebony and bone and 17 (either whole or partial) were found. A normal domino set contains 28 pieces.

Other items uncovered included a toothbrush, hair brush handles and 3 lenses from pince-nez. Two of the lenses were clear and probably came from a single set of pince-nez (although the frames had eroded) and there was another pale blue lens of the same shape also recovered (Figure 115). Pince-nez became very popular as eyeglasses for middle-class men and women before the end of the 19th century and were worn until about 1935⁴². The clear lenses were tested by OPSM in Royal Oak and found to have a dioptre of 4.0, suggesting the owner was very short sighted. The blue lens was not a corrective lens.

A metal stamp was also recovered (Figure 116), with the letters 'J. White'. This is potentially intriguing as D. White was noted as the property owner in 1878 and members of his family lived there later on.

Metal objects and leather fragments including a boot heel were also recovered (Figure 117). A summary of artefacts is provided in Table 7 and Table 8. Additional discussion on many of the artefacts is presented in later chapters.

Summary

The evidence suggests that this feature may have been a garden pond and probably related to the original house on the property. At some point during the latter part of the 19th century, the pond was used as a rubbish dump and filled in. The use of recycled bricks is also an interesting feature and they may have come from the nearby brick works located in Mechanics Bay or perhaps from the neighbouring Phoenix Foundry below.

Continued on next page

Clough & Associates Ltd. Page 89 Middle Class Spread

⁴² http://www.antiquespectacles.com/history/through_the_ages.htm



Figure 110. Exposure of the garden feature behind crèche



Figure 111. Garden feature fully excavated



Figure 112. Close up of brick work



Figure 113. Debris from fill



Figure 114. Domino set from garden feature



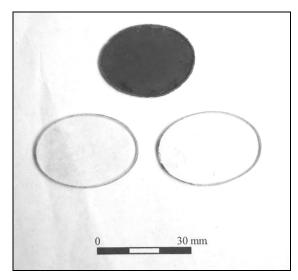


Figure 115. Lenses recovered from garden feature

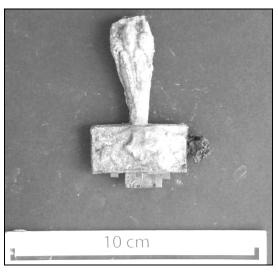


Figure 116. Stamp with decorative handle and base. Letters inserted in the base read 'J.White'

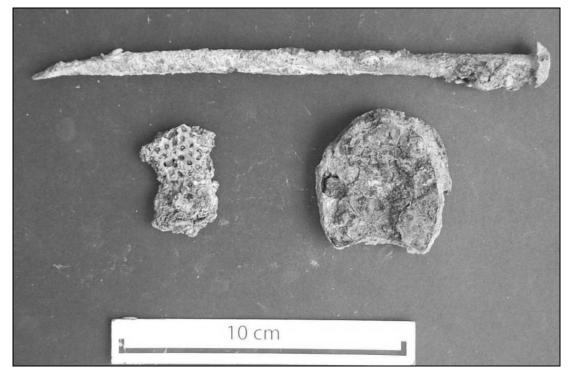


Figure 117. Objects from garden feature including metal nail, metal brush handle and boot heel

Continued on next page

Clough & Associates Ltd. Page 91 Middle Class Spread

Table 7. Glass, stoneware and metal objects from the garden feature

O-500mm	Context	Contents	Bottle	Total
Champagne	0-500mm	Alcohol	Black Beer	3
Chemist				1
Chemist			Champagne	1
Perfume 2		Chemist	Hair product	1
Food Club sauce 1			Medicine	1
Essence			Perfume	
Malt 1 Salt/jam jar 1		Food	Club sauce	1
Salt/jam jar			Essence	1
Glassware			Malt	1
Unknown 1			Salt/jam jar	1
O-500mm Total 15		Glassware	Tumbler	1
500-1000mm Alcohol Black Beer Brandy 1 1 Spirits 1 5 Brandy 1 1 Spirits 1 Chemist Medicine 1 Perfume 2 Poison 1 1 Perfume 2 Poison 1 1 Sauce/pickles 2 Sauce/pickles 2 1 Lampshade 1 Tumbler 2 Vase 1 Wine glass 2 Household Ink 1 1 S00-1000mm Total 27 Spoilheap Alcohol Black Beer 1 Glassware Tumbler 1 Spoilheap Total 2 2 Spoilheap Total 3 Spoilheap Tot			Unknown	1
Brandy 1 Spirits 1		0-500mm Total		
Spirits 1	500-1000mm	Alcohol	Black Beer	5
Chemist Medicine 1 Perfume 2 Poison 1			Brandy	1
Perfume			Spirits	
Poison 1		Chemist	Medicine	1
Food Salt/jam jar 6 Sauce/pickles 2			Perfume	2
Sauce/pickles 2				1
Glassware		Food		
Lampshade 1 Tumbler 2 Vase 1 Wine glass 2			Sauce/pickles	2
Tumbler 2 Vase 1 Wine glass 2		Glassware	Carafe	1
Vase 1 Wine glass 2 Household Ink 1 500-1000mm Total 27 Spoilheap Alcohol Black Beer 1 Glassware Tumbler 1 Spoilheap Total 2				
Household Ink 1 500-1000mm Total 27 Spoilheap Alcohol Black Beer 1 Glassware Tumbler 1 Spoilheap Total 2				2
Household Ink				
Spoilheap Alcohol Black Beer 1			Wine glass	
Spoilheap Alcohol Black Beer 1 Glassware Tumbler 1 Spoilheap Total 2				
Glassware Tumbler 1 Spoilheap Total 2				27
Spoilheap Total 2	Spoilheap	Alcohol	Black Beer	
		Glassware	Tumbler	
Grand Total 44				
	Grand Total			44

Garden Feature 0-500mm	Ink	2	well 0 - 50
	Stout	1	
Garden Feature 500-	Penny		
1000mm	ink	1	
Grand Total	4		
Stoneware			

ell 0 - 500mm Various small tubes Tap?

Shoe base Large Nail Stamp Large hinge

Metal pipe Nails Lead

well 500 - 1000 Handle

Large metal stake Metal rod with an eye Short bit of pipe

Metal objects

Continued on next page

Clough & Associates Ltd. Page 92 Middle Class Spread

Table 8. Miscellaneous items from the garden feature

Context	Material	Description	Notes
0 - 500mm	bone	hair brush	top fragment of brush part
0 - 500111111	bone	hair brush	fragment of brush part
		hair brush	fragment of brush part
	bone	?	Inagment of brush part
	bone		whole have brown
	bone	hair brush toothbrush	whole brush part whole brush head part
	bone		
	bone	toothbrush	whole brush head part - green lines on the back
	bone	?	like a toothbrush head but no sign of holes
	bone	toothbrush	handle - marking in the shape of a small circle with writing, but too small to make out
	bone	toothbrush	most of a whole toothbrush
	bone	toothbrush	whole toothbrush - in two parts
	bone	toothbrush	whole toothbrush - writing on handle 'THE
			BEATRICE LAMBERT & CO' (close up)
	bone	?	
	stone	Slate	
500 - 1000mm	ceramic	pipe whole	thistle pattern at tobacco end. Written on one side is 'GLASGOW' and on the other 'DAVIDSON 76'
	ceramic	pipe end	
	ceramic	pipe end	two small holes out to stem
	ceramic	fragment of pipe end	
	ceramic	pipe stem	written on the side 'W.SOUTHORNE & Co (not sure about the & Co)/BROSELEVIR (not clear on the LEVIR)'
	ceramic	pipe stem	Written on one side is 'GLASGOW' and on the other 'DAVIDSON'
	ceramic	pipe stem	plain
	ceramic	pipe stem	Written on one side is 'GLASGOW' and on the other 'McDOUGALL'
	plastic	buttons	5 buttons
	cloth	small fragment of cloth	
	wood/leather?	heel of shoe x2	
	stone	piece of slate	
	stone	?	piece of obsidian?
	wood/leather? & metal	various shoe soles	
	cloth	Pieces of cloth	one black the other yellow
	wood/leather? & metal	large shoe heel	,
	cloth	piece of cloth	very matted together
	clay	flower pot	, ,
	leather/wood ?	heel of high heel shoe	two fragments
	bone	toothbrush	handle - marking in the shape of a small circle with writing, but too small to make out
	bone	hair brush head pieces	fragments from the head(s) of hair brush(es)
	bone	hair brush handle	small holes at the end seem to point to this being the handle of a hair brush.
spoil heap	wood	dominoes	
•	bone	toothbrush head	

Clough & Associates Ltd. Page 93 Middle Class Spread

RUBBISH PIT 2 (ALLOTMENT 19)

Rubbish Pit 2 Rubbish Pit 2 was just over 0.5m in diameter, relatively circular and contained:

- 1. Shell, charcoal, shale fragments, basalt stone fragments.
- 2. Ceramics, pitchers and plate, terracotta figurine, doll fragment.
- 3. Bottles, wine glass fragments, pencil, animal bone and toothbrush fragment.

This pit was probably dug to around 0.5m below the original ground surface. The matrix contained significant amounts of charcoal and the mixed nature of the fill suggested that the pit had been dug, filled in quickly with rubbish and then covered with a cap of clay to seal it.

As might be expected, analysis of the artefacts (see Chapter 5) suggested a late 19th century date for the rubbish pit. The amount of charcoal also indicated that at least some of the material came from cleaning the fireplace out, but the disposal of the terracotta figurine (Figure 121) and other artefacts suggested that the opportunity was taken to dispose of more general debris. The history of the figurine is unknown but overall the artefacts, particularly the figurine, toothbrush, wine glasses and ceramics are suggestive of occupants who were moderately well-off.

Continued on next page

Clough & Associates Ltd. Page 94 Middle Class Spread

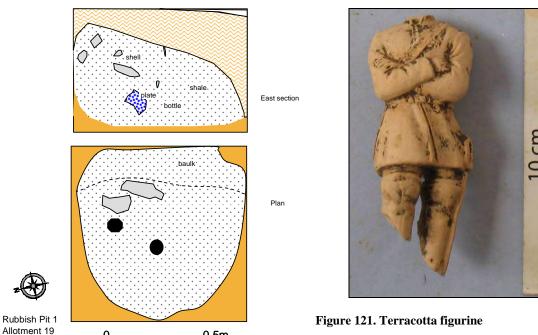
RUBBISH PIT 2 (ALLOTMENT 19), CONTINUED





Figure 118. Rubbish Pit 1 looking south-east (prior to excavation)

Figure 119. Rubbish Pit 1 east section



<u>0.5</u>m

Figure 120. Plan and section of Rubbish Pit 19/1

Clough & Associates Ltd. Page 95 Middle Class Spread

DISCUSSION (ALLOTMENT 19)

Summary

Allotment 19 was a productive area for the excavation. The earliest evidence of use was the basalt drains found on the original subdivision, and the evidence of subsequent drains such as the brick drain, the bottle drain and other more modern drainage illustrates the ongoing need to handle the water flow across the clay surface of the property.

The removal of the crèche building was itself instructive although it is unlikely this was the original house on the property. The relatively unusual plaster and lathe construction does suggest that the house was built in the 19th century and then heavily modified, but it is not clear whether it was the original house on the property indicated in the 1866 plans. Examination of the Stephens 1886 map shows that Allotment 19 originally had buildings at the front of the property with a small wooden house further back. The brick drain lined with slate was the only surviving indication of these buildings. A well at the front of the property may also date from this earlier occupation.

The evidence from the 'cellar' and the garden feature also suggests that there was a major event during the 19th century. Both seemed to have been constructed as part of the original design of the property – or at least of the original house. The 'cellar' was probably some form of cold store for the house in pre-refrigeration days and was located in its own small building at the front of the property. The garden feature was probably a small pond. However, it is possible that both the cellar and garden feature were used as a dump at roughly the same time at the end of the 19th century or early 20th century, although the exact date is difficult to pin down.

Landscaping had also been carried out in relation to the original house. The remains of the shell tarmac material seen in sections near the later foundations probably relate to the earliest house, but whether the garden pond was part of the original house or the later one is unknown. Later landscaping removed the shell tarmac and covered the garden pond.

At least 2 rubbish pits were excavated at the back of the property. They probably relate to the late 19th century and perhaps to the occupation of the house.

Clough & Associates Ltd. Page 96 Middle Class Spread

ALLOTMENTS 20 AND L18

Allotment 20

Allotment 20 is located at the northern end of the project area. This allotment was purchased in 1861 by Alexander Kennedy who was declared bankrupt eight years later. The allotment was briefly owned by a banker's clerk from Thames before being purchased by Joseph Howard in 1870. He soon had a dwelling built on the site. Howard lived in the house, which was later inherited by his widow. She was still living there in 1902. On the 1908 map of the city the house is shown as a wooden dwelling one storey high with an outhouse at the front (Figure 122).

A modern pre-fabricated crèche building occupied the front of the property and the area was heavily modified. Behind there was a small garden. Vegetation covered the southern end, with some decaying concrete retaining walls along the path through this area. This all appeared to date to the 20^{th} century. The initial assessment of this area suggested that little of archaeological interest would be found. The northern end could not be tested and no structures or archaeological remains were revealed by testing at the southern end.

L18 Institute of Linguistics

This allotment (Allotment 18 Section 10, City of Auckland, DP 27319) was part of the Auckland Grammar School endowment land. In February 1908 the Auckland Grammar School Board offered it for lease. Kathleen Smith purchased the 21-year lease. A house was subsequently built on the site. Nothing was found in this area during the assessment.

Excavations

Archaeological remains in this area were scant except for two sets of features. On the sloping ground behind the location of the original house in Allotment 20, two brick features connected by a basalt drain were identified and excavated. The features, probably some sort of drainage system, were filled with debris. In addition, a highly disturbed midden, thought to be of Maori origin was also identified in Allotment L18.

Continued on next page

Clough & Associates Ltd. Page 97 Middle Class Spread

⁴³ 6G/769 and 23D/323, Land Information New Zealand, Auckland.

⁴⁴ 23D/323 and 24D/77, Land Information New Zealand, Auckland.

⁴⁵ Electoral Roll, Auckland City East, 1871-1872.

⁴⁶ Wises New Zealand Post Office Directory, 1902, p.123.

⁴⁷ 1908 map F14, Auckland City Archives.

⁴⁸ R294/501, Land Information New Zealand, Auckland.

⁴⁹ Valuation Field Sheets, 28 Wynyard Street, Auckland City Archives.



Figure 122. Allotments 20 and L18 with modern buildings overlaid on the 1908 plan and main excavated features (1866 structures in mottled red)

Clough & Associates Ltd. Page 98 Middle Class Spread

FEATURES (ALLOTMENT 20)

Rubbish Pit (RB1)

The removal of topsoil from the allotments down to the natural clay layer exposed an oval rubbish scoop (RB1 on Figure 122). The removal of the topsoil was conducted by machine excavator. The natural clay layer is a yellowish colour; the rubbish scoop was a dark brown. This scoop measured 1300 x 660mm and was very shallow, with a maximum depth of 80mm. The removal of the topsoil by machine excavator contributed to the shallow appearance of this pit but it is unlikely that it was ever particularly deep.

The pit did not have an even or regular boundary or base. It was cut into the natural clay layer, but the unevenness of the feature suggests that either little care or time was taken in the original excavation of the pit, or that the tool used to dig it did not allow for an even excavation.

Artefacts recovered from this feature include ceramics, glass, copper, iron, and possibly eggshell from the interior of a broken bottle. The soil matrix of this feature contained a number of amorphous rusted metal fragments, along with quantities of charcoal and ash. The charcoal removed from this feature was generally larger and coarser in nature than any other excavated features. This is unlikely to be the material raked out from a hearth. Analysis of the material suggested a late 19th century date.



Figure 123. View of location of Rubbish Pit behind crèche building (inset – plan looking west)



Figure 124. Half sectioned view of Rubbish Pit showing shallow base

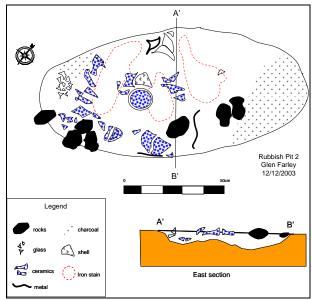


Figure 125. Plan and section drawing of Rubbish Pit 1

Continued on next page

Clough & Associates Ltd. Page 100 Middle Class Spread

FEATURES (ALLOTMENT 20), CONTINUED

Brick Features

Two rectangular brick features were found on sloping ground towards the back (eastern end) of Allotment 20 (Figure 122, Figure 126). The larger of the brick features was over 2m long and half as wide, with walls made from two courses of bricks. A small number of artefacts were found in the top 10cm or so of fill debris inside the feature, below which was a corrugated iron sheet (Figure 127). This sheet covered about ¾ of the interior. This was removed to reveal more fill with relatively fine silty soil and a number of artefacts scattered around (Figure 128). The remains of an exotically vibrant red transfer printed chamber pot were excavated and included the pattern mark 'Lasso', which inadequately describes the cowboy scene depicted (Figure 130). The base of this feature consisted of bricks covered with a sandy mortar coating.

The smaller of the brick features was less than 1m long and half as wide with a dirt base. Only the top courses of the brick remained (Figure 129) on top of a cracked concrete floor. At the eastern end small basalt rocks (Figure 129) were collapsing down the bank, but had formed a drain leading from the upper feature down to the lower feature.

The bricks from both features were not particularly diagnostic, but were similar. A 3 holed brick type with trimmed edges was found in both features. This suggests contemporary use, at least in the infilling.

Bricks and pipe and field tile fragments were recovered. This included a field tile with the 'G. Boyd' manufacturer's mark (Figure 130). Remains of a ceramic teapot were also found.

The brick features probably functioned as some form of drainage sump, capturing debris running from drains above. Exactly how and why this was necessary is not obvious. The subsequent infilling with artefacts presumably represented opportunistic rubbish dumping. It is most likely that the features related to the Howard house above.

Continued on next page

Clough & Associates Ltd. Page 101 Middle Class Spread

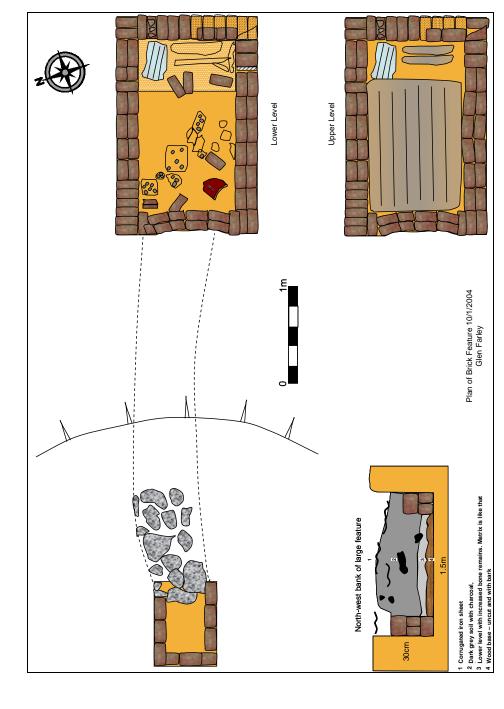


Figure 126. Plan of brick feature

FEATURES (ALLOTMENT 20), CONTINUED



Figure 127. View of lower brick structure prior to removal of corrugated iron



Figure 128. View of lower brick structure after removal of corrugated iron and excavation



Figure 129. Upper brick structure showing drain running east to lower structure (above), with close-up of drain (right), and Boyd brick (below)





Continued on next page

Clough & Associates Ltd. Page 103 Middle Class Spread

FEATURES (ALLOTMENT 20), CONTINUED





Figure 130. Ceramic chamber pot with 'Lasso' pattern mark

Clough & Associates Ltd. Page 104 Middle Class Spread

MIDDEN EXCAVATION (ALLOTMENT L18)

Midden Excavation

After the modern building was removed, it was clear that the area had been substantially modified (Figure 131). Building rubble including stone, brick and gravel were spread across this area and were probably put in place deliberately during levelling of the land.

The midden was located on the boundary of Allotment L18 with Allotment 20; more or less in the centre of southern side of Allotment L18 (see Figure 122). It covered an area of approximately 18.3 by 3.5m - a remnant cut off abruptly all around by fairly recent (probably 20^{th} century) major disturbance, with rubble of brick, scoria and other building materials.

After vegetation and tarmac was removed, the feature was visible on the surface as mainly shell mixed in a compact greasy black soil. The shell differed from that seen in the shell paths in other areas of the site in that it was not beach rolled. This midden patch sloped away gradually to the east and north sides.

Stratigraphy

The midden itself was not in primary context. The compact black shell layer – between 15 and 20cm deep – overlaid an uneven layer that was considerably mixed. It comprised a brown/black soil with a thinner scatter of shell and with clumps of yellow clay. This layer was 11-17cm thick. Below this was a mixing of brown soil and yellow clay (25cm) giving way gradually to the natural subsurface of yellow clay some 51-63cm below the midden surface.

Tree roots had caused more mixing of layers in some places.

Although the black midden layer appeared to be quite homogenous and possibly sealed the disturbed layers underneath, a number of 19th century European artefacts were found scattered throughout the deposit. These artefacts included fragments of black beer' bottle glass (51cm below surface), slate (purple grey – 40cm down), brick pieces and a sheep bone (25cm depth). One piece of bottle glass was found close to an obsidian flake.

The compact nature and the small amount of mixing in the black shell layer suggest, however, that the material was shifted in one brief episode from a homogenous (undisturbed?) deposit, and received little disturbance thereafter. It is reasonable to suggest that it was shifted from an adjacent location, possibly during construction and modification of 19th century European buildings. A possible scenario is that the midden material was dumped on the edge and down the bank of the site during levelling operations.

Continued on next page

Clough & Associates Ltd. Page 105 Middle Class Spread

MIDDEN EXCAVATION (ALLOTMENT L18), CONTINUED

Midden Composition

A bulk sample was taken and a range of shellfish was identified – see Table 9. These included oyster, cockle, pipi, scallop and univalves, with cockle the dominant species by number (74.7%). The size range was also variable with a number of very small specimens indicating mass gathering methods. Some of the shell was fragmentary, but complete and near complete specimens were common. Unlike much of the shell found elsewhere on the site, these shells were not water-rolled.

Hangi stones were quite abundant and most were small fragmented pieces. A number of different materials were used including the local scoria and haematite (Dante Bonica, pers.comm.).

A small amount of fish bone was recovered, including 3 snapper jaws.

Table 9. MNI of Midden Shell Species

Univalves			25
Whelks	small (less than 30mm length)	6	
Whelks	medium (30-50mm length)	6	
Whelks	large (50-80mm length)	5	
Other		7	
Bivalves			292
Oysters 'Stewart Island'	large 90mm long	1	
Oysters 'Auckland Rock'	medium to small 9 50-60mm long 1 20mm long	10	
Scallops	1 large complete – 90mm long rest 30-70mm long	10	
Pipi	40-50mm = 6 around 30mm = 16 less than 20mm = 10 Most complete	32	
Tuatua	medium 30-40mm long	2	
Cockle	40mm + = 1 30-40mm = 33 20-30mm = 167 10-20mm = 36	237	
		Total	317

Continued on next page

Clough & Associates Ltd. Page 106 Middle Class Spread

MIDDEN EXCAVATION (ALLOTMENT L18), CONTINUED

Maori Artefacts

Five obsidian flakes, two chert tools, one Motutapu greywacke tool and a bird bone awl were recovered in different areas throughout the midden.

There were four small obsidian flakes and one tiny piece of shatter. The flakes were all small, between 25 and 30mm maximum dimension. Two flakes were green in transmitted light and were probably from Mayor Island. The other three, including the tiny piece of shatter, were characteristic of Great Barrier Island obsidian, a source commonly found in late pre-historic Auckland sites (Moore 1988:12, 14, 16). Two flakes, one Mayor Island and one Great Barrier, had obvious use damage. The Great Barrier flake had minor chipping to two edges and quite extensive high angled mainly unifacial damage to one lateral margin. The Mayor Island flake had extensive high angled, chipping and crushing damage to two edges, with minor chipping to two others. While obsidian was generally used on soft materials such as the scraping and cutting of fibre and flesh, the type of damage seen on these two flakes suggests use against quite a hard surface – possibly use on soft materials on an anvil stone. Minor low angled chipping is evident on the other two flakes.

A small red water-rolled chert pebble (probably sourced to either Weymouth or Motutapu Island) had extensive modification and/or damage to one end. It had an edge that curved inwards and had high angled unifacial chipping and crushing damage. This modification and damage may be consistent with its use as a scraper for cleaning down narrow shafts of wood (Dante Bonica, pers. comm.).

Another chert tool was a broken flake of a rather coarse dark material. One curved edge had high angled unifacial chipping. This tool may also have been used as a scraper.

A slightly larger water-rolled cortical flake of Motutapu greywacke has minor edge damage – variously chipped and crushed at different edges.

The bird bone awl is most similar in size and form to some found at the late prehistoric site of Oruarangi (Furey 1996:68 - Figure 283 and 285). The bone is a section split longitudinally and ground to a point at one end (50 x 10mm in size). These tools are generally considered to be skin piercers. At Oruarangi they may have been used in the manufacture of dog skin cloaks (Furey 1996:66).

Continued on next page

Clough & Associates Ltd. Page 107 Middle Class Spread

MIDDEN EXCAVATION (ALLOTMENT L18), CONTINUED



Figure 131. Cross section through fill material showing building rubble used to level the land



Figure 132. Baulk of midden excavation showing old shell deposits

Clough & Associates Ltd. Page 108 Middle Class Spread

DISCUSSION (ALLOTMENTS 20 AND L18)

Summary

Allotment 20 had originally been sold in the 1860s and the first house was built there in the 1870s. However, this house had been demolished sometime during the 20th century. Plans in 1927 still show the house on the property and it is likely that it was removed after the war. Nothing remained of this structure and although some parts of the original drainage system were seen in the back part of the property, the modifications to the land had been sufficient to remove any intact material. Allotment L18 was not built on until the 20th century.

The surprising find was the remains of the pre-European midden. The disturbed nature of the midden limits the information that can be derived from it. It is, however, highly likely that Maori were living in the area both in prehistory and after European arrival and settlement in Tamaki. The site was near Te Reuroa Pa that stood at the top of Constitution Hill where the Supreme Court now stands. Two streams, which probably extended as far as the site, drained into Te Toangaroa or Mechanics Bay. Waiparuru Stream was on the western side and the streambed revealed during development was probably a tributary that drained into it. The junction of Stanley Street, Beach Road and Parnell Rise was a Maori canoe reserve, known as Waipapa, from the very early days of European settlement. The reserve, owned by Ngati Whatua, was used for the distribution of food from Maori to Pakeha settlers and was the location of a Maori hostel that was still being used in the 1950s. (Simmons 1987:41).

Whether the archaeological evidence of Maori occupation relates to prehistoric or historic times is unclear, due mainly to the disturbed nature of the deposit. The stone and bone artefacts suggest that prehistoric occupation and/or use is most likely. The artefacts also suggest occupation/use that went beyond cooking up a quick snack by the side of the stream. Flax and food preparation and garment making are some of the activities that may have taken place there, activities that represent a greater investment of time.

The site may have once been on the lower slopes of the pa or at least associated with it. Its location provided quick access to the harbour and beyond, where much of the shellfish and fish found in the midden were probably caught and gathered. The archaeological evidence is a rare glimpse and verification of Maori prehistoric presence in the now very built up city environment of Auckland.

Nothing much remained of the early European houses on the allotment. The pre-fabricated crèche building removed during the project sat on a fill of old building debris. The only other remnant of the previous housing was an unusual double brick structure probably relating to the drainage system on the property. Most likely this was a sump of some sort. Inside debris including china, ceramic tiles and other item such as bricks was recovered.

Clough & Associates Ltd. Page 109 Middle Class Spread

CHAPTER 5: MATERIAL CULTURE

INTRODUCTION

Artefacts from Wynyard Street

The excavations from Wynyard St included the recovery of a range of late 19th and early 20th century artefacts. While some major items have been described in the previous chapters in relation to the contexts they were recovered from, additional information about the collection as a whole is provided here. This is to provide a more general comparison with the results of other historic excavations carried out nearby.

The predominant items recovered, as in most historic archaeological sites, were bottles and broken ceramics. Detailed assessment of these collections is provided below. Other items include metal objects and personal items such as toothbrushes, hairbrushes and combs, which were also recovered in numbers and are discussed briefly. A catalogue of artefacts is provided on CD accompanying the report.

Sample Selection

Not all artefacts recovered were analysed. Samples were mainly taken from contexts which were better defined. A large amount of fill and re-deposition of material had taken place across the site, and although a sample of material was collected from these layers, generally they simply illustrated that that filling had occurred.

Analysis was undertaken by specialists in the different material classes. The following discussion, however, generally focuses on the function of items rather than the material the object was made from.

Much of the material recovered was not particularly diagnostic and is not illustrated here. The focus remained on the ceramics and glassware which dominated the assemblage.

Clough & Associates Ltd. Page 110 Middle Class Spread

CERAMICS

Introduction

Mica Plowman carried out the analysis of the ceramic assemblage following similar studies from other New Zealand historic sites (see, e.g., Plowman 2000; Clough *et al.* 2004a,b; Bickler *et al.* 2005).

Methodology

The methodology is outlined in other publications (mentioned above) and not reiterated in detail here. Generally, the collection of material was identified according to:

Category	Description
Fabric	Refers to the type of material used. Includes earthenware, ironstone, porcelain and stoneware
Decorative Technique	Describes the type of decoration applied to the pottery. Transfer printing was the most common type found
Decorative Pattern	Describes the particular pattern of decoration used. Some patterns are named, others are catalogued by comparison with similar material found at other sites
Colour	The colour of the pattern
Function	This included whether the vessel was used for food preparation, eating on, decoration, in the bathroom, etc
Form	Describes the shape of the vessel, e.g. plate, bowl, tureen, etc
Size	Various measurements of size taken on the vessel where possible. Useful indicator sometimes relating to function

A large sample of the ceramics was then digitally photographed with the selection based on recording representative samples of the material, including most patterns (both named and unnamed – see below), forms and functions. This information was added to a database of ceramics from archaeological sites in Auckland available on the web (www.clough.co.nz).

Decoration

Transfer printed earthenware was by far the most commonly used pottery during the late 19th century and the Wynyard St assemblage reflects this (Table 10). Perhaps more interesting, however, was the significant amount of semi-vitreous china recovered. This is generally of better quality and more expensive than earthenware and is suggests a household better off than the average.

Continued on next page

Clough & Associates Ltd. Page 111 Middle Class Spread

Table 10. Ceramic fabric and decoration

Fabric	Number
Earthenware	145
Hard paste porcelain	1
Ironstone china	6
Porcelain	2
Semi-vitreous china	50
Terracotta	1
Total:	205

Technique	Number
Applique	3
Colour glazed (marbling)	3
EBHL/Hand painted	26
Edgebanded/hairlined	20
Hand-painted	3
Plainware	7
Plainware/whiteware	18
Relief moulded	7
Relief moulded/slip coloured	6
Relief moulding /w hand painting	3
Slip glazed	1
Slip glazed w/ relief moulding	2
Sponged	1
Transfer w/ EBHL	1
Transfer-print	100
Transfer-print w/ hand-painting	5
Total:	206

Colour

Colour is also a commonly reported characteristic, although it is probably not that useful an indicator taken in isolation (

Table 11). The colours are generally correlated with decorative types. Blue-on-white transfer printing is the most commonly found, along with plain white wares. The mustard, yellow and beige material usually refers to baking dishes. Beyond noting that a range of colours is represented in the collection consistent with the rubbish dump nature of the contexts, no further analysis is presented here regarding colour.

Table 11. Colour of patterns on ceramics

Colours	Number
Beige	3
Black	10
Black/Yellow	1
Blue	22
Blue Dark	10
Blue Light	22
Blue/brown	1
Blue/gold	5
Brown	11
Flown Blue	1
Gold/Gilt	29
Green	8
Green/Gold	2
Grey	15
Mustard	1
Pink/Gold	4
Polychrome	9
Purple	12
Red	6
terracotta	1
White	33
Total:	206

Pattern, Function and Form

As with most sites excavated from 19th century Auckland, the majority (85%) of the material is tableware (Table 12), with a small number of other items. The breakdown of different forms present (Table 12) illustrates what is probably a fairly typical range of vessels forms from household contexts, including items from sets of dinner, tea and coffee ware. When compared with the pattern information (Table 13), particular sets are obviously represented: the gold tealeaf pattern tea service found in Allotment 19 along with Rhine and plain whitewares in rubbish deposits.

A large number of patterns were identified in the collection although only a few were named. This diversity reflects the significant choice available to the different households along Wynyard St.

Table 12. Vessel function and form

Function	Number
Bed/bathroom	17
Decorative	5
Kitchen/utilitarian	8
Tableware	176
Total:	206

Pattern name	number	Total
Tealeaf	WS0001	22
Rhine		15
Plainware/whitew	vare	12
Asiatic		
Pheasants		8
Willow		8
Madras		6
Holly		5
Rouen		5

Common tableware patterns

Vessel Form	Number
Ashet	3
Ashet, large	3 1
Ashet, small	1
Baking dish	1
Bowl	<u>4</u> 1
Bowl ?	1
Chamber pot	3
Cosmetic container	3
Cup	50
Cup?	1
Egg cup	4 3 4 1
Ewer	3
Figurine	4
Holloway's ointment	1
Jar/canister	7
Jug	6
Jug?	1
Milk Jug	2
Mug	
Plate	35
Saucer	28
Side plate	18
Soap dish	2 2 2 1
soup ladle	2
Soup plate	2
Sugar /slop bowl	1
Teapot	4
Toothbrush case	1
Tureen	4
Tureen lid	6
Tureen oval	1
Tureen pedestal base	1 1 2
Unidentified	2
Wash bowl	2
Total:	206

CERAMICS, CONTINUED

Table 13. Patterns identified in assemblage

BR0002 BR0032 BR0036 BR0038 BR0069 BS0001 BS0003 BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0017 BS0018 BS0017 BS0018 BS0020 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275 EA0286	r
BR0036 BR0038 BR0069 BS0001 BS0003 BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0017 BS0020 BS0020 BS0021 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0034 BS0035 EA0018 EA0232 EA0275	1
BR0038 BR0069 BS0001 BS0003 BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	4
BR0038 BR0069 BS0001 BS0003 BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BR0069 BS0001 BS0003 BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0001 BS0003 BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	2
BS0003 BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0004 BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0005 BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	3
BS0006 BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0007 BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	
BS0008 BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0009 BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0034 BS0035 EA0018 EA0232 EA0275	
BS0010 BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0011 BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0012 BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0013 BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0014 BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0015 BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0016 BS0017 BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0034 BS0035 EA0018 EA0232 EA0275	2
BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	2
BS0018 BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	5
BS0019 BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	2
BS0020 BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0021 BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0022 BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0023 BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	2
BS0024 BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0025 BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0026 BS0027 BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	
BS0027 BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0028 BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0029 BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0030 BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0031 BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0033 BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0034 BS0035 EA0018 EA0232 EA0275	1
BS0035 EA0018 EA0232 EA0275	1
BS0035 EA0018 EA0232 EA0275	2
EA0232 EA0275	1
EA0232 EA0275	1
EA0275	1
	2
I FAUZKA I	1
EA0354	1
EA0397	5
ED0002	2
HM0075	
HM0083	1
HM0148	2
HM0160	1
HM0222	2
MB0003	3
MB0033	2
MB0071	1
WS0003	6
Nth WY0001	2

Name	Pattern Name	Number
Albion		1
Amoy	MB0031	1
Antique 1		3
Asiatic Pheas	ants	8
Bears Grease)	1
Bouquet		1
Cherry toothp	aste	1
Dulcamara		1
Fibre		2
Gem		1
Holly		5
Imitation Jasp	er	3
Lasso		1
Madras		6
Non-diagnost	ic	30
Rhine		17
Rouen		5
Spect'is		1
Te Awamutu	Hotel	1
Tealeaf	WS0001	22
Teddesley		1
Willow		8
	Total:	206

Notes

BS patterns are newly identified patterns from Business School Project

BR –Britomart R11/1379 excavation (Bickler *et. al.* 2005),

HM – His Majesties R11/1624 (Plowman 2000)

EA/ED – DOC Reference Collection, now in Museum

WY – Fale Pasifika site (Clough et al. 2004b)

WS – Winstone Stables (Plowman pers. comm.)

MB – Miners' Bay Kawau Island R09/627 (Judge 2004)

Maker's Marks

Despite the large assemblage only a small number of maker's marks were identified on sherds from secure contexts (Table 14). This includes the common Pinder Bourne & Co frequently found in late 19th century Auckland sites. Perhaps the most interesting mark is the 20th century 'A B J & Sons' manufactured in New Zealand.

Table 14. Manufacturer's and maker's marks

A. B Jones & Sons Date range: -Country: England Date range Godden number Maker's mark 1900-1972 ABJ&Sons 2192 Grafton China Gibsons & Patent New Zealand Brown-Westhead, Moore & Co Description Cauldon Place, Hanley. Staffordshire Potteries Date range: 1862 -onward Country: England Maker's mark Date range Godden number 1862-1904 B. W. M. & Co 675 Davenport Longport, Staffordshire; 1793-1887 (Godden 1964:189; Godden Description 1968:60). Date range: 1793-1887 Country: England Maker's mark: DAVENPORT Pinder and Bourne & Co Description According to Godden (1991:495), Pinder, Bourne operated their Nile St works from 1862 to 1878 at which time they were purchased by Doulton & Co although the Pinder, Bourne title was retained till 1882. Date range: 1862-1878 (1882) Country: England Maker's mark P B & Co **Thomas Furnival and Sons** Previously Jacob and Thomas Furnival (c. 1843) and afterward 1890 became Furnivals Date range: 1871-1890 Country: England Maker's mark THOMAS FURNIVAL AND SONS TRADEMARK ENGLAND Date range post 1891 Unknown Maker's mark L. M & Co

Clough & Associates Ltd. Page 115 Middle Class Spread

DRINK

Glass and Stoneware

The Wynyard Street assemblage included a large number of drinking containers made from glass with a smaller number of stoneware containers. Only a few bottles were recovered whole with fragmentation occurring both as a result of deposition in rubbish pits as well as post-depositional processes. The analysis of the material was carried out by Marianne Turner with additional notes by Jennifer Low, following similar methodology to that outlined elsewhere (e.g., Clough *et al.* 2006).

Non-Alcoholic Beverages

A total of 17 bottles were identified as containers of non-alcoholic beverages. Of those, only one was made from stoneware: the top of a stoneware ginger beer bottle, probably two-tone, found in Allotment 18 scoria fill. The remaining bottles were all aerated water bottles.

Aerated Waters

Sixteen aerated bottles were identified (Figure 133). Aerated water bottles are usually described by the patent representing the shape and filling of the bottles and the collection comprised the following:

- 8 Codd.
- 4 Hamilton
- 2 Hogben
- 2 not diagnostic.

Only 12 were complete enough to identify or partially identify embossing details; the remainder were represented by tops and/or bases. Four to five different manufactories of New Zealand aerated water manufacturers were represented:

- 3 from Auckland,
- 1 possibly from Hamilton,
- 1 from Wellington.

Wynyard St was occupied during a time which saw, at first, a steady increase in the number of aerated water factories operating and then, after 1910, an ongoing series of amalgamations which resulted in a major decrease in the number of small individually owned businesses. For example, in 1870 there were only two aerated water factories in Auckland (John Grey and George Gledhill). By 1880 they had been joined A.T. Hartley operating in Cross St and the Ballin Brothers in Shortland Street. By 1910 there were eight factories, but most of these had been swallowed up by larger companies by 1930 (Robson 1995:183).

Continued on next page

Clough & Associates Ltd. Page 116 Middle Class Spread

J. Grey & Sons

Six bottles (4 Codd's patent, 1 Hogbens patent) made by the Eden Crescent Auckland Factory were recovered. This was the first aerated water factory in New Zealand, opened in 1845 by Alexander Wilkie. Like many of the earliest aerated water operations, the site was chosen because of its proximity to a natural spring called 'Wai Ariki' by local Maori. This spring also provided water for the wells in Albert Park used by, among others, the military barracks (Robson 1995:53). It was purchased by John Grey in 1874.

One Hogben's patent bottle from the general fill of Allotment 15b/16 is embossed 'J. Grey Auckland'. In 1880, John Grey formed a partnership with his sons Charles and Walter (Rusden 1979:14,17). 'J.Grey & Sons Auckland' is embossed on three Codd's patent bottles; one large example from the brick wall fill in Allotment 19, two standard sized bottles and one with the trademark entwined initials 'JG&S' on the base, from the carpark area in Lot 15b.

Two other Codd's patent bottles, one small and one standard, are embossed 'Grey & Menzies Ltd New Zealand' around their trademark entwined initials (one found with the large 'J.Grey & Sons' specimen in the brick wall of Allotment 19, the other found in the Rubbish Pit 2 (Lot 19).

The Greys merged with Robert Menzies in 1902. Robert Menzies had previously worked with other aerated water manufacturers including B. Ballin of Thames, George Gledhill of Auckland and also John Grey, before establishing his own factories in Thames, Paeroa, Waihi and Hamilton (Rusden 1979:25; Robson 1995:56). Menzies had initially intended to set up business on his own in Stanley St, Auckland but within a month of opening had received offers from both Grey & Sons and C. Nichols of Ponsonby Road. The former offer was obviously too good to refuse and was apparently a good deal for the Greys also (Robson 1995:57). Grey and Menzies operated until 1964 when it became part of a major amalgamation under the umbrella of the Oasis group of companies (Robson 1995:26).

Finds from other Auckland sites: That John Grey and his sons and Grey & Menzies were always a major aerated water manufacturer in Auckland is evident in their common appearance in a number of excavated Auckland sites dating to the period from 1874:Britomart, Sky City, Chancery St, Grafton Gully, Newton Gully.

DRINK, CONTINUED

James Wilkie

Two large Codd bottles embossed 'J. Wilkie Trademark Registered Auckland' around entwined trademark initials 'JW' were recovered. One of these was found in the roof of the house in Allotment 15a, the other came from the Rubbish Pit 2 (Lot 19).

James Wilkie (it is not known if he was related to Alexander Wilkie) operated an aerated water factory in Randolph St, Auckland from 1892 to 1912 when he sold out to ALVA (Auckland Licensed Victuallers Association) (Robson 1995:37).

Finds from other Auckland sites: Grafton Gully, Newton Gully

E. Dixon

One complete Hamilton's patent bottle embossed 'E. Dixon Cuba Street Wellington was found at the base of the 'cellar' feature in Allotment 19. Peter Fisher (pers. comm.) dates this particular bottle, due to the nature of the embossing and patent, to c.1870. Edward Dixon was the first aerated water manufacturer in Wellington and set up a small factory in Cuba St in 1854. At this time Cuba St was swampy farmland until the land was raised and drained by an 1855 earthquake, and made thereafter more habitable. Initially known as 'Dixon's Ginger Beer Shop', the business prospered. By 1865, he was manufacturing a wide range of syrups, bitters, cordials and aerated waters including lemonade, soda water, tonic water and sarsaparilla. He retired in 1876 and his oldest son George took over the business (Fisher 2004).

Note: 'Hamilton's patent' refers NOT to the bottle shape but the process 'for the continuous generation of carbon dioxide and impregnation with water' (Robson 1995:16). The 'egg-shaped' bottle had been in use since the late 1700s, and was initially produced in stone for ginger beer.

Finds from other Auckland sites: Britomart – George Dixon Codds/Hamilton hybrid dated to 1875-76 when Edward gave George a trial business to run in Sydney St.

Waiwai Ltd

Two bottles are associated with the Waiwai Ltd factory. One small Hamiltons patent was found with two other aerated water bottles (see above) in the brick foundations in Allotment 19. It has 'Registered trademark' around the trademark symbol 'Y-Y' in a circle. The other, a large Codd's found in Lot 15b (bag 14), has the same 'Y-Y' symbol in a circle but with 'Stanley St Auckland' around it.

Waiwai Ltd (continued)

Waiwai Ltd first operated their business in Stanley St from 1903 to 1918 as 'The Waiwai Mineral Co.' after which time they moved to Great North Road in Ponsonby. They become one of the larger companies in the early 20th century taking over smaller businesses like W. Handley in 1912 and A.C. Scott in 1920 before themselves being taken over by a consortium of even bigger players – G.E.M holdings – in 1957 (Grey & Menzies and C.L. Innes) (Robson 1995:36).

Finds from other Auckland sites: Winstone Stables, Newton Gully, Grafton Gully, Wesleyan Chapel, Ponsonby.

While the Hamiltons bottle was the earliest patent, and the only one until the 1870s, its use by Waiwai Ltd is good evidence that the Hamiltons patent or 'torpedo' bottle continued to be used into the 20th century – as also shown in a 1899 sales catalogue illustrated in Rusden's work on the Eden Crescent Factory (1979:20). Schweppes were another company that continued to use them well into the 1900s and archaeological examples of both 'Y-Y' and 'Schweppes' torpedo bottles have been found close to Wynyard St in Grafton Gully near the site of WaiWai's Stanley St factory (Clough et al. 2004a; Robson 1995:17).

Codd Bottle from Hamilton

One probable Codd patent bottle fragment with '...all St' was recovered. This fragment came from the brick feature in Allotment 20. From Robson's (1995) list of all known New Zealand aerated water manufacturers and their addresses, only one address matches this fragment. This is the C.L. Innes factory in Tisdall St, Hamilton (see Robson 1995: p71).

C.L. Innes & Co Ltd would become Grey & Menzies' main competitors in the early to mid 20th century as well as eventually forming a consortium with them (see above). Initially Charles Innes set up a factory in Ngaruawahia during 1865 that made both beer and aerated waters. This was no arbitrary decision as he was able to supply some 3000 troops who were engaged in conflict with Maori at the time. During the next 30 years Charles and his wife Mary Jane opened and closed a number of factories in towns around the Waikato area with varying success. The Tisdall Road factory operated during two separate periods: 1877-1886 and 1897-1957. Charles Innes died in 1899 and the business was taken over by his eldest son Charles Lewis, after which it became C.L. Innes & Co. He and his brothers continued to make both aerated water and beer and opened many branches around the country including in Khyber Pass, Auckland in 1924. (Robson 1995: 71, 73, 75, 183,185).

Bottle Makers and Other Embossed Details

One of the Codd patent bottles from Allotment 19 brick wall fill from 'J.Grey & Sons' had 'Cannington Shaw Co Ltd' embossed on it as well. Cannington Shaw & Co were bottle makers from St Helens, Lancashire from 1872 to 1916, but from 1897 they were making machine made bottles (Toulouse 1971:147-149).

A second 'J Grey & Sons' Codd patent had '**KB**' embossed on its base and was found in the Allotment 15b carpark. The initials refer to the Kilner Brothers, bottle makers from Yorkshire, London who operated between 1857 and 1937 (Toulouse 1971:302). The type of monogram and its placement dates to between 1895 and 1900 (www.aussiebottlediggers).

The Kilner Brothers were a major supplier of bottles to John Grey & Sons and Grey & Mencies until 1912, when a dispute over the quality of a consignment of bottles led to a major legal battle. Grey & Menzies ultimately appealed to the House of Lords, but the finding was in favour of the bottle makers (Robson 1995:60-61).

Hogben Patents Distributors

Two of the Hogbens' patent bottles also contained bottle manufacturer marks. One distributed by J. Grey had 'Castleford Lumb & Co Makers' around base and was found in general fill in Allotment 15b/16. A second was also manufactured by Castleford Lumb & Co, but bore the additional embossing 'Barrett and Elers patent London' (but with no water manufacturer) and was foun din the general fill behind the Grafton Rd houses (Allotment 15b) The bottle makers Castleford Lumb & Co Makers made bottles between the 1870s and 1905 (Toulouse 1971:281).

The 'Barrett and Elers' patent and the 'Hogben' patent are basically describing the same bottle shape and type of closure. The Barrett and Elers patent is associated with British bottlemakers while the Hogben patent is of Australian origin, many being made and supplied to New Zealand factories by the Melbourne Glassworks from 1874 (www.aussiebottlediggers).

The type of closure consisted of a wooden peg with a collar close to one end; it was actually patented in 1840 by Mr M. Vallett. When the bottle was being hand blown the peg was inserted with the collar end toward the bottom. When the bottle was filled the peg rose and the long end protruded out the top. The filler would then tug the peg so that the rubber against the collar would fit tightly against the opening, thereby making a good seal (Robson 1995:16). As usual with most new designs the patent took 30 years before it enjoyed a brief period of popularity, peaking in New Zealand between 1879 and 1882 (Tasker 1989:60).

Cost of Bottles

Bottles were THE major expense carried by aerated water manufacturers. They remained in the ownership of the manufacturers, and consequently there were ongoing problems related to their return after use; for example, Robson states that for every bottle in the factory yard, there was twice the number out in the marketplace (1995:20). A number were never returned. Bringing into the equation a high rate of breakage and the general inefficiency of the designs, they also needed constant replacement, and because they had to be imported from overseas, they were not cheap (Robson 1995:20, 34, 58).







Figure 133. Examples of aerated water bottles (E. Dixon, J. Grey and Sons and Waiwai Ltd)

Continued on next page

Clough & Associates Ltd. Page 121 Middle Class Spread

Alcoholic Beverages

Several hundred alcohol-related bottles were recovered from the Wynyard St excavations. Typically, such bottles are the most commonly recovered in excavated sites in Auckland. Of these black beer and champagne bottles made up the majority but spirits, wine and stoneware stout bottles were all well represented. The collection appeared to relate mostly to the 19th century although later material was found in later fill deposits. Most of the 20th century material was not analysed.

Black Beers MNI = 450

The remains of over 450 black beer bottles were identified, although many were highly fragmented (Table 15). For the whole assemblage of black beers, both the quart and pint and squat and tall types are represented in similar frequencies. A skittle shaped black beer bottle was also found in the Allotment 19 round brick feature.

The bottle drain found in Allotment 19 had the highest number of beer bottles with almost half being the slender pint type. Many of these may have been from the same batch, as at least 22 of these bottles had '12 to the gallon' embossed on their bases. At least 6 of the quart slender type had 'Cooper & Wood Portobello' on the bases.

Allotment 19 Cellar top: 1 slender squat bottle with 'Cooper & Wood manufactory' on the base.

Allotment 19 Cellar base: 1 slender quart with 'Edinborough Glass Co' on the base

Allotment 15b/16 bag 10: 1 squat pint with 'Rd Cooper & Co Portobello'

Allotment 15a Fireplace in Green House (20 Grafton Rd) squat quart has 'Imperial Quart' on base

Allotment 19 Rubbish Pit 2 (Lot 19): 1 slender quart with 'S & Co' and 1 squat quart with Wood Portobello' on base

In the Post Office Directories for Edinburgh and Leith, Cooper and Wood⁵⁰ are listed together from 1860 to 1865 as glass bottle manufacturers. After this time, they are separately listed in the directories:

Richard Cooper & Co – glass bottle manufacturer Portobello

Thomas Wood – bottle works Portobello House Baileyfield

⁵⁰ www.ulst.ac.uk/faculty/science/crg/cma/taymouth.htm

DRINK, CONTINUED

Table 15. Black beer bottles

	Size								
Feature	large	small	Type 1	Type 2	Type 3	Type 4	Type 5	unknown	Total
Area D behind shade house (General location)							1		1
General - with gun flint	1		1	1			1	1	5
Lot 15a - Green house Gully Trap (next to house)								1	1
Lot 15a Green House Fireplace SE corner during									
demolition	2	3	3			3			14
Lot 15a Rubbish Pit 1	3	5		2		2	2		14
Lot 15a Well Debris				1					1
Lot 15a/b - Rubbish Pit 2			1						1
Lot 15a/b Stream Bed		1				1	3		5
Lot 15b & 16 General Fill			1	1			1		3
Lot 15b bag 10				1					1
Lot 15b bag 13		2	3	1			2		8
Lot 15b Carpark Area							1		1
Lot 17 Lab Scoria Fill Layer nr crucible piece	2						1		3
Lot 19 Fill - Nth Foundation Wall			3	2			1	1	7
Lot 19 Garden Feature 0-500mm	1		1					1	3
Lot 19 Garden Feature 500-1000mm							3	2	5
Lot 19 Garden Feature spoil heap				1					1
Lot 19 Rubbish Pit 2 General	3	6		2		1	1		13
Lot 19 Rubbish Pit 2 Inside			2	1	1	2	6	4	16
Lot 19/Cellar/Bottom Layer			5		1	2	2	10	20
Lot 19/Cellar/conc. near cellar			2	1		1	1	2	7
Lot 19/Cellar/Surface Layer	11	7	6	1		8	14		47
Lot 19/Drain	53	82	39	28		61	10		273
Lot 20 Rubbish Pit 1			1	3		1	3	5	13
Lot 20 Brick Feature below iron								1	1
Total	76	106	68	46	2	82	56	27	464

Black Beer Types

The black beer typology used is described below:

- Type 1 squat quart (big and fat)
- Type 2 squat pint
- Type 3 porter
- Type 4 tall slender pint
- Type 5 tall slender quart

See Turner (1998) for further discussion of Black Beer Types.

Continued on next page

Clough & Associates Ltd. Page 123 Middle Class Spread

DRINK, CONTINUED

Cooper & Wood Separation

The information about the separation of Cooper & Wood in 1865 is of interest because it differs from the archaeological literature to date, which derives from Toulouse (1971:141-3). Toulouse dated the Cooper & Wood separation to 1868. This caused problems in the analysis of the bottles at Victoria Hotel as both Cooper & Wood bottles were found as well as Wood bottles, yet the hotel cellar was sealed by the 1865 fire. At present we think the directory evidence is more reliable and 'fits' the Victoria Hotel data better. For Wynyard St, the majority are also Cooper and Wood dating to 1860-1865, though allowance must be made for re-use. Cooper & Wood bottles dominate early Auckland sites such as Victoria Hotel, His Majesty's, Queen St Gaol, Chancery St, but also Britomart and Durham St Well. Similar bottles were also found at the adjacent site on Wynyard St – the Fale Pasifika (Clough et al. 2004c).

Edinburgh Glass Co

Information on the **Edinburgh Glass Co**. is also available.⁵¹ From 1856 to 1867 the company was called the 'Edinburgh & Leith Glass Co/Edin & Leith Glass CO/E & L.C' but changed to this name after 1867. These earlier bottles have been found at His Majesty's, Victoria Hotel and Fort Ligar. The later bottles with just 'Edinburgh' have so far only been identified at Wynyard St.

'12 to the gallon'

Bottles with **12 to the gallon** on the base of small sized bottles (pint) were recovered. In other sites larger slender quart sized bottles have been found with **6 to the gallon'** embossed on the base. Apart from the 22 small bottles at Wynyard St the '12 to the gallon' has not been found elsewhere.

'6 to the gallon' has been found on the slender quart bottles at Te Awamutu redoubt (Ritchie and Gumbley 1992), at Willowbank Cottage, Russell (Best 1996), at Newton Gully, at Britomart, Waipu house and well (Low 2003:38,44), and at the Wesleyan Chapel site. Not all were black glass – one at the Wesleyan Chapel was light green, one at Newton Gully was amber and one at the Waipu house was aqua. All were the same shape.

Skittle Shape

A skittle shaped black beer bottle dated to late 1860s was recovered. The only other one from an Auckland site was found was in the Durham St Well.

Continued on next page

_

⁵¹ www.ulst.ac.uk/faculty/science/crg/cma/taymouth.htm

Champagne Bottles MNI = 240 The remains of over 240 'champagne' style bottles were recovered from the site (Table 16), the vast majority from the upper layers of the Allotment 19 Cellar. The material was highly fragmented but where diagnostic pieces were retrieved, most bottles were the smaller type. The fragments of at least two champagne bottles were of the larger size known as a 'magnum'. These too, probably contained champagne. These may be the first archaeological examples to be excavated from an Auckland site. Even in today's recycle bins, magnums of champagne are an uncommon sight and generally indicate a special occasion, usually being associated with the more 'well to do'. There is a tendency for only the more expensive brands of champagne to be sold in magnums but it is not known whether this was the case in the past (although it seems probable that the social context and meaning of champagne have not changed much).

Table 16. Champagne bottles

Feature	small	large	magnum	n/d	Total
Lot 15a Grafton Rd Fireplace SE corner	2	1	_		3
Lot 15b & 16 General Fill	8	3			11
Lot 15b bag 15	1				1
Lot 15b Carpark Area		1			1
Lot 17 Lab	1		1		2
Lot 19 Fill - Nth Foundation Wall	1	1			2
Lot 19 Rubbish Pit 2		2		1	3
Lot 19 Garden Feature 0-500mm	1				1
Lot 19/Cellar/Bottom Layer	10	1			11
Lot 19/Cellar/conc. Near cellar	1				1
Lot 19/Cellar/Surface Layer	57	22	1	102	182
Lot 19/Drain	6	2		13	21
Lot 20 Rubbish Pit 1	1	1			2
Total	89	34	2	13	241

Stoneware Stout/Porter Bottles MNI = 8 Eight stout/porter shaped bottles with either a cream slip or a cream and tan slip were found in various parts of the site. These common bottles have been found in most sites in Auckland except those dated to the late 19th and early 20th century – Winstone Stables, Ponsonby and Newton Gully. Three of these bottles had stamps:

- Allotment 19 Area C: 'Doulton...Lambeth Pottery. This could be 'Doulton & Co, a London pottery in operation between c.1858-1958
- Allotment 19 Area D: 'Port....Glassworks/Lambeth Pottery'
- Allotment 19 Garden Feature: 'Stephens Aldergate 5 London' which
 may also have been made at the Doulton Lambeth pottery (see example
 of an ink bottle at Britomart with both stamps on it (Bickler et al. 2005)

Case Gin MNI = 14

Fourteen case gin bottles were found from most areas of the site. All but one embossed example from the Allotment 15b carpark are of the type common from the 1860s to the 1880s. These have irregularly applied cone collar tops and often irregular concave bases – several are patterned. The large embossed example is of a later period, with a more regular rim and base and with more rounded shoulders. It is embossed with 'This bottle is the property of JDKZ/John de Kuyper & Son Rotterdam' on the sides. While bottles with this type of embossing date between 1880 and 1900 (Polak 2000), the family business of De Kuyper has a long history. The business opened in 1695 when the family began making wooden casks for transporting beer and gin. In 1729 the de Kuyper distillery was among the first to market Dutch gin in the now characteristic square case gin bottle and from 1827 began exporting their products, which included gin and schnapps, to Europe, particularly to the UK its colonies. In 1911 the distillery moved Schiedam and to (www.dekuyper.com.).

Note: The introduction of embossing gives the illusion that manufacturers identified by embossing are 'new'. In fact firms like de Kuyper had been exporting for a long time but were 'invisible' due to a lack of surviving identification details on bottle.

Finds from other Auckland sites: Embossed gin bottles are rare in the archaeological record, being found in Auckland only at one other site – Newton Gully. In a trend seen among other bottle types, the embossing of bottles seems to have markedly increased around the turn of the century (personal observation).

Other Gin MNI = 2

The base of a large round aqua bottle embossed with 'W & A. Gilbey Ltd' was also found in the carpark of Allotment 15b. These gin makers also have a long history and the name continues in the business today. W & A. Gilbey were two brothers, Walter and Alfred of Camden, who, in 1872, set up a distillery north of London making gin with their unique blend of twelve ingredients (www.missionliquors.com). The only other Auckland site where embossed bottles identifying their product have been found is at Newton Gully.

Again from Allotment 15b (bag 3) came one example of a stoneware 'Bols gin'. This characteristic roughly made bottle with a small handle has a smudged stamp on the side near the shoulder that is slightly illegible 'L.W.H.AENKRST'. Lucas Bols of Schiedam was the first commercial distiller of gin or 'geneva' as it was called then (Dutch for the main ingredient 'juniper' berries) in 1572. Its initial invention by a Dutch chemist, Dr Franciscus de la Boe, some 20 years earlier was for purely medicinal reasons – particularly as a remedy for kidney disorders.

Other Gin (continued)

From the early 1700s Dutch gin became popular in Britain as a consequence of soldiers returning from campaigning in Holland boasting of 'Dutch courage' - their bravery in battle as a consequence of imbibing the local gin before going into battle. Along with Zoon and Molyn, Lucas Bols was the most prolific gin producer between the 1850s and 1920. He was not, however, the only distiller to use the distinctive stoneware bottles (www.internetwines.com, www.antiquebottles.com, www.forbes.com).

Finds from other Auckland sites: Victoria Hotel, Chancery St, Albert Barracks, Britomart, Newton Gully. The wide age range of these sites reflects the long standing and continuing popularity of this gin, or at least Dutch gin. Dutch gin dominates compared with gin from the UK of which only one example is known. Possibly this reflects the Dutch monopoly of the market and also a cheaper product. Among the plain round aqua spirits bottles, however, may be some contained gin from the UK or even locally produced gin – the popularity of gin was partly based on the ease with which it could be made from virtually anything.

Schnapps MNI=6

Five 'Udolpho Wolfe Aromatic Schnapps Schiedam' bottles were found (2 in Allotment 19 wall fill, 1 in the 20 Grafton Rd fireplace, 2 from Allotment 15b as well as one 'Burkes Schnapps Schiedam' bottle from the Allotment 17 Laboratory area.

The history of schnapps follows a similar pattern to that of gin. It was invented in the Netherlands in 1650 and, like gin, was first touted as a medical tonic. Many gin distillers also made schnapps due to a similar though distinctive mix of ingredients (schnapps being basically gin with a strong herbal component). Unlike gin, the medicinal merits of Schnapps lasted for some time and its properties were often ridiculously overstated, in claiming to prevent and cure almost every ailment real and imagined. Udolpho Wolfe began his distillery in 1848 and used both amber and green square bottles of the same shape and with the same embossing as those found on Auckland historic sites. An 1867 newspaper advertisement from Texas for Wolfe's brand of schnapps claims a successful 18 year association with the USA, endorsement by the USA medical faculty and promotion as a 'medicinal gin tonic and invigorating cordial' as well as a long list of ailments it claimed to cure (www.bottlebooks.com). No information as yet has been found concerning Burkes.

Finds from other Auckland sites and trends: The appearance of Udolpho Wolfe's schnapps in Auckland historical sites is common and only in three sites have they not been excavated: Britomart, Albert Barracks and the Magistrates Court.

Schnapps (continued)

For much of the 19th century in Auckland, Udolpho Wolfe appears to have had a bit of a monopoly on the schnapps market, appearing until now as the only producer excavated from Auckland sites. Over time, particularly around the turn of the century, a trend can be seen where more producers are evident at sites. For example, the turn of the century rubbish pit at Newton Gully produced at least four different producers of schnapps including Udolpho Wolfe. The characteristic square bottle persists, however.

Brandy MNI = 14

All of the brandy bottles are the characteristic green glass type with a deep kick up. Distinguishing characteristics are the very irregularly applied string rim often accompanied by wrench marks on the neck. The majority (12) were found associated with features in Allotment 19, including 1 in the drain, 6 in the 'cellar' feature (3 each for bottom and top), 1 from the rubbish pit, 2 from the garden feature and 2 from the brick wall fill. The Lot 19 Rubbish 2 had one example as did the nearby 20 Grafton Rd fireplace. At least two sites have produced these bottles with labels or partial labels intact indicating that contents were either cognac or brandy (Omata stockade, Taranaki Prickett 1994; Victoria Hotel, Brassey and Macready 1994).

Finds from other Auckland sites and trends: These bottles are quite common in Auckland sites, particularly the earlier ones. It would appear from this data that these bottles were no longer in use by the turn of the century. They were present in most sites excavated in Auckland but not the Sky Tower site, Winstone Stables, Ponsonby or Newton Gully.

Other Spirits MNI = 8

Eight other spirit bottles were recovered. Five were similar in shape and rim type to the black beer slender quart bottle, but in aqua glass. This bottle shape is still commonly used for spirits. Lacking other details such as embossing it is not possible to say more about the range of spirits they used to contain. One was a similar shape but in the pint size and had a ring seal rim. Another was of the squat quart shape. Three of these bottles came from Allotment 19 (one each from wall fill, rubbish pit and the garden feature). Two others came from the 20 Grafton Rd fireplace and one from the Allotment 17 Lab. The last of these bottles and a whisky flask came from the Allotment 15a well.

Finds from other Auckland sites and trends: The ubiquitous round aqua spirits bottles have been found at almost all Auckland sites both early and late. Those from turn of the century sites also have embossed examples – in both cases indicating gin, and both UK producers. Whisky flasks appear in all but the earliest Auckland sites of His Majesty's Theatre, Victoria Hotel and Albert Barracks, suggesting that whisky flasks increased in popularity from the 1870s.

Wine MNI = 6

Six wine bottles were recovered. Four are small pint sized green bottles made of fine glass that is often mottled. Rims, where present, are commonly of the ring seal type. Two were found in the general area of Allotment 15b/16, another was found in the fireplace at 20 Grafton and another at the base of the cellar feature in Allotment 19.

A tall slender green hock bottle originally containing white wine from the wine producing regions of Germany was found in the Lab in Allotment 17. Bedford dates these to around 1875 (1986:31). The identification of these bottles in sites can be difficult when they are broken. These bottles have been identified at Britomart and the Sky Tower site.

Fragments of a globular ruby-coloured carafe that was probably used for decanting and serving wine came from the Allotment 15a well.

Bitters MNI = 2

One 'Dr Soules Hop Bitters 1872' square amber bottle was found associated with the Allotment 20 garden feature. Another less diagnostic round amber bottle represented by only the base and the top (collar/bead) was found at the base of the Allotment 19 cellar feature (this may have been a tonic or other medicinal bottle though generally larger than most medicine containers).

Dr Soules Bitters are the most commonly found bitters on Auckland sites. Asa Soule was a quaker from New York who made a range of 'medicinal' products with extravagant claims including a cure for liquor, narcotic and tobacco habits (his hops bitters perhaps?). He was in business from 1870 to 1872, buying out Doyles Bitters in New York in 1872. Extravagant claims for the restorative qualities of his bitters were made including 'the greatest medicine ever made....best blood purifier...liver regulator...'. Despite being peddled as a medicinal product, the alcoholic content was high with a strong whisky base. While the bottle shape remained the same, the embossed lettering and illustration design and size changed some 21 times. All specimens unearthed from Auckland sites. however, have had identical embossing (www.antiquebottles.com).

Finds from other Auckland sites and trends: Like its sister products schnapps and sarsaparilla (both also peddled as medicinal products first and foremost and both with a high alcoholic content – drinks one could respectably get drunk on), bitters are more common in later sites. But like sarsaparilla, bitters was never a popular drink in New Zealand. Usually only one or two bottles have been found at any particular site and Dr Soules bottles have only been recovered from three other Auckland sites – Britomart, Sky Tower and the well at Newton Gully. The latter was unusual in producing at least five of these bottles.

FOOD

Introduction

Food bottles were the second most common category of bottles after alcohol (MNI = 131). The majority of containers in this category are bottles and jars relating to the flavouring of food. Judging from the variety and abundance of these containers, people in the 19th century appear to have been well supplied with pickles and sauces and salad oils. This reflects the lack of refrigeration and the ongoing problem of keeping meat edible and non-life threatening, which led to the use of heavy duty household cleaners to 'disinfect' the meat before cooking and eating and thus the liberal use of flavourings to disguise the resulting taste. Perhaps the delicate and ornate nature of much of this glassware served not only to decorate the table but also inspire and delude the tastebuds!

There were a number of manufacturers of pickles, salad oils and other products like vinegar and sauces, for example: Hill and Ledger, George Whybrow, Batty & Co, Hora & Co (early) Holbrooks. Little can be found about them other than that they were London companies that made food products, and often other products as well. They rarely embossed their bottles and when they did little information is included. Partial labels have been excavated and copies of some of these can be seen on the internet, but as yet there is little detail on date and the changes to containers over time. Some, like George Whybrow, embossed their names on glass stoppers (see below), but often these are not found in the bottles and again we are short on information. Information on New Zealand manufacturers is even more elusive – for example, Thomas Koefoed, sauce maker of Thames and later Auckland (King 1990).

The use of glass for food storage began in 1810 but did not become commercially successful until about the 1850s–1860s, when buyers became aware of the advantage offered by glass – that you could see what you were buying (see also Mason jars below) (www.arch.ant.bham).

Continued on next page

Clough & Associates Ltd. Page 130 Middle Class Spread

FOOD, CONTINUED

Salad Oil MNI = 27

Salad oil bottle types included: 13 whirly, 8 herringbone, 3 plain, 2 fluted, 1 genie. This is a narrow range of bottle types compared to earlier sites like His Majesty's, where a wide range of distinctive types was present (Turner 1998). The predominant type of salad oil bottle in late 19th century sites, known as the 'whirly', also dominates at Wynyard St and is found in most areas. Three were found in the 20 Grafton Rd fireplace and another nearby in the Lot 19 Rubbish Pit 2, two in Allotment 15b, two others near the Allotment 17 Lab; the remaining five come from Allotment 19 – two from the cellar base and another near the top, and two from the brick wall fill. These bottles have been found at all sites except His Majesty's.

Other types of salad oil bottles, such as the herringbone and fluted types, are often found with whirly types, but are usually not as common, and this was also the case at Wynyard St,.

The types of bottles characteristic of early (1840-1860s) Auckland sites are often referred to as 'goldfields' (Aldridge and Aldridge 1978). They are rarely found in sites dating beyond this period. Only one was found at Wynyard St, known as the 'genie'; it was found in an old stream bed nr the Grafton Motorway in the Gully when it was briefly uncovered.

FOOD, CONTINUED

Vinegar MNI = 12

Twelve vinegar bottles were identified comprising: 8 fluted, 2 dimple, 2 fluted/bevelled types. Vinegar bottles are generally larger versions of salad oil bottles though this may not have been a hard and fast rule. The fluted and dimpled types have been found on both late and early historic Auckland sites and are quite common. One fluted specimen had a fake registration mark on its base. Real registration marks were commonly seen on 'goldfields' type condiments bottles and jars from 1840-1860s sites like His Majesty's and the Victoria Hotel. Fake marks can be recognised readily by their illegibility and have, thus far, been found exclusively on fluted vinegar/salad oil bottles from at least seven other Auckland historic sites including His Majesty's, Victoria Hotel, Albert Barracks, Browns Mill, Sky Tower, the Wesleyan Chapel and the Magistrates Court. Two vinegar bottles with bevelled tops and fluted bottom halves were found in the top portion of the cellar in Allotment 19. These types are rare in post 1870s sites, having been found previously only in earlier contexts at His Majesty's, Fort Ligar and Albert Barracks in both small and large sizes.

Pickles MNI = 48

Pickles and other chunkier condiments were generally placed, as they are today, in large jars characterised by a wide mouth, wide body and a shorter neck. One type dominated at Wynyard St: a round plain type with a wide mouth varying from 40 to 50mm diameter. These jars can be difficult to identify when broken as the bases are the same diameter and of similar appearance to those of aqua spirits bottles. A number were identified at His Majesty's, but where tops are absent or broken, the bases are likely to be recognised as spirits bottles. Only where a large number are present with some intact specimens included, as at Wynyard St and His Majesty's, can identification as pickle jars be made with any degree of confidence. In the late 19th century, when it became common to emboss information about the contents on bottles and jars, similar types of jars held pickles and related products.

Forty-three such jars were found at Wynyard Street – the majority coming from Allotment 19 (37, including 8 from the drain, 26 from the cellar).

Pickles (continued)

Five other jars were either square plain types or six-sided (3) – similar to the goldfield types found at His Majesty's. These latter bevel-sided forms came from the 20 Grafton Rd fireplace (2) and the other from the nearby rubbish pit in Lo19 Rubbish Pit 2. The two plain jars came from the drain and cellar in Allotment 19 respectively. From the information derived from other Auckland sites it would appear that 'goldfields' pickle jars endured in the archaeological/historical record longer than the salad oil and vinegar bottles.

Club Sauce MNI = 18

The club sauce bottle was first used by Lea & Perrins (c.1840) and was designed with their famous and unique brand of Worcestershire sauce in mind (discovered by accident after a batch of experimental sauce based on an Indian recipe had been discarded in a cellar after being declared unpalatable only to be tasted again after a certain period of 'maturity' - Tasker 1989:88). The sauce required shaking before use so a long neck was incorporated into the design. The bottle was only filled to the shoulder and the sauce was quite thin so the long neck enabled the contents to be shaken adequately without making the bottle look half empty. The long neck and rim type also allowed controlled pouring of the liquid (www.arch.ant.bham).

Later other manufacturers, hoping to cash in on the success of Lea & Perrins, adopted the same bottle type for their own products. Examples of these at Wynyard St are H. Olson of Auckland's tomato sauce (Allotment 15/16 general fill) and Goodall Backhouse & Co.'s Yorkshire Relish (Allotment 19 garden feature).

While 18 such bottles were identified, only 6 were sufficiently complete to identify manufacturers and specific contents and a few had no embossing. As is typical in most sites Lea & Perrins Worcestershire sauce dominates, with 4 bottles (1 each from the Allotment 19 drain and wall fill and 2 from the 20 Grafton Rd fireplace).

While Lea & Perrins commenced the manufacture of their sauce early in the 19th century, importation of the product to New Zealand did not begin until 1852 (Tasker 1989:88). Other types of sauces in club sauce bottles made an even later entrance (1880) into the New Zealand market, by which time they were in competition with local products. Certainly, in contrast to earlier sites like the Victoria Hotel and His Majesty's, later sites and assemblages like Sky Tower and Britomart are characterised by a wide range of products and manufacturers both local and imported (Britomart, for example, had 9 different club sauce manufacturers represented, at least 3 of which were local producers – Bickler et al. 2005).

Other Food Products MNI = 18

Another trend seen in post 1870s Auckland sites including Wynyard Street, is a wider range of food and related products and this does not appear to be related to the increase in embossed details. Wide round jars that once contained salt and jam, square coffee jars, small round clear essence bottles and emerald green glass cylindrical capers or curry powder jars are examples of these that were found at Wynyard St.

Symington's Coffee: 1 of the 2 coffee jars is embossed, the other plain. The embossed bottle (from the Allotment 15b carpark) has 'Symington & Co Edinburgh Essence/Coffee and Chicory'. Thomas Symington opened his factory in Edinburgh in the 1880s and operated until 1980, though in later years he focused on health food products rather than coffee (www.geocities.com).

Mason Jars: several Mason's preserving jars were recovered (1 found in the Lab), the other from Allotment 15b carpark: distinctive tops only, embossed pieces. Early in the 19th century food preservation methods were revolutionised with the development of the tin can. Prior to the 19th century, smoking, drying and salting were the only ways of preserving many foods (like meat), that otherwise spoiled after a short period of time. In 1809, a Frenchman, Nicholas Appert, a chef, pickler and brewer, developed a successful way of preserving fruit in hermatically sealed glass containers. The process was complicated however, both in the cooling of the jars and in sealing them properly. But in 1858 John Landis Mason, a tin smith from New York city, patented a jar with a zinc screw cap, a threaded neck and a rubber seal. The Mason jar provided people with an effective and relatively easy method of preserving food, as well as being affordable and re-useable. Home grown tomatoes, fruits, relish and pickles were common foods preserved in Mason jars in home kitchens. The Mason jar is considered historically important because it freed farm families in USA from reliance on inferior and unreliable containers and methods for food preservation. Jars are often embossed with the date when the patent was taken out (Nov.30th 1858) and this information appeared on jars until about 1920. Other details embossed on jars can include other manufacturers as the term 'Mason' became generic for describing the type of jar and its function (www.canningpantry.com; www.fohbc.com.)

Note: of interest in relation to food preservation is evidence in the Allotment 19 garden feature that some jam/salt jars may have been re-used for preserving. Of 8 wide round jars characteristic of jam or salt jars, a minimum number of 6 was found in this feature, but of the 6, 5 are represented by lids only. The only near complete jar (no embossing) has the base neatly snapped off. This type of breakage is common when the jars are heated too quickly during the preservation process. The presence of the 5 lids without the jars indicates that jars may have been retained for re-use – possibly for preserves.

FOOD, CONTINUED

Other Items (continued)

Two of the lids were embossed, one with 'John Kilner Calder Vale Glassworks Wakefield' and the other with 'Sykes MacVay & Co Albion Glassworks Castleford'. John Kilner (and his brothers) were London bottle makers from 1844 to 1937 (Toulouse 1971:303). The lack of 'Ltd' in the embossing suggests a pre 1873 date for this lid (www.angelfire.com). Sykes MacVay & Co. were also bottle makers in operation from 1860 to 1888 (Toulouse 1971:279).

The only other embossed bottle in this category is 'Tranmer Extract of Malt Co Fermont Ohio', an oval amber bottle. In the context of the 19th century, however, it may have been considered more for medicinal purposes – the type and colour of the bottle certainly suggests this. No other details are yet known about this product.

Stoppers/Lids

Apart from the jam/salt jar lids, 5 stoppers with long pegs were recovered. Three are embossed with 'Lea & Perrins' and can thus be associated with the club sauce bottles of the same name. One other is embossed 'George Whybrow' and fits the standard salad oil bottles. Other 'George Whybrow' stoppers have been found in both 1840s-1860s sites (Victoria Hotel and Albert Barracks), as well as Chancery Street, Sky Tower, Queen St Gaol and the Wesleyan Chapel.

TOBACCO

Clay Pipes and Cigarettes

Only a relatively small number of tobacco related items were recovered (Table 17). These consisted of a 20th century metal cigarette case (Figure 134) and a few broken clay pipes, typical of the late 19th century (Figure 135).

Table 17. Tobacco-related artefacts

Lot	Feature Number	Description	Notes
16a	well debris	parts of a pipe	two pieces
17		clay pipe	four pieces ste, two partial bowls with spur
	Area D General Collection	clay pipe	stem only, no markings
17	Lot 17 Chimney Fill NE side	cigarette tin	Benson & Hedges Super Virginian Cigarettes/ Twenty Cigarettes/ Old Bond St London Made In England
19	Rubbish Pit	pipe	missing stem - 2 pieces
19	garden feature 500 – 1000 a	pipe whole	thistle pattern at tobacco end. Written on one side is 'GLASGOW' and on the other 'DAVIDSON 76'
19	garden feature 500 – 1000-b	pipe end	
19	garden feature 500 – 1000- c	pipe end	two small holes out to stem
19	garden feature 500 – 1000- D	fragment of pipe end	
19	garden feature 500 – 1000- E	pipe stem	written on the side 'W.SOUTHORNE & Co (not sure about the & Co)/BROSELEVIR (not clear on the LEVIR)'
19	garden feature 500 – 1000- F	pipe stem	Written on one side is 'GLASGOW' and on the other 'DAVIDSON'
19	garden feature 500 – 1000- G	pipe stem	plain
19	garden feature 500 – 1000- h	pipe stem	Written on one side 'GLASGOW' and the other 'McDOUGALL'

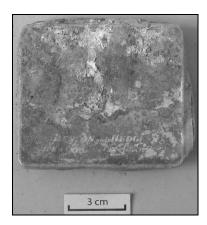


Figure 134. Metal cigarette case



Figure 135. Clay pipes from Allotment 19

Clough & Associates Ltd. Page 136 Middle Class Spread

HOUSEHOLD

Glassware

A range of general glassware was recovered from various locations and included tumblers, wine glasses vases and lamp shades (Table 18, Figure 136). A small number of other objects were also represented including decanters, carafes, dishes and even a glass knob.

Most of the wine glasses and tumblers came from the brick cellar in Allotment 19, as indeed did the carafe and decanter. Vases and other objects were found in the rubbish deposits associated with the earlier buildings there.

Table 18. Glassware

		Allot	ment		
TYPE	15	17	19	20	Total
bowl			2		2
carafe			1		1
cup			1		1
decanter			1		1
dish	2		1		3
dish/bowl			1		1
dish/plate		2			2
knob			1		1
lamp shade	1		3	3	7
shot glass	1				1
tumbler	12	3	31	2	48
unknown			1		1
vase		1	1		2
vase drop	1			1	2
vase?			1		1
wine glass			8		8
Total	17	6	53	6	82







Figure 136. Glassware (from left: wine glasses and tumblers from Allotment 19 Cellar; etched glass from Allotment 17)

Continued on next page

Clough & Associates Ltd. Page 137 Middle Class Spread

HOUSEHOLD, CONTINUED

Blacking Jars MNI = 25

Stoneware jars that probably originally containing blacking are indirect evidence of coal and wood-fired stoves used in the houses. 'Blacking' is a compound like boot polish. In the 19th century its most common usage was polishing cast iron stoves. These jars may also have contained other substances like grease. Blacking jars are relatively common in excavations in Auckland from the late 19th century onwards and fragments were found across most of the site:

16 stoneware flaring rim types (8 from Allotment 19 cellar, 1 from Allotment 19 drain, 2 from Allotment 18 debris, 1 from Allotment 15b carpark, 2 from Allotment 15b/16 fill, 2 from Allotment 15b bags 3 and 5).

5 stoneware two-tone types (2 from Allotment 19 drain, 1 from Allotment 19 cellar, 1 from Allotment 19 rubbish pit, 1 from Allotment 15b fill).

5 square glass: (1 from 'lab', 1 from Lot 19 Rubbish Pit 2, 1 from Allotment 15/16 fill and two embossed from Allotment 15b carpark.).

Three of the two-tone blacking jars had stamps:

Allotment 15b fill: 'Doulton....Lambeth Pottery' (Figure 137) same as stout bottle above – pottery was in operation in London from 1858 to 1956 (Godden 1964:214).

Allotment 19 drain: 'Powell, Bristol' William Powell's pottery was in operation from 1835 – famous for his glazes (Godden 1964:509).

Allotment 19 drain: '...Lovatt, Lambeth'.

With embossing also found in two cases:

'Spooners Boot Dressing' (Figure 137)

'Tappans Reluent Washington D.C' (Figure 137)

There remains some debate in archaeological literature as to the function of the squat round two-tone wide mouth jars. Most interpret these as preserving jars. Tasker has this type of jar as well as other stoneware forms pictured and described as 'mainly used for such substances as polishes and stove blacking in a society that blacked and polished cast-iron stoves as often as shoes!' (1989:39). Other collectors consulted concurred with this view. Four such jars were found at Wynyard St.

Continued on next page

Clough & Associates Ltd. Page 138 Middle Class Spread

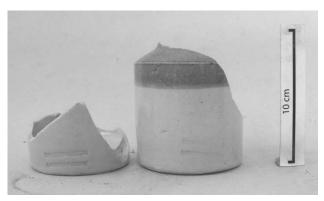






Figure 137. Blacking and boot polish containers (left: two-tone Lambeth pottery blacking jar; middle: Spooners Boot polish, right: Tappans Reluent)

Ink MNI = 11

Stoneware ink bottles were found in all areas of the site (a total of 11 analysed): 6 'penny', 3 small 'spout', 1 medium cream along with a possible glass ink container.

Ink bottles sat on desks in dens, libraries and studies in ink wells and were reused. The replacement of the feather quill pen with the steel nib in 1849 coincided with a change to ink being sold in a liquid form rather than the previous powdered variety. Commonly liquid ink was sold in small shear-lip glass bottles in a variety of decorative forms given that they were designed to be seen on the tops of desks etc (www.bottledigger.com).

All but one of the ink bottles at Wynyard St, however, were stoneware types. Six were small round 'penny' inks so called because of their cost. These ink bottles are very common in historic sites in Auckland and have been found throughout the historic sequence.

Also found were three small stoneware inks with a brown glaze and spouts, and one larger cream glazed bottle. These types of stoneware bottles have also been found in both pre 1870s sites like His Majesty's, Albert Barracks and the Victoria Hotel as well as later sites like Britomart and the Sky Tower.

One possible glass bottle has the characteristic dimensions and appearance of ink bottles and is embossed 'Atkinson London', but no details have yet been found to substantiate this.

Pencil fragments were also found throughout the site but were not particularly diagnostic.

Continued on next page

Clough & Associates Ltd. Page 139 Middle Class Spread

HOUSEHOLD, CONTINUED

Other Household Items

Other household items were also recovered. These included window glass fragments, bottles of sewing machine oil (Figure 138), buttons, metal tool fragments and shoe fragments. However these are not discussed further here.



Figure 138. Sperm whale oil for sewing machine (front and back)

Clough & Associates Ltd. Page 140 Middle Class Spread

PHARMACEUTICAL

Poisons and Concentrates

Nine vials (all but one cobalt blue example are clear glass) and six cobalt blue bottles are included in this category. Vials were generally used to store concentrates such as strychnine and other ingredients which could be harmful if ingested in concentrated form. The prescription lip was generally not designed to be sipped from but rather allowed minute amounts to be extracted carefully (Best and Turner 1997:43; Tasker 1989:32).

Cobalt blue was a colour used in bottle glass as a general warning that the contents were not to be taken (or in the case of castor oil – to be taken in small amounts!). Often the words 'NOT TO BE TAKEN' are embossed on the bottle (as can be seen on at least two of these bottles at Wynyard St). The colour and other devices such as striations (two Wynyard Street bottles) and hexagonal shapes (two Wynyard Street bottles) lessened the chances of accidental imbibing and thus poisoning in the absence of light (in times where poor lighting conditions were common) and also for people who were colour-blind or illiterate (also quite common in the 19th century). The top from a larger bottle was probably from a bulk chemist's bottle.

Magnesia MNI = 6

Light blue oval bottles are commonly referred to as 'magnesia' but are also found in aqua, amber and cobalt blue. Alfred Bishop, a chemist of London, was one of the earliest producers of magnesia from 1857 until the present. A cobalt blue 'Bishops' bottle with incomplete embossing '..asnulacitrate... magnesia/bishops' was found in Allotment 15b (bag 4) and refers to Bishop's Granular Citrate of Magnesia.

Magnesia products claimed to be an analgesic and antacid and were advertised as cures for indigestion, particularly for the delicate constitutions of women and babies (www.glwd.auction.com; www.arch.ant.bham.). Five other bottles were of the plain light blue variety and were found in different areas of the site. One of these bottles had a measurement scale up the side.

Continued on next page

Clough & Associates Ltd. Page 141 Middle Class Spread

PHARMACEUTICAL, CONTINUED

Medicine Bottles MNI = 16

Pharmaceutical bottles include the characteristic medicine container – the rectangular 'panel' bottle both plain and embossed, as well as a few other items identified as medicinal from embossed information. The embossed ones generally contained what are referred to as 'quack' medicines – patented products that made what can be considered today as outrageous claims to both prevent and cure a wide range of maladies including those that were the figment of some inventive person's imagination (softening of the brain, for example). These medicines also share in common the basic ingredients that made up their contents; that is, a high percentage of alcohol coupled with smaller amounts of other powerful drugs like opium and cocaine. An example of such a medicine was the very popular 'Barry's Tricopherous for the Hair and Skin/New York' of which two were found at Wynyard Street (the 20 Grafton Rd fireplace and in Allotment 15b – bag 6). The advertisements for this product (see Bickler *et al.* 2005:Chapter 6) claimed, among other things, to 'restore the hair to bald heads'.

Another product present at Wynyard St 'Wood's Great Peppermint Cure, London' (2, from Allotment 15a well and Allotment 19 rubbish Pit) was composed of similar potent ingredients.

Another popular and more harmless remedy (in terms of its narcotic free contents) found at Wynyard St was 'Eno's Fruit Salts', a product containing sodium bicarbonate, carbonate and citric acid. James Crossley Eno began making and selling his own preparations, including fruit salts, in the 1850s in his pharmacy in Newcastle-upon-Tyne. His fruit salts were very popular, particularly with sailors and captains who found the product very effective in treating sea-sickness, fever and sicknesses bought on by climatic change. By this means the popularity of the product spread around the world and by 1876 Eno was able to open a new factory at New Cross in London which operated until 1920. From this busy seaport, most sailing ships left with a consignment of Eno's Fruit Salts, which even made it as far as Thursday Island and Easter Island. Eno wrote most of his own advertisements, coining an early popular phrase 'The Line of Life' to describe his fruit salt (www.rpsgb.org.uk). Eno salts are still produced today (by Glaxo Smith Kline).

An unusual complete amber triangular bottle embossed 'Frederick Sterns & Co, Detroit Mich' was found in the Allotment 15b carpark (Figure 139). The fragments of at least two of these same bottles have been recently recovered from Newton Gully. While no information could be found about what precisely the bottle may have contained, businessman Frederick Sterns played a leading role in the early pharmaceutical business in the USA. In 1852 he was influential in the establishment of the American Pharmacists Association (AphA) at a time when the industry had moved from cottage to commercial production.

Continued on next page

Clough & Associates Ltd. Page 142 Middle Class Spread

Medicine Bottles (continued)

One of the main roles of the association was the acquisition and blending of raw materials to provide consumers with finished products. Philadelphia and Pittsburgh thus became the centre of pharmaceutical development. This occurred at a time when physicians were hard to come by and expensive to visit and some of their methods (bloodletting and purging for example) were of dubious benefit. There also existed no quality control over the manufacture and sale of 'quack' medicines which were often peddled as part of travelling shows.

The development of the AphA occurred just before the Civil War, which created a major demand for pharmaceutical products, and Sterns became a key provider to the Union forces. He formed his company in 1855 and sold medications in the form of syrups, liquids and pills and these were eventually distributed all over the world (www.freepages.genealogy.rootweb).

Holloways Ointment

A small 'Holloways Ointment' jar came from the base of the cellar in Allotment 19. Thomas Holloway was an English patent medicine vendor from Davenport who ran his business first at 244 The Strand, London from 1839 to 1867 after which he moved to 533 Oxford St. Advertising was the key to his success and his ointment in the characteristic white pot with 'busy' lettering was his most popular and most enduring product. This ointment was known as the 'poor mans friend' and a 'cure-all'.

Plain Panel Bottles

Plain panel bottles were often used by local chemists who made up similar concoctions from similar ingredients to those used in 'quack' medicines with the advantage that they were cheaper. Some chemists bottles were embossed with the name and address of the chemist. One such bottle was found at Wynyard St in the garden feature in Allotment 19, 'Sharland & Co, Auckland' (Figure 139). These bottles were also found at Britomart. Another partial oval bottle from the same context has '..pharmacy..T...2'. This collection is completed by a salt mouth chemist's prescription bottle stopper (Allotment 19 cellar).







Figure 139. Medicinal bottles (from left: Eno Fruit Salts, Frederick Sterns & Co., Sharland & Co.)

Clough & Associates Ltd. Page 143 Middle Class Spread

GROOMING

Introduction

In the 19th century considerable importance was placed on personal hygiene and care. There were several dimensions to this, many deriving from advances during the 18th century, when the development of water closets made an impact in crowded cities. In colonial New Zealand, outhouses were the norm for most domestic situations and they were only gradually incorporated into the main building structures. Apart from what was required for carrying out one's ablutions, a whole range of hygiene and cosmetic products was developed. They ranged from improved brushes (in particular the development of the toothbrush), to a huge range of cosmetics, hair products and perfumes. They Wynyard St excavations uncovered a significant number of such items, particularly toothbrushes from several contexts.

The Bathroom

Bathroom wares were found in various contexts at the Wynyard St excavation (see Figure 140). Vessel forms included jugs, wash bowls, soap, toothpaste containers and chamber pots. Most items had transfer-printed patterns. The items were generally only fragmentary, which suggests that they were thrown out in the rubbish when accidentally broken, although an almost complete jug was reconstructed in one case and the missing piece was nowhere to be found.

Other items such as toothbrushes, toothpaste containers and toothbrush cases illustrate the growing interest in dental care. Used toothbrushes, handles and heads were found in several locations (Table 19), but were concentrated in the garden feature at the back of Allotment 20 (Figure 141). The older examples were made from bone of some sort. Later plastic examples were found near the crèche buildings at the front of the properties.

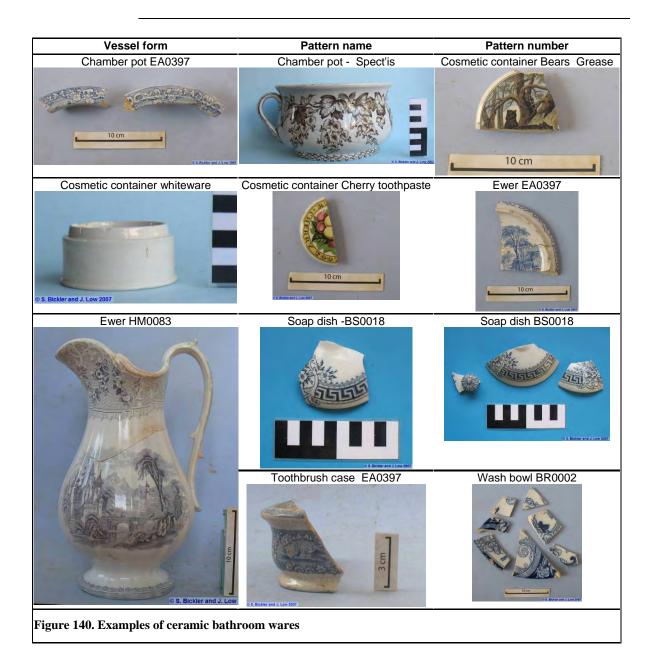
Two of the toothbrushes had markings. One had an elephant symbol and some lettering (Figure 142) perhaps indicative of Indian origin, while the other had 'THE BEATRICE LAMBERT & CO' manufacturer marking on it (Figure 143). At this stage further information regarding these items is not available.

Fashion in the Victorian period also emphasised the importance of hair, with lush long thick hair for women and big sideburns for men very much in vogue. The fill contained hairbrushes as well as a number of bottles relating to colouring and caring for hair as discussed earlier.

Continued on next page

Clough & Associates Ltd. Page 144 Middle Class Spread

GROOMING, CONTINUED



Continued on next page

Clough & Associates Ltd. Page 145 Middle Class Spread

GROOMING, CONTINUED

Table 19. Personal items found on Wynyard St excavations

Lot	FEATURE	Layer/Description	MATERIAL	DESCRIPTION	NOTES
15a		midway down bank	bone	toothbrush	two pieces
		spoil heap	bone	toothbrush head	
19	garden feature 0 - 500mm	а	bone	hair brush	top fragment of brush part
19	garden feature 0 - 500mm	b	bone	hair brush	fragment of brush part
	0 - 500mm	С	bone	hair brush	fragment of brush part
	0 - 500mm	е	bone	hair brush	whole brush part
	garden feature 0 - 500mm	f	bone	toothbrush	whole brush head part
	0 - 500mm	g	bone	toothbrush	whole brush head part - green lines on the back
	0 - 500mm	i	bone	toothbrush	handle - marking in the shape of a small circle with writing, but too small to make out
	garden feature 0 - 500mm		bone	toothbrush	most of a whole toothbrush
	garden feature 0 - 500mm	k	bone	toothbrush	whole toothbrush - in two parts
19	garden feature 0 - 500mm	I	bone	toothbrush	whole toothbrush - writing on handle 'THE BEATRICE LAMBERT & CO' (close up)
19	garden feature 500 - 1000mm		bone	toothbrush	handle - marking in the shape of a small circle with writing, but too small to make out
19	garden feature 500 - 1000mm		bone	hair brush head pieces	fragments from the head(s) of hair brush(es)
19	garden feature 500 - 1000mm		bone	hair brush handle	small holes at the end seem to point to this being the handle of a hair brush.
	House	Foundation level	bone	toothbrush handle	
	House	Foundation level	plastic	toothbrush	
	Cellar		bone	toothbrush	toothbrush head with faded green colouring
19	Rubbish Pit		plastic	comb	-
19	Rubbish Pit		bone	toothbrush	one piece
20	garden feature	below iron	bone	handle of comb	one piece

Continued on next page

Clough & Associates Ltd. Page 146 Middle Class Spread

GROOMING, Continued



Figure 141. Brushes from garden feature Allotment 19



Figure 142."WARRANTED" amd Elephant symbol on toothbrush handle



Figure 143. Toothbrush handle with 'THE BEATRICE LAMBERT & CO' (L)

Continued on next page

Clough & Associates Ltd. Page 147 Middle Class Spread

Perfume MNI = 14

Perfume bottles are characteristically in small clear bottles with short necks and commonly made of thick glass. At Wynyard St they came in various shapes – oval, square and round, some with bevelled sides. Two were embossed 'E.Rimmel' including a larger bottle; a broken base portion of a similar bottle could also be part of a Rimmel bottle. Eugene Rimmel was a Perfumer, first in London and then in Paris. Their bottles have been found in other Auckland sites including the Victoria Hotel, Chancery St, Queen St Gaol, Sky Tower, Britomart and the Durham St Well. They are the most common embossed perfume bottles excavated from Auckland historic sites. With beginnings in the mid-19th century, Rimmel is still in operation selling a range of cosmetics.

Other Products

Two cobalt blue bottles also appear to relate to this section. One square cobalt blue bottle came from the garden feature in Allotment 19, 'Wedsons Hair Renewer' (no information on this product could be found). There was also a fragment from a round cobalt blue jar embossed 'Shav..' – probably shaving cream (Allotment 15b carpark).



Figure 144. Rimmel perfume bottle

Clough & Associates Ltd. Page 148 Middle Class Spread

ASSAYING

Summary

Excavation of the basalt floor and immediate surrounds at the eastern end of Allotment 17 revealed a collection of used and broken crucibles, cupels, quartz (gold bearing?), test tubes, nails and remains of a grill or stand (see Figure 145 - Figure 153), suggesting that the basalt feature was the remains of the 'garden shed' laboratory used for the fire assay of gold ores. In fact, the range of artefacts recovered characterized most of the items expected for the process of assaying.

The Process

The quartz (Figure 150) bearing gold would have been mechanically crushed with some coarse sorting. The gold bearing portion would then have been mixed with a flux traditionally containing litharge (lead oxide), borax, soda ash and silver nitrate and heated under reducing conditions (probably in the graphite crucible, Figure 148) to form globules of liquid lead. The lead forms an amalgam with other metals present including both silver and gold.

The gold rich lead would collect at the base of the crucible (Figure 148). After about an hour at temperatures around 1000°C the liquid would be poured into a conical mould (possibly the Round G crucibles?) where the lead, being denser, settles at the tip of the mould along with glassy components from the rocky portion of the ore.

When cooled, the lead is separated from the glass and then cupelled. Cupellation involves placing the lead 'button' into a pre-heated cupel (Figure 149) at 1000°C. A cupel is a shallow dish traditionally made of bone ash (but today of magnesium sulphate) which is a material that is capable of absorbing the lead. At this temperature the metals liquify and lead is absorbed into the cupel. Gold and silver, having a higher surface tension than lead, are not absorbed and remain as a small globule or 'prill' in the bottom of the cupel. The cupel and prill are removed from the furnace and allowed to cool.

The presence of broken test tubes and other glass fragments (Figure 152) suggests that the gold button was then dissolved in aqua regia (a mixture of sulphuric and nitric acid capable of dissolving gold – hence the name) to determine the gold content or purity.

The bulk of crucible remains were fragmented with incidental glazing on the exterior and vitrification or glassy deposits internally of varying colour relating to the interaction of the flux and rocky portion of the ore.

Continued on next page

Clough & Associates Ltd. Page 149 Middle Class Spread

ASSAYING, CONTINUED

Morganite Crucible Ltd

The assay crucibles were imported from England – from Morgan Crucible Ltd. The company is still in production and the following history has been taken from the Morgan Crucible Ltd. (now Morgan MMS) Web Site Library (by Richard Kimberley, Product Manager). A detailed history of the company has been written (Pugh 2006), but was not available at the time of writing this report.

In 1855, William Vaughan Morgan acquired the merchant and druggist business of Halse and Sons from the City of London. Trading for a period of time under the name Morgan and Rees, the Morgan brothers Thomas, Walter, Octavius, Septimus, and Edward joined forces with William and, in 1856, obtained a license for the manufacture of crucibles.

The purchase of a factory at Battersea, London soon followed and by 1857 the business, known then as the Patent Plumbago Crucible Company, was sufficiently successful to be able to display a range of crucibles at the Crystal Palace Exhibition. The company won a gold medal at the Paris Exhibition in 1868. In the late 1800s, the Company changed its name to the Morgan Crucible Company.

The crucible business continued to flourish at the Battersea plant. However, for strategic reasons crucible production was transferred to a second plant at Norton just outside Worcester during the Second World War.

Continued on next page

Clough & Associates Ltd. Page 150 Middle Class Spread



Figure 145. Crucibles recovered (right: view from the top)



Figure 146. Crucible lid 1 with 'Morgan Crucible Ltd Battersea England'



Figure 147. Crucible lid 2



Figure 148. Base of graphite crucible



Figure 149. Bone ash cupel



Figure 150. Quartz fragment



Figure 151. Morganite Crucible Ltd (Morgan MMS), UK

Continued on next page

Clough & Associates Ltd. Page 151 Middle Class Spread





Figure 152. Glass fragments found around assaying equipment



Figure 153. Parts of a metal grill found next to the lab

Clough & Associates Ltd. Page 152 Middle Class Spread

OTHER ITEMS

Merchant Token

A single merchant's token was recovered near the cellar located in Allotment 19. British and foreign coinage had been accepted as legal tender in New Zealand until 1850, when British coins become the sole legal tender (Bertrand 1965). With the cessation of foreign coinage as legal tender a shortage of imperial coinage ensued with merchants in Auckland and Dunedin responding to this by issuing tokens with a face value of a penny or halfpenny in 1857 (Bertrand 1965 and Lampard 1981). This form of private tender was demonetised on 25 March 1897 (Lampard 1981), the last known issue being the 'Maori penny' of 1881 (Skinner 1965). Heyde (1967) and Lampard (1981) suggest that 46 firms throughout New Zealand issued these tokens, while Skinner (1965) suggests 48 with 122 varieties identified.

The token has a diameter of 32mm with a thickness of 2mm. Issued in 1857 by M. Somerville, Wholesale Family Grocer of the City Mart, Auckland, the token had a face value of one penny. The relief on the reverse of the token depicts a rose, thistle and shamrock. The City Mart was located on the southern corner of Shortland Street and Queen Street (Figure 155 and Figure 156) and was operated by Somerville until approximately 1865, at which time W. Graham had taken over the store. Somerville tokens have been recovered from three other Auckland City sites, one each from the Queen Street Gaol (Best 1992) and Fort Ligar (Brassey 1989) and four from the Victoria Hotel (Brassey and Macready 1994).

Figure 157, reproduced from the *Southern Cross* 5 June 1857, indicates the type of produce available for purchase from the City Mart at the time the token was issued. It is possible residents at Allotment 19 purchased items from City Mart, but it cannot be stated with certainty that the token is associated either with residents or a particular time period due to the length of time these tokens were in circulation.

Continued on next page

Clough & Associates Ltd. Page 153 Middle Class Spread

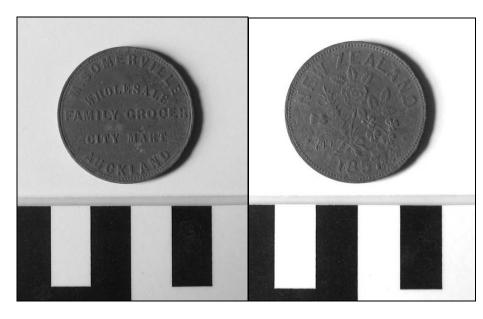


Figure 154. Obverse (left) and reverse of Somerville's 1857 penny token

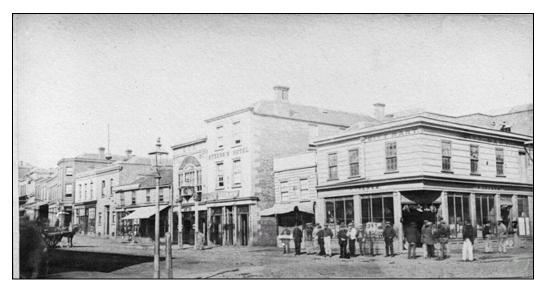


Figure 155. Looking up Shortland Street showing City Mart. Richardson 1865. APL Neg 4-183.

Continued on next page

Clough & Associates Ltd. Page 154 Middle Class Spread

OTHER ITEMS, CONTINUED

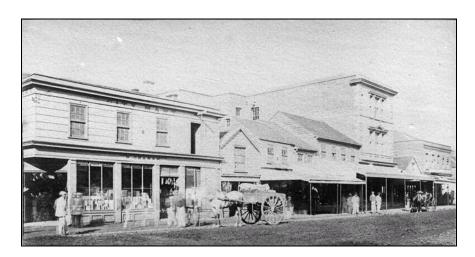


Figure 156. Looking towards City Mart from across Queen Street. Richardson 1865. APL Neg 4-404.

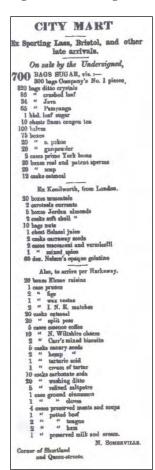


Figure 157. Advertisement for City Mart produce, $\it The Southern Cross 5 June 1857:1$

Continued on next page

Clough & Associates Ltd. Page 155 Middle Class Spread

OTHER ITEMS, CONTINUED

Gun Flint

A small gun flint was found in the fill in the area of Allotment 17 (Figure 158). Its original context is unknown but it is probably that it dates from the period of the nearby Albert Barracks and was discarded in the area that was to become Wynyard St.

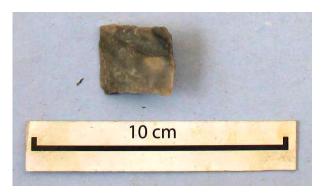




Figure 158 Gun flint fragment from Lot 17

Faunal Assemblage

Fragments of animal and bird bone were identified in the fill across the site but not in great numbers. A couple of unidentifiable fish fragments were also observed. The key contexts with animal bones were the early "rubbish" deposits identified during the excavation. The material was predominantly cow with some sheep (Figure 159-Figure 161, Table 20). Many of the bones have been obviously butchered as would be expected.

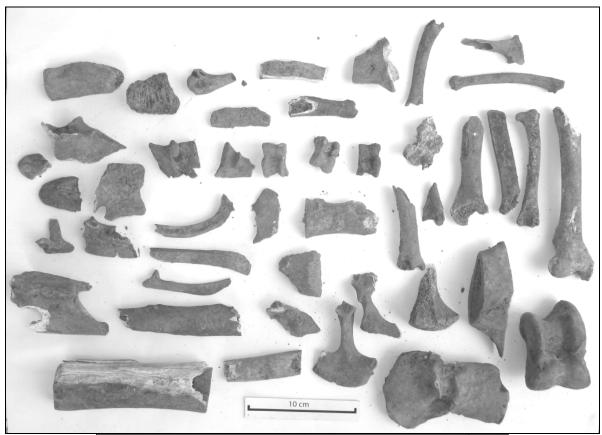
Table 20. Animal bone from Wynyard St contexts

	Cow	Sheep	Bird	Fish	Rodent
Lot 17 Near the "Lab"	Х	Х			
Lot 19 Rubbish Pit 2	Х	Х			
Lot 20 Brick Feature 2	Х	Х	х	Х	Х
Lot 19 "Garden Feature"	Х	Х			
Lot 19 "Cellar"	Х	Х	Duck x 2	Х	

The presence of the bones is generally not particularly definitive with regard to wealth and lifestyle in the Auckland context. However, the material from the Lot 19 contexts does generally suggest a reasonably affluent lifestyle here with a high meat component. The most unusual finds were the two ducks heads found in the "cellar" (Figure 159). Perhaps another indication, along with the champagne and oysters, of some good dinners at Number 32!

Continued on next page

Clough & Associates Ltd. Page 156 Middle Class Spread



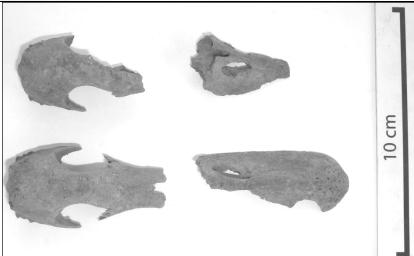


Figure 159. Animal bones from Lot 19 "Cellar"

Top: Miscellaneous bones; Bottom Left: Duck heads.

Continued on next page

Clough & Associates Ltd. Page 157 Middle Class Spread

OTHER ITEMS, CONTINUED



Figure 160. Bone from Lot 19 "Garden Feature"



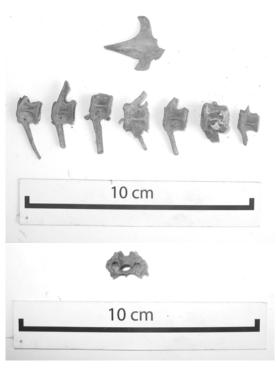


Figure 161. Bones from Lot 20 Brick Feature 2 (Rodent bone, in bottom right)

Clough & Associates Ltd. Page 158 Middle Class Spread

DISCUSSION OF ARTEFACT ASSEMBLAGE

Wynyard Bottle Assemblage

Over 800 bottles were represented in the Wynyard St assemblage. While many of the samples were from general contexts, two contexts in particular provided intriguing collections. The bottle drain and cellar from Allotment 19 contained a large number of bottles – the drain predominantly beer bottles, while the cellar was apparently a rubbish collection probably reflecting the consumption of one of owners. The results discussed here include the data from these collections, along with the assemblage as a whole and are compared with other assemblages from downtown Auckland excavations.

Black Beer: Champagne Bottle Ratio

Typically, bottle assemblages are dominated by alcohol bottles. Measuring the ratio between those bottles identified as 'black beer' and 'champagne' has proved to be a useful aid in establishing chronological relationships between and within features in a site (Best and Turner 1997). The results are based on research carried out on different excavated sites in Auckland and suggest that the black beer bottle was gradually replaced over time by the 'champagne' ring seal bottle. The black glass beer bottle was the only identifiable beer container prior to the 1870s. Mainly imported from Britain, a similar problem existed as seen with the aerated water bottles – they were in short supply and expensive to import. A solution appeared in the form of ring-seal green glass bottles imported from France where they were used for champagne. Champagne was never a popular drink in 19th century Auckland but the bottles were plentiful and cheap to import. By the late 1870s, they had become the dominant beer container, and by the turn of the century, people so strongly identified the bottle type with beer that they refused to buy beer in any other 'new-fangled' type of bottle. By the 1900s the 'champagne' bottles were being manufactured in Australia specifically for beer (Tasker 1989:41-42).

Table 21 shows the ratios between features at Wynyard St (features included only where sample size allows). The construction of the Allotment 19 drain, or at least the placement of the bottles in the drain, occurred earlier in the habitation history of the site, possibly in the 1860s when the first houses were built here. On the basis of this evidence, the Lot 19 Rubbish Pit 2 would appear to be of a similar age as would the rubbish pit and the garden feature in Allotment 19, though the small sample size of the latter in particular should be taken into consideration. The champagne bottles found in these features probably were originally imported containing champagne.

Continued on next page

Clough & Associates Ltd. Page 159 Middle Class Spread

DISCUSSION OF ARTEFACT ASSEMBLAGE, CONTINUED

Black Beer: Champagne Bottle Ratio (Continued)

The black beer:champagne bottle ratio indicates that the fill in the cellar feature in Allotment 19 is clearly a later deposit – late 19th century. But the difference between the top deposit and the bottom suggests some time lapse between each deposit. This would need to be corroborated by other evidence. Overall, the assemblage suggests an occupation that spanned the time when black beers were dominant: in this case the 1860s up to the turn of the century when the French ring-seals dominated.

Replacement of Black Beer

While the replacement of black beer bottles with ring seal champagne bottles was quite rapid, it was not absolute and small numbers of black beer bottles continued to be imported and used. This is evident in the archaeological data from the dominance of pontilled bases on black beers in early assemblages (1840s-1860s) like His Majesty's Theatre (94%) and the Victoria Hotel (80%) (Turner 1998; Brassey and Macready 1994:88). Over time, however, with the development of new cradling devices, the frequency of moulded bases increased, particularly after 1870. At Wynyard St, of 251 black beer bases, 59.3% were moulded. This evidence suggests that, while some black beer bottles in later sites are the result of a long use-life due to re-use, others are more recent imports.

Table 21. Ratio of black beer to champagne for Wynyard St features

Feature	MNI	Black Beer %	Champagne %
Lot 15b 20 Grafton Rd fireplace	6	50	50
Lot 19 Drain	151	91.3	8.6
Lot 19 Cellar top	131	22.1	77.8
Lot 19 Cellar base	25	56	44
Lot 19 garden feature	7	85.7	14.3
Lot 19 Rubbish 2	22	90.9	9
Lot 20 Rubbish Pit 1	18	100	0
Total Features	360	63.3	36.6
Total for all Site	417	63.5	36.4

Other Chronological Information from the Bottles

Aside from the black beer and champagne bottles, few of the bottles were from secure contexts. The best context was for the E. Dixon torpedo bottle deposited in the 'cellar' rubbish dump some time after 1870. All the aerated water bottles date between 1870 and the early 1900s. The assemblage in general suggests late 19th century (due to the dominance of Codd patent bottles).

Continued on next page

Clough & Associates Ltd. Page 160 Middle Class Spread

DISCUSSION OF ARTEFACT ASSEMBLAGE, CONTINUED

Other Material

The artefacts do generally fit with the deposition of late 19th century – early 20th century rubbish from households. Indeed it is interesting that although there was a bias against sampling later material, very little 20th century material was actually encountered: which probably relates to the advent of organised rubbish collections.

The ceramic collection is relatively typical of the time period. The interesting element of the assemblage, though, was the collection of 'Tea leaf' pattern wares - a not uncommon gold pattern, but one that indicates some moderate wealth for its owners. The quantity and types of alcohol bottles, oyster shells, and other debris, such as the duck remains, found in the Allotment 19 rubbish support this impression, as does the number of grooming items, including bone tooth and hair brushes.

Given the results presented here, the relationship of the material culture with the social context of the inhabitants of the houses along Wynyard Street appears to be a fruitful avenue of research. Perhaps the most dramatic find was the artefacts relating to gold assaying from the Fraser 'Laboratory' on Allotment 17. Apart from being unique in the Auckland CBD excavations to date, they are a tangible indicator of the Fraser family's wider business interests and scientific skills.

Clough & Associates Ltd. Page 161 Middle Class Spread

CHAPTER 6: DISCUSSION AND CONCLUSIONS

SITE HISTORY

Site History

The midden excavated in Allotment 20 provided the only information uncovered during the project that probably related to the pre-European use of the area. Although significantly disturbed, the midden reflects the use of the shellfish resources of the Waitemata and was probably part of the settlement known as Horotiu. The recovery of ochre and the awl area suggest that a range of activities were carried out in the vicinity. Unfortunately the disturbed state of the site makes it difficult to say much more about the remains. However, the identification of this midden does suggest the possibility that other earlier remains might be found nearby despite the major modifications that have taken place in colonial times.

With the abandonment of the Auckland area by Ngati Whatua during the early 19th century, the area became rapidly overgrown with native fern. It was the view of this re-growth that met the European settlers when the township of Auckland was established in 1840. Settlement in Auckland focused first along Official and Commercial Bays, spreading along the coast and particularly to Mechanics Bay as well as up the valley along what is now Queen Street. The project area had probably been covered in regenerating low bush up to the 1840s, but it had probably been progressively cleared by the 1850s given the proximity of the Albert Barracks. By the mid-1850s, the area around Wynyard Street was starting to fill up, with the Albert Barracks occupying the ridge above Wynyard St and Stanley Street and Grafton Road already in place. The Wynyard St land was sold by the government in 1860 and subdivided, starting at the northern end and extending to the south. An allotment just north of the project area had been put aside for a Grammar School (see Bartley 1855 Map). This area was not built on during the 19th century (Clough *et al.* 2004b).

Drainage

Drainage was clearly an issue for the property owners and large drains were uncovered during the archaeological investigations. These drains were formed by filling in ditches cut into the clay with basalt rocks. This type of drain was found on most of the different allotments along Wynyard St. No direct evidence regarding when they were dug was recovered but their overall uniformity suggests they were dug sometime around the time of the original subdivision, before any of the later owners built their houses. Perhaps they were part of general land clearance and roading projects carried out by the government and future research into this may well be rewarding.

Continued on next page

Clough & Associates Ltd. Page 162 Middle Class Spread

Drainage (continued)

Drainage was an on-going issue for properties on this site with a succession of different types of drains used. The large basalt drains were later supplemented with smaller brick drains, possible sumps and the unusual bottle fragment drain at the back of Allotment 19. Subsequently ceramic and eventually plastic drains were also uncovered on the site. The sequence is shown below:

- Basalt rock drains (Allotments 16-20)
- Brick with slate (Allotment 18)
- Brick drains (Allotment 20)
- Bottle drain (Allotment 19)
- Ceramic Pipe/Field Tile (Allotments 15-20)
- Plastic (Allotments 15-20).

The brick features at the back of Allotment 20 were probably related to drainage but their exact function is not definitively known. They did contain a range of artefacts that might have been brought down by the water flow, but other objects, such as bricks, were likely to have been dumped in them after they had stopped functioning.

Housing

Houses appeared along Wynyard Street and Grafton Road from the 1860s as the allotments were sold off. By 1866, houses stood at 20 Grafton Road, and 38 and 32 Wynyard Street, with additional buildings, perhaps sheds, at 34 Wynyard Street (Allotment 18). The single storey wooden villa at 20 Grafton Road had to be raised high on its piles to reach street level and eventually the lower area was enclosed to create a basement floor. This building was demolished in 2004. Along Wynyard St, none of the original buildings from the 1860s survived intact although it is possible that the original building at 32 Wynyard St was moved, re-piled and then extended. Similarly, 38 Wynyard St may have also remained at least in part until demolished in the 1960s. Foundations exposed during the excavations here probably included part of a laundry area in the basement.

Continued on next page

Clough & Associates Ltd. Page 163 Middle Class Spread

Landscape

Houses along Wynyard Street were positioned on relatively flat land at the front of the property. There was no unequivocal evidence of landscaping during the early subdivision, although this is likely given the relatively uniform sections that at first only gently sloped to a distance of around 30m and then sloped more steeply down towards Grafton Gully. Behind Allotments 16 and 17 the ground originally fell steeply towards the gully, but there is clear evidence of major earthworks which added several metres to the flattish area, which was retained by a stone wall in the south before dropping down to the gully. During the initial assessment in 2002 (Bickler, Clough and Mace 2002), this area was heavily overgrown but terracing and the remains of concrete retaining walls and steps were observed. These were probably early 20th century features.

The northern landscaping probably relates to work for the Grammar School property and was investigated by Clough *et al.* (2004b). Early maps of the area show a small gully here. In 1900 the Auckland College and Grammar School Board received a letter from a local architect regarding the property and its use:

'as regards the formation of the allotments fronting Wynyard Street I find it will take 12,000 yards to fill them up to the level of the same grade as Mr Howard's Property⁵² – this filling will give allotments 120 feet deep.' (from Clough *et al.*, 2004b).

Indeed, the gully was filled and artefacts recovered confirm that this occurred during the 1900s.

Excavation of the fill at the back of Allotment 16 also suggested that a significant amount of fill had been placed there during the 20th century. Remains of the houses demolished in the 1960s was present on the surface, but beneath that the quantity of fill could be determined based on a comparison between the landscape contours prior to the removal of the fill as part of the Business School development and measurements taken after the fill was removed. Whether this landscaping was designed to improve the gardens in Allotment 16 during the 19th century, to prevent slips onto the Phoenix Foundry buildings below, or was carried out in the mid-20th century after the removal of the houses is not clear. Artefacts recovered around Allotment 15 also contained a wide variety of artefacts including both 19th and 20th material; none of it is definitive in establishing when exactly this filling took place.

Continued on next page

Middle Class Spread

Clough & Associates Ltd. Page 164

⁵² Mr Howard owned the property on Allotment 20 investigated here.

Fraser House at 36 Wynyard St (Allotment 17) The remains of the house at 36 Wynyard Street probably built by George Fraser, owner of the Phoenix Foundry, were exposed. The brick foundations of a double bay-window villa of approximately 130-140m² probably date to the 1870s. These foundations were found over the top of slag material probably brought up from Fraser's foundry in Grafton Gully below and used to level the site. Interestingly a well built at the southwest corner of the house was found and had been covered and enclosed under a porch area. Comparison of two images of the house shows that the house was modified to provide a grander appearance at some point in its history, although George Fraser V (pers. comm.), who was born in the house says that the top floor was barely used.

The 'laboratory' found at the back of Allotment 17 provides three direct links with the Frasers. The first relates to the presence of the dressed basalt blocks, showing groove marks on some edges. It is quite likely that these were taken from parts of paving used down at the Phoenix Foundry below. Secondly, the presence of an angel recovered in the floor of the laboratory is suggestive of a Catholic building. Although this branch of the Fraser family did convert to Catholicism later on, it is possible the work was undertaken by Catholic workmen. Thirdly, and probably most convincingly, the presence of crucibles and glassware used in gold assaying is most likely to relate to the Phoenix Foundry's owner and the Fraser family's stake in the Waitekauri Mine, near Thames (George Fraser V, pers. comm.).

An unusual L-shaped structure aligned to Wynyard Street, may have extended onto both Allotments 17 and 18 probably built by 1866⁵³. Its function is not clear but it was possibly a stable used by Fraser and his neighbour.

32-34 Wynyard St (Allotments 18 & 19) Towards the end of the 19th century, the smaller buildings originally built at 32 and 34 Wynyard St were replaced with larger dwellings. Two buildings were removed or demolished from these properties but foundation walls, old brick and totara piles as well as remains of old tarmac were found here and relate to 19th century and 20th century use of the properties. The remains of a brick drain with slate lining were found at the front of Allotment 19 with a well at the front of that property. Excavations of a 'cellar' at the front of Allotment 19 recovered a dump of oyster shell and champagne bottles (particularly the "magnums"), along with relatively fine ceramics. The material is suggestive of middle-to-upper class occupants and dated to late 19th century. At the back of the properties a small round brick garden feature was found and may have been a small pond. A large number of artefacts were dumped into the feature.

Continued on next page

Clough & Associates Ltd. Page 165 Middle Class Spread

⁵³ However, the 1882 map suggests this L-shaped building was only Allotment 18, so either the 1866 map is inaccurate or the building was moved around the same time as the new house was built on Allotment 17.

18-20 Grafton Rd (Allotment 15)

The two buildings at 18 and 20 Grafton Rd appear to have been the original buildings on these allotments. However, both had been substantially modified during their lifetime. The earlier of the two, No. 20, was a traditional villa built on relatively high piles to allow the ground level to be close to that of Grafton Road. The lower level had been enclosed at some point and later occupied. The most unusual aspect of this building was the use of scoria fill in the walls for insulation. A well was found at the back of the house, along with the remains of garden edging.

No. 18 had been a more substantial building with bay windows on the ground floor. Again the interior had been significantly altered during its life although it was clear that the building had been re-piled during the later 20^{th} century.

Rubbish Pits

Rubbish pits found behind houses, and particularly at 32 Wynyard Street and the Grafton Rd properties, show one of the common disposal practices prior to regular rubbish collections. However, these were relatively small and simple and so here only represent minor events. The brick garden feature and the cellar at the front of 32 Wynyard St (Allotment 19) were also filled with a variety of artefacts and given the similarity of the material found there was not a significant time lag in deposition.

The remains of ceramics and bottles were found under some of the houses as part of general rubbish around the site but not in large quantities.

Clough & Associates Ltd. Page 166 Middle Class Spread

ARTEFACTS

Domestic Items

The majority of artefacts recovered from the project obviously related to the domestic use of the site. The 'cellar', garden fill and other rubbish dump contexts found on the site included the bottles, ceramics and animal bones that we would expect, as well a range of other items such as glasses, toys and personal care items such as toothbrushes and hair brushes. Overall, the quality of many of these items is indicative of relatively well-to-do groups of people with access to a range of imported goods that Auckland's growing middle class required.

The key indicators of 'class' proposed here are described in the previous chapter but relate mostly to the number of personal care items and their quality, ornamental items, game pieces and perhaps the number of wine bottles versus beer bottles. The remains of two 'magnum' size champagne bottles are also strongly suggestive. In comparison the Mechanics Institute and Chancery Street neighbourhood (Site R11/1589, Macready and Robinson [1990] and Macready and Goodwyn [1990]), which was generally a slum area, included only a few personal items in various fill contexts, although it did include some chess pieces.

Social differences are not as clearly identified on items such as ceramics as there was some diversity in the range of patterns represented. Examination of the rubbish dumps (rather than the more general 'fill' contexts) at Wynyard Street, though, show a more limited range of patterns, i.e. Rouen, Rhine, Tea Leaf and Holly in each of these contexts, indicative of the disposal of parts of sets of tableware. It is the limited range of the sets represented that is suggestive firstly of the domestic nature of the occupation (single families) and then perhaps of their social status. This is a similar picture to the ceramics found in the Mckerras Residence contexts excavated in Parnell, Auckland (at Winstone Stables site, Martin Jones in preparation).

Industrial Items

Industrial items were not a significant component of the material found at the Wynyard Street excavations, and this is not particularly surprising. While a range of industrial debris was identified at the Britomart reclamation site (R11/1379, Bickler *et al.* 2005), this represented both its proximity to Auckland's burgeoning 19th century industries along the coast, as well as the opportunity the reclamation provided to allow local industries to dispose of their debris. A significant exception to this was the gold assaying 'laboratory' finds, reflecting the commercial interests of the property owner, George Fraser.

Continued on next page

Clough & Associates Ltd. Page 167 Middle Class Spread

Local versus Imported Items

There were perhaps few surprises in examining the origin of the items identified in the artefact assemblage, which contained a mixture of local and imported items and materials. The Fraser house and laboratory complex probably demonstrated the most local source of materials imported to the site, with the slag and probably the basalt blocks used in the laboratory floor coming from the Phoenix Foundry down in Grafton Gully.

It is also likely that the majority of bricks used in the houses (as well as the timber) were sourced locally. A number of local food and drink purveyors were also represented in the bottle and other artefact collections, and a token issued by M. Somerville, an Auckland grocer, indicates the likely source of some of these items.

Connections further afield within New Zealand were represented by the gold assaying equipment found in Fraser Laboratory, used for evaluating gold from the Waitekauri Mine near Thames (although the equipment itself was imported from the UK). This connection, though a small link in itself, illustrates the relationships between the colonial centres at the time.

Dominating the collection, however, were artefacts imported from the 'Motherland'. Staffordshire ceramics predominate throughout the site and many of the bottles are also likely to have been sourced from outside the colony (although filled by local manufacturers). 19th century colonial New Zealand, however, was part of a global trade network and items were also supplied from the United States (particularly pharmaceuticals), and Asia (e.g., Turner.

Social Class and Material Culture

There have been numerous historical and sociological studies of class and it is not possible to cover that literature here. However, interpreting the artefactual material from Wynyard St does require some understanding of the social context from which the material derives:

Viewing the classes as having separate symbolic systems allows archaeologists to treat material culture as active symbols which help define class membership. Following this approach, archaeologists can study how individuals used the symbolic aspects of material culture to define themselves, maintain class boundaries, and also break down class barriers... Examining such topics will not only increase our understanding of how material culture is used in social strategies, but will also further our understanding of the concept of class. By looking at the variation of material culture both between and within classes, studies can illuminate strategies of class advancement, examine how individuals coalesce into classes, and discuss the shifting nature of class through time (Fitts 1999: 40-41).

Continued on next page

Clough & Associates Ltd. Page 168 Middle Class Spread

Social Class (continued)

Fitts' (1999) assessment of artefacts from Victorian-era Brooklyn, New York, makes a number of claims comparable to the Wynyard St contexts. The artefact range is not dissimilar and there are useful themes highlighted. Fitts discusses some of the social developments during the 19th century to argue that the material culture reflects middle class interest in the creation of 'domestic sanctuaries'. This notion of domestic sanctuary reflects a wider concern by some in society to identify themselves as a 'middle class' distinct from the workers, as well as providing a 'suitable' environment for children.

There was also a greater interest in 'genteel dining' and this in turn created changes in the demand for ceramics used for dining. These changes included both interest in sets of ceramics for various functions as well as changes in the fashion of decoration. For example, Fitts (1999) illustrates in his Brooklyn, NY site the presence of various tea sets, and particularly the quantity of 'white wares' that appear to become fashionable during the latter 19th century in the US.

Plowman (2000) explores socio-economic indicators based on the ceramic assemblages excavated at the His Majesty's Theatre archaeological site in downtown Auckland. While the results from that particular assemblage were not particularly conclusive, they did suggest that a greater diversity of patterns is likely in working-class contexts, with more opportunistic selection of vessels creating a greater diversity of patterns found. In middle class contexts the assumption is that there are greater numbers of 'sets' and therefore fewer patterns.

The results from Wynyard St do suggest this situation, as the number of patterns represented in the good domestic contexts was relatively limited and the range of vessel forms probably indicative of breakage of objects from larger sets. In contrast with Fitts' results, however, the patterns represented at Wynyard St are predominantly transfer printed wares whereas in the Brooklyn contexts there was an emphasis on plain white wares. It is likely that this represents differences in the tastes that prevailed in the different colonies. Transfer printing was the dominant decoration on ceramics in the late 19th century in New Zealand (see e.g, Bickler *et al.* 2005; Plowman 2000). At Wynyard St, this is also certainly the case and it is also proposed that the 'Tea leaf' gilded pattern was a popular tea set ware used by the middle class for genteel entertaining in Auckland.

However, at 32 Wynyard St (Lot 19), the evidence for wealth is accumulative: the number of champagne and other alcohol bottles in the small rubbish context, the presence of the magnum-size bottles, the animal bones, the terracotta figurine, the domino set and so on.

SUMMARY

Excavation Results

The excavations around Wynyard St have added significantly to an evolving picture of 19th and early 20th century inner-suburban Auckland life. The original subdivision of the properties along both Wynyard St and Grafton Rd appears to have been well organised and engineered. Drainage systems put in on the property were substantial, consisting of 0.5-1m deep trenches filled with basalt rocks running diagonally across the slope and channelling water down into Grafton Gully. The first houses generally consisted of single storey villas which were then modified substantially during their history. At least two and possibly three of the earlier houses were removed during the 20th century. Infilling of the allotments continued in the 20th century and there is evidence of garden landscaping and new and improved drainage being added to the site.

During the 19th and early 20th centuries, the houses appear to have been occupied by relatively wealthy Aucklanders. The most prominent identified was George Fraser, owner of the Phoenix Foundry, who lived at 36 Wynyard St and probably built his own private assaying laboratory in the land behind his house. He had good access from his house down to the Foundry buildings in Grafton Gully below.

The disturbed midden excavated in Allotment 20 is also the first archaeologically recovered remnant of the pre-colonial use of the general area by Maori and suggests the possibility that future work may uncover further information. The ongoing development of the area makes this a priority for future research.

Households and Individuals

The Wynyard St and Grafton Rd excavations have added to a growing number of investigations into domestic households in historic Auckland. Such work is often successful in engaging the imaginations of the local community, especially those whose family have had a long history of association with the area. The archaeological results presented here fit within a wider context contributing not only to the development of our understanding of Auckland's heritage, but to the enrichment of the University's own institutional objectives.

The archaeological investigation at Wynyard St provided new information regarding two families who lived there in the 19th and early 20th centuries. The evidence of the metal stamp with 'J. White' in the garden feature in Allotment 19 suggests that much of the material recovered there related to the White family who lived there from 1880 onwards. Two doors down, the Fraser family were involved in their growing Foundry business in the gully below Wynyard Street, and their investment in the Waitekauri Gold Mine.

Continued on next page

Clough & Associates Ltd. Page 170 Middle Class Spread

SUMMARY, CONTINUED

Middle Class Spread

Twenty years after the arrival of Europeans on the shores of the Waitemata to create the new capital of New Zealand at Auckland, the area had undergone significant change. Around Official, Commercial, Freemans and Mechanics Bays, the early whares built for settlers had given way to a burgeoning industrial, retail, bureaucratic and domestic entrepôt serviced by a network of transport routes serviced by horse and cart, train and sail. On the hills above Queen Street, Government House and Albert Barracks dominated the ridge line. However, the increasing population demanded more land for housing near the centre of town and land sales were common. The sale of the Wynyard Street properties, first to a developer and subsequently to families, laid the basis of a middle class suburb. The artefacts recovered from the excavations suggest a relatively wealthy group of families living along the street. The White and the Fraser families are both visible in the archaeological record. While we have yet to turn up information on the Whites, we were fortunate to have the assistance of the Fraser family, including George Fraser (V) who was born on Wynyard Street, during our investigations.

With the growth of the University the houses along Wynyard Street were gradually either occupied by different departments or removed. The new School of Business represents a new phase in the history of the Street.

Clough & Associates Ltd. Page 171 Middle Class Spread

APPENDIX

ACKNOWLEDGEMENTS

The Wynyard St project was carried out for the University of Auckland and Haines Planning. We would like to thank the various staff members who assisted the project as well as provided background information on the area. On site, the project was assisted by Vuksich and Borich.

Matthew Felgate, Matthew Campbell and Jacqui Craig also assisted in the fieldwork. Many thanks for their efforts.

We are grateful to Richard Kimberley, Product Manager from Molten MMS in the UK for his assistance and the copy of the Morgan Crucible company history.

We would also particularly like to thank Dr Peter Adams and George and Patricia Fraser for their hospitality and interest in researching their family history and providing background information regarding the Wynyard St houses, Phoenix Foundry and Waitekauri Gold Mine.

Clough & Associates Ltd. Page 172 Middle Class Spread

BIBLIOGRAPHY

- Aldridge, A. and C. Aldridge. 1978. New Zealand Antique Bottles Price Guide. Wellington, private publication.
- Bedford, S. 1986. The History and Archaeology of the Halfway House Hotel Site, Cromwell Gorge. New Zealand Historic Places Trust, Cromwell.
- Bertrand, J. 1965. New Zealand Coin Catalogue. Wellington. A.H. & A.W. Reed.
- Best, S.B., 1988. The Queen Street Gaol: Auckland's first Courthouse, Common Gaol and House of Correction (Site R11/1559). Auckland Conservancy Historic Resource Series 2. Auckland Department of Conservation.
- Best, S. 1992. The Queen St Gaol: Auckland's First Courthouse, Common Gaol and House of Correction (Site R11/1559). *Auckland Conservancy Historic Research Series No 12*. Auckland. Department of Conservation.
- Best, S. 1993. The Whau Brickworks and Pottery. Archaeological excavation of an early industrial ceramic site (R11/1509) on the Whau Peninsula. *Auckland Conservancy Historic Resource Series* No. 7. Auckland, Department of Conservation.
- Best, S. 1996 Willowbank Cottage Russell. Unpublished report.
- Best, S. 1999. *The Magistrates Court Site Kitchener Street, Auckland. Part of the Wesleyan Chapel Site* (R11/1665) Site History and Archaeology. Final Report for The Courthouse Tower Trust.
- Best, S. 2001. The Bluestone Store, Durham Lane, Auckland: Archaeological Investigation of the Building's Floor. Unpublished report prepared for University Trust Auckland.
- Best, S. and R. Clough. 1988. Pollen Brickyard and Wright Potteries. Early colonial ceramic industries of the Whau Peninsula. A preliminary report. Science and Research Internal Report No. 21. Wellington, Department of Conservation.
- Best, S.B. and M.T.Turner, 1997. *The Hall House Site, Russell (Q05/1200), Archaeological Investigations*. Report prepared for the Department of Conservation, Northland Conservancy.
- Bickler, S. May 2004. 32 Wynyard St And 18-20 Grafton Road. Photographic Record of Demolition. Prepared for University of Auckland
- Bickler, S.H., R. Clough and T. Mace. 2002. Wynyard St Archaeological Assessment. Report prepared by Clough & Associates Ltd for the University of Auckland Proposed Business School.
- Bickler, S.H., B. Baquié, R. Clough, T. Mace, D. Prince, M. Plowman, M. Turner. 2005. Excavations at Britomart, Auckland (R11/1379). Clough & Associates Monograph Series No. 1. Excavation Report for Auckland City Council.
- Bickler, S.H., B. Baquié, R. Clough. 2004. Excavations at Britomart, Auckland. *Archaeology in New Zealand* 47(2): 136-152.
- Bioresearches., 1995. The Archaeology of the Sky City Site, Auckland. Terra Firma Group Limited.
- Brassey, R.J.N. 1989. Rediscovering Fort Ligar: Archaeology at R11/1656, Auckland. Volume II: Analysis of Artefact Assemblages and Faunal Material. *Science and Research Internal Report 41*. Wellington. Department of Conservation.

Continued on next page

Clough & Associates Ltd. Page 173 Middle Class Spread

- Brassey, R.J.N. 1990. The History and Archaeology of the Browns Mill Site, 15-17 Durham Lane. *Science and Research Internal Report* 77. Auckland, Department of Conservation.
- Brassey, R. and S. Macready. 1994. The History and Archaeology of the Victoria Hotel, Fort St, Auckland (Site R11/1530). *Auckland Conservancy Historic Research Series No 10*. Auckland. Department of Conservation.
- Clough. R., M. Campbell and T. Mace, 2004a. Industrial Auckland: An Archaeological Investigation of Grafton Gully. Report prepared for Freeflow Alliance.
- Clough, R., Mace, T., Plowman, M. and T. Fiske. 2004b. Pasifika Development, Wynyard St: Archaeological Investigation. Unpublished report for Haines Planning and the University of Auckland.
- Clough, R. *et al.* 2004c. Albert Barracks: Archaeological Investigation of Site R11/833. Unpublished Report for the University of Auckland.
- Clough, R. et al. 2006. Excavations at Newton Gully. Unpublished report.
- Clough, R. and T. Mace. 22 July 2002. University of Auckland: Rehutai Extension and Fale Pasifika Development: Archaeological Assessment. Report prepared for Haines Planning/University of Auckland.
- Felgate, M. (ed.) 1998. His Majesty's Theatre Excavations (R11/1624). Final Archaeological Report. Volume 1. Unpublished report prepared for Pacific Dynasty Group Ltd., Auckland.
- Fisher, P. 2004. Capital Thirst: Wellington's Soft Drink Industry 1843-1988. Wellington.
- Fitts, R. 1999. The Archaeology of Middle-Class Domesticity and Gentility in Victorian Brooklyn. *Historical Archaeology* 33(1):39-62.
- Furey, L. 1996. Oruarangi. The archaeology and material culture of a Hauraki pa. *Bulletin of the Auckland Institute and Museum* No. 17: Auckland.
- Hampton-Reynolds, W. 1958. A Short History of George Fraser & Sons, Engineers 1862-1952.
- Heyde, G.C. 1967. Renniks Unofficial Coins of Colonial Australia and New Zealand. Unley. Renniks & Co Pty Ltd.
- Judge, C. 2004. Reconstructing the social dimension: Miners Bay, industrial settlement 1844-1854. Unpublished MA Thesis, Department of Anthropology, University of Auckland.
- Keith, H. (ed). 1984. New Zealand Yesterdays: A Look at our Recent Past. Reader's Digest Services Pty Limited: NSW.
- King, O. 1990. New Zealand Food Containers: Made in glass or pottery, Jams, Pickles, sauces, vinegars, coffee and cheeses c1880-1930. Private Publication.
- Lampard, W.H. 1981. Catalogue of New Zealand Coins Tokens Bank Notes. Wellington. Royal Numismatic Society of New Zealand.
- Laxon, W. A. 'Fraser, George 1832 1901'. Dictionary of New Zealand Biography, updated 22 June 2007. URL: http://www.dnzb.govt.nz/
- Low, J., 2003. Glass. In A. Slocombe (ed.), *The McLeod House Site: An Archaeological Report.* Prepared for the Sir John Logan Campell Residuary Estate and Waipu Heritage Centre.

Continued on next page

Clough & Associates Ltd. Page 174 Middle Class Spread

- Macready, S. 1991. A Review of Urban Historical Archaeology on Auckland to 1990. *Australian Journal of Historical Archaeology*, 9: 6:13.
- Macready, S. and J. Robinson. 1990a. Slums and Self-improvement. The History and Archaeology of the Mechanics Institute, Auckland, and its Chancery Street Neighbourhood. Vol 1: the site (R11/1589). Science and Research Internal Report 91. Department of Conservation, Wellington.
- Macready, S. and J. Goodwyn. 1990b. Slums and Self-improvement. The History and Archaeology of the Mechanics Institute, Auckland, and its Chancery Street Neighbourhood. Vol 2: The Artefacts and Faunal Material. *Science and Research Internal Report* 92. Department of Conservation, Wellington.
- Moore, P. 1982. Obsidian Deposits at Huruiki, Northland. New Zealand Archaeological Association Newsletter 25:240-246.
- Petersen, A. 2001. New Zealanders at Home: A Cultural History of Domestic Interiors 1814-1914. University of Otago Press: Dunedin.
- Plowman, M. 2000. The Archaeological Use of Historic Ceramics as Indicators of Status and Class: His Majesty's Theatre Ceramic Assemblage. A Case Study. Unpublished MA thesis, University of Auckland.
- Pollack, M., 2000. *Bottle Identification and Price Guide*. 3rd edition. HarperCollins Publishers Inc, New York.
- Prickett, N., 1980. Maori Fortifications of the Omata and Oakura Districts, Taranaki. Records of the Auckland Institute and Museum 17:1-48
- Pugh, P. 2006. A Global Presence. The Morgan Crucible Story. Cambridge, Cambridge Business Publishing.
- Ritchie, N.A and W.Gumbley. 1992. *The 40th Regiment Redoubt Site, Te Awamutu S15/173 Archaeological Excavations 1991.* Department of Conservation, Hamilton.
- Robson, P.E.W. 1995. *The Aerated Water and Soft Drink Industry in New Zealand 1845-1986*. Auckland New Zealand Soft Drink Manufacturers Association.
- Rusden, K. 1979. Aerated Water Manufacturers of Eden Crescent, 1845-1964: a history of the soft drink industry of Auckland. Volume 1. K.G. Rusden, Auckland.
- Simmons, D. 1987. *Maori Auckland including the Maori Place Names of Auckland Collected by George Graham*. Auckland, Gordon Ell The Bush Press.
- Sinclair, K. 1983. A *History of the University of Auckland 1883-1983*. Auckland University Press: Auckland.
- Skinner, D.H. 1965. Renniks New Zealand Coinage Guide. Unley. Renniks & Co Pty Ltd.
- Smith, I. W. G., 1989. Rediscovering Fort Ligar: Archaeology at R11/1656, Auckland. xcavation and Site History. Volume One. *Science and Research Internal Report 40*. Auckland: Department of Conservation.
- Tasker, J. 1989. Old New Zealand Bottles and Bygones. Heineman Reed, Auckland
- Toulouse, J.H. 1971. Bottle Makers and their Marks. New York, Thomas Nelson.

Continued on next page

Clough & Associates Ltd. Page 175 Middle Class Spread

Turner, M. T., 1998. Glassware. In (ed. M.Felgate): *His Majesties Theatre Site Excavations (Site R11/1624)*. Final Archaeological Report, V1, 79-109. Bioresearches, Auckland.

Turner, M., K. Hill, and R. Clough. 2005. Chinese Artefacts from a Site at Wakefield St, Auckland. *Archaeology in New Zealand* 48(3):260-278.

Archival Information

Auckland Archives Auckland List for the City of 1878, ACC 201, item 1 1880, ACC 210, item 10 1885, ACC 201, item 60 1900, ACC 210, item 161 1902, ACC 210, item 161 1902, ACC 210, item 173 Auckland Institute and Museum Photographic Collection, Grafton Auckland Public Library, Special Collections Auckland Museum Photographic Collection, Grafton Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe, Alphabetical Descriptive Schedule to Accompany Map of The City of Auckland, January 1867. Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 Auchland Suburban So 24 (1860 plan) 23D/323 244D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Mitchell & Seffern's Directory of the City and Suburban 1882 Directory Cleave's Auckland Suburban 1889 Directory Cleave's Auckland Suburban 1889 Directory Wises New Zealand Post Office 1885-1886 Directory Wises New Zealand Post Office 1885-1886 Directory Wises New Zealand Post Office 1885-1896 1894-1895 1896-1897	Source		Detail
28 Wynyard Street 36 Wynyard Street Valuation List for the City of 1878, ACC 201, item 1 Auckland 1880, ACC 210, item 20 1885, ACC 210, item 60 1900, ACC 210, item 161 1902, ACC 210, item 173 1908 Map F14 and G14 (H. Wrigg)	Auckland City	Valuation Field Sheets	14 Grafton Road
Valuation List for the City of 1878, ACC 201, item 1 Auckland 1880, ACC 210, item 20 1885, ACC 210, item 60 1900, ACC 210, item 161 1902, ACC 210, item 173 1908 Map F14 and G14 (H. Wrigg) Auckland Institute and Museum Photographic Collection, Grafton Auckland Public Library, Special Collections Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe, Alphabetical Descriptive Schedule to Accompany Map of The City of Auckland, Auckland, January 1867. Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland City and Suburbs of Auckland City and Suburban 1882 Directory Wises New Zealand Post Office 1885-1886 Directory Wises New Zealand Post Office 1885-1886 Directory Wises New Zealand Post Office 1885-1886 Directory 1887-1888 1894-1895 1896-1897	Archives		16 Grafton Road
Valuation List for the City of Auckland 1878, ACC 210, item 1			
Auckland			36 Wynyard Street
1885, ACC 210, item 60 1900, ACC 210, item 161 1900, ACC 210, item 161 1900, ACC 210, item 161 1902, ACC 210, item 173		Valuation List for the City of	1878, ACC 201, item 1
Auckland Institute and Museum Photographic Collection, Grafton Auckland Public Library, Special Collections Auckland Institute and Museum Photographic Collection, Grafton Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe, Alphabetical Descriptive Schedule to Accompany Map of The City of Auckland, January 1867. Bartley 1855 Map of Auckland, January 1867. Bartley 1855 Map of Auckland, January 1867. Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. Land Information New Zealand So 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office Directory Wises New Zealand Post Office Directory 1885-1886 1894-1895 1896-1897		Auckland	1880, ACC 210, item 20
Auckland Institute and Museum Photographic Collection, Grafton Auckland Public Library, Special Collections Auckland Fire City of Auckland, September 1866. John Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe & Harding Map of City of Auckland, January 1867. Bartley 1855 Map of Auckland I882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland City and Suburbs of Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office Directory 1885-1886 1894-1895 1896-1897			1885, ACC 210, item 60
Auckland Institute and Museum Photographic Collection, Grafton Auckland Public Library, Special Collections Auckland Public Library, Special Collections Auckland Public Library, Special Collections Auckland Public John Vercoe, Alphabetical Descriptive Schedule to Accompany Map of The City of Auckland, January 1867. Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. Land Information New Zealand Auckland Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories of the City and Suburbs of Auckland Auckland Auckland City and Suburban 1882 Directory Cleave's Auckland Suburban 1889 Directory Wises New Zealand Post Office 1885-1886 Directory Wises New Zealand Post Office 1887-1888 1894-1895 1896-1897			1900, ACC 210, item 161
Auckland Institute and Museum Photographic Collection, Grafton Auckland Public Library, Special Collections Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe, Alphabetical Descriptive Schedule to Accompany Map of The City of Auckland, Auckland, January 1867. Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton.			1902, ACC 210, item 173
Auckland Public Library, Special Collections Vercoe & Harding Map of City of Auckland, September 1866. John Vercoe, Alphabetical Descriptive Schedule to Accompany Map of The City of Auckland, Auckland, January 1867. Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton.			
Library, Special Collections File City of Auckland, Auckland, January 1867.			
Collections of The City of Auckland, Auckland, January 1867. Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. Land Information New Zealand DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland Auckland City and Suburbs of Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office Directory Wises New Zealand Post Office Directory 1885-1886 Directory Wises New Zealand Post Office 1885-1886 1894-1895 1896-1897			
Bartley 1855 Map of Auckland. T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland City and Suburbs of Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Uses New Zealand Post Office Wises New Zealand Post Office Directory Wises New Zealand Post Office 1885-1886 Directory 1887-1888 1894-1895 1896-1897			
T.W. Hickson Map of the City of Auckland 1882 George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland City and Suburbs of Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office 1885-1886 Directory Wises New Zealand Post Office 1887-1888 1894-1895 1896-1897	Collections	of The City of Auckland, Aucklan	nd, January 1867.
George Tracy Stevens, 'Birds eye perspective of Auckland', 1886. Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls			
Photographic Collection, Wynyard Street, Grafton Road and Grafton. DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203			
DP 2452 SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203		George Tracy Stevens, 'Birds eye	perspective of Auckland', 1886.
SO 2A (1860 plan) 23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls Auckland City East 1871-1872, 1878 Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office Directory Wises New Zealand Post Office Directory 1885-1886 1894-1895 1896-1897		Photographic Collection, Wynyard	d Street, Grafton Road and Grafton.
23D/323 24D/77 6G/769 R294/501 CT 56/189 CT 113/203			DP 2452
24D/77 6G/769 R294/501 CT 56/189 CT 113/203 Electoral Rolls	New Zealand		SO 2A (1860 plan)
CT 56/189 CT 113/203 Electoral Rolls			23D/323
R294/501 CT 56/189 CT 113/203 Electoral Rolls			24D/77
CT 56/189 CT 113/203 Electoral Rolls			6G/769
CT 113/203 Electoral Rolls			R294/501
Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland 1866-1867 Auckland City and Suburban Directory 1882 Cleave's Auckland Suburban Directory 1889 Wises New Zealand Post Office Directory 1885-1886 Directory 1887-1888 1894-1895 1896-1897			CT 56/189
Newspapers Southern Cross 3 August 1860 Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland 1866-1867 Auckland City and Suburban Directory 1882 Cleave's Auckland Suburban Directory 1889 Wises New Zealand Post Office Directory 1885-1886 Directory 1887-1888 1894-1895 1896-1897			CT 113/203
Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office 1885-1886 Directory 1887-1888 1894-1895 1896-1897	Electoral Rolls	Auckland City East	1871-1872, 1878
Street Directories Mitchell & Seffern's Directory of the City and Suburbs of Auckland Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office 1885-1886 Directory 1887-1888 1894-1895 1896-1897	Newspapers	Southern Cross	3 August 1860
of the City and Suburbs of Auckland Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office Directory 1885-1886 Directory 1887-1888 1894-1895 1896-1897		Mitchell & Seffern's Directory	<u> </u>
Auckland Auckland City and Suburban Directory Cleave's Auckland Suburban Directory Wises New Zealand Post Office Directory 1885-1886 Directory 1887-1888 1894-1895 1896-1897			
Directory 1889			
Directory 1889		Auckland City and Suburban	1882
Cleave's Auckland Suburban 1889 Directory Wises New Zealand Post Office 1885-1886 Directory 1887-1888 1894-1895 1896-1897		· · · · · · · · · · · · · · · · · · ·	
Wises New Zealand Post Office 1885-1886 Directory 1887-1888 1894-1895 1896-1897			1889
Wises New Zealand Post Office 1885-1886 Directory 1887-1888 1894-1895 1896-1897			
Directory 1887-1888 1894-1895 1896-1897			1885-1886
1894-1895 1896-1897			
1896-1897			
1900. 1902			1900, 1902

Continued on next page

Clough & Associates Ltd. Page 176 Middle Class Spread

Auckland Sites Referred to in Report

Auckland Archaeological Sites	Reference
Albert Barracks	Clough et al. 2004c
Britomart	Bickler et al. 2005; 2004
Browns Mill	Brassey 1990
Chancery St	Macready and Robinson 1990a;
	Macready and Goodwin 1990b
Durham St Well	Best 2001
Fale Pasifika	Clough et al. 2004b
Fort Ligar	Brassey 1989; Smith 1989
Grafton Gully	Clough et al. 2004a
His Majesty's Theatre	Felgate 1998; Plowman 2000
Magistrates Court	Best 1999
Newton Gully	Clough et. al. 2006
Queen St Gaol	Best 1992
Sky City	Bioresearches 1995
Victoria Hotel	Brassey and Macready 1994
Wesleyan Chapel	Best 1999
Winstone Stables	Martin Jones in preparation

Clough & Associates Ltd. Page 177 Middle Class Spread