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APPENDIX 1: Context List

List of contexts recorded within the Penrith Plaza archaeological program, August-September 2004.

Context	Type	Description	Area
4701	Structure	Pebble base/footing	D: RC1
4702		Machine excavation/cleanup	A, D: RC1
4703	Fill	Rubbish pit	A: Station Street
4704		Machine excavation/cleanup	A: Station Street
4705	Fill	Cistern/tank fill-top	C: Riley Street
4706	Fill	Cistern/tank fill-bottom	C: Riley Street
4707	Structure	Cistern/tank	C: Riley Street
4708		Machine excavation/cleanup	C: Riley Street
4709	Fill	Occupation, North Wing/Room 2	D: RC1
4710	Fill	Modern, over well feature	D: RC1
4711	Fill	Occupation, North Wing/Room 1	D: RC1
4712	Structure	Pebble cobbling	D: RC1
4713	Fill	Well fill	D: RC1
4714	Fill	Fill of sandstone drain 4718	D: RC1
4715	Fill	Fill of sandstone brick box drain 4717	D: RC1
4716	Fill	Fill of V-shaped trench 4724	D: RC1
4717	Structure	Sandstone brick box drain	D: RC1
4718	Structure	Drain, V-shaped sandstone	D: RC1
4719	Structure	Sandstone brick dish drain	D: RC1
4720	Fill	Fill within structure 4725	D: RC1
4721	Structure	Sandstone brick walls on pebble footing	D: RC1
4722	Fill	Western pit (tree root)	C: Riley Street
4723	Fill	Eastern pit	C: Riley Street
4724	Cut	V-shaped trench, flat bottom	D: RC1
4725	Structure	Remnants of footings sandstone, brick	D: RC1
4726	Structure	Sandstone footings, DP brick wall	D: RC1
4727	Structure	DP brick wall in sections	D: RC1
4728	Structure	Timber beam	D: RC1
4729	Structure	Timber lined well	D: RC1
4730	Cut	Cut for 4729	D: RC1
4731	Surface	Mortar surface	D: RC1
4732	Surface	Ash surface	D: RC1
4733	Structure	Sandstone pad footing	D: RC1
4734	Natural	Clayey sand brown to yellow	D: RC1
4735	Fill	Redeposited red natural	D: RC1
4736	Fills	Modern levelling	D: RC1
4737	Fill	Fill of timber lined feature	В

APPENDIX 2: Specialist Artefact Reports

- 2.1: Ceramics
- **2.2: Glass**
- 2.3: Miscellaneous, Metals and Building Materials

APPENDIX 2: Specialist Artefact Reports 2.1: Ceramics

SPECIALITST CERAMICS REPORT RED COW INN & PENRITH PLAZA, PENRITH



Rowan Ward

for Casey & Lowe

September 2005

1.0 Introduction

1.1 Background

This report covers the artefacts recovered from the excavation associated with the extension of Penrith Plaza. The artefacts are associated with four main areas at the site, the Red Cow Inn (Area D), deposits associated with a house on Riley Street (Area C), remains from a timber-lined pit (Area B), and a blacksmiths shop on Station Street. The first part of the report present an overview of the artefacts while the second part discusses the more substantial contexts.

Two-thirds of the ceramics were associated with the occupation of the Red Cow Inn located on the corner of Station and Jane Streets, Penrith. The original hotel was built by Thomas Smith in 1862 and although the hotel is still functioning it has been altered so much over the past 140 years that little of the original fabric or configuration of the hotel and associated buildings is discernable. The Smith family sold the hotel in 1901 and in 1911 Robert and Mary Lack took up the hotel licence. The Red Cow Inn is one of the oldest operating hotels in the area and was built in response to the coming of the Penrith railway and its associated passengers and therefore potential customers. The next main group of ceramics are associated with a house on Riley Street (Area C), while only small quantities were recovered from Areas B and C (**Table 1.2**).

1.2 Aims of Report

A series of Research Questions were identified in the excavation permit application for the site. The ones considered to be most suitable for addressing the ceramics from the are:

- What evidence is there for the standard of living as evidenced by the ceramic assemblage?
- What information can the ceramics provide on living standards, consumer choices and market availability, gender identity and childhood?
- Do the ceramics recovered reflect solely hotel-related activities, such as meal and alcohol consumption, as well as the provision of accommodation?

1.3 Methodology

The methodology used to catalogue the ceramics was developed by Dr Mary Casey. The catalogue sheets used an individual catalogue number for each artefact entry (ceramics using numbers 35,001-35,365); the context number where item found; the shape of the item (cup, plate, etc); the general function (food, alcohol, household, etc); the specific function (teaware, tableware, serving, etc); the fabric (stoneware, fine earthenware, etc); portion (whole, body, base, etc); decoration (Sponge, Salt Glaze, Blue Transfer Print, etc); pattern ("Asiatic Pheasants", etc); country of manufacture; mark (ticked if basemark or inscription present); rim diameter (in millimetres); joins (context and catalogue number); item; fragments; weight; brief description (includes mark description and info on maker); from and to date; box (final location of item for storage).

The minimum item count (MIC) was ascertained both by the individual catalogue number and the item number. Where items were too small to ascertain much more than perhaps just the decoration, these were put together in the one entry and listed in the fragments column only, with nothing put under items and "miscellaneous body sherds" written in description. Items, which conjoined between contexts, were only entered once under the 'item' column to avoid doubling up on numbers, with the number of fragments entered in all cases.

Although a ceramic type series was not undertaken, the methodology used included a running pattern series that incorporated other sites excavated by Casey and Lowe Pty Ltd. When a pattern could not be identified by name a number was assigned to it and this was used every time it was found on either this or other sites, or until the pattern name was identified and then it was replaced on the database. (ie, Blue Transfer Print 39). This number appears on the catalogue sheets under 'pattern'.

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¹ Casey, Mary 2004 'Falling through the cracks: method and practice at the CSR site, Pyrmont', *Australasian Historical Archaeology*, 21: 27-43.

1.4 Authorship

The substance of this report was written by Rowan Ward. Mary Casey made a number of amendments resulting from a reorganisation of the main report which necessitated some changes in the presentation of tables within the ceramic report.

2.0 Discussion / Overview

2.1 Discussion/ Overview

The total number of ceramic fragments recovered was 895, representing a minimum item count of 350 (MIC). Ceramics were found in 17 contexts, with over half (62.2%) coming from three contexts alone (4702, 4706 and 4713) and representing 218 MIC (610 fragments) (**Tables 1.1, 1.2**). Context 4702 was the number assigned to artefacts recovered during machine excavation and general cleanup over the site, and featured the largest number of ceramics (103 MIC) representing 29.4% of the entire ceramic assemblage.

Contexts 4706 and 4713 were fills from a circular brick cistern (4707) and timber-lined well (4713). Both features were excavated mainly by machine. Context 4706 contained 60 MIC (17.1%) and context 4713 contained 55 MIC (15.7%). These two contexts will be discussed in more detail later. Context 4706 was associated with a house on Riley Street and 4713 was the backfill of a well associated with the early use of the Red Cow Inn. These two contexts will be discussed in detail below.

Area	Context	MIC	%	No. frags	%
RCI	4701	2	0.6	3	0.3
RCI	4702	103	29.4	158	17.7
A	4703	2	0.6	4	0.4
A	4704	3	0.9	5	0.6
С	4705	7	2.0	13	1.5
C	4706	60	17.1	198	22.1
RCI	4709	25	7.1	89	9.9
RCI	4710	10	2.9	12	1.3
RCI	4711	3	0.9	4	0.4
RCI	4713	55	15.7	254	28.4
RCI	4714	12	3.4	12	1.3
RCI	4715	2	0.6	2	0.2
RCI	4716	20	5.7	57	6.4
RCI	4720	1	0.3	4	0.4
С	4722	9	2.6	39	4.4
С	4723	7	2.0	12	1.3
В	4737	29	8.3	29	3.2
	Total	350	100.1	895	99.8

Area	MIC	%
A	5	1.4
В	29	8.3
C	83	23.7
RCI	233	66.6
Total	350	10000.00%

Table 1.2: Proportion of ceramics within each context.

Table 1.1: Minimum item count (MIC) of ceramics within all contexts.

Conjoins between contexts occurred between only two contexts, 4702 and 4709, representing eight items in total. As already mentioned, context 4702 was general cleanup and machine excavation, however context 4709 was an occupation fill located in Room 2 of the North Wing of the Red Cow Inn. Because of the disturbed nature of context 4702 no meaning can be really be given to its relationship with context 4709. No other conjoins were evident within the ceramic assemblage. The eight conjoined items were: 1 Sprigged cup, 1 Brown Transfer Print saucer, 1 Black Flow cup, 1 Bristol Glaze jar, 1 Blue Flow jug, 1 "Albion" pattern plate, 1 "Albion" pattern platter and 1 "Lily of the Valley" plate.

Items associated with food, its preparation, serving, consumption and storage, dominate the overall assemblage, represented by 235 MIC (67.1%) (**Tables 2, 3**). Beverage consumption, both alcoholic (stout) and non-alcoholic (ginger beer), is represented by only 28 stoneware bottles (8%), perhaps surprising at first glance given the association of some contexts with the Inn, however by the midnineteenth century glass bottles were the preferred container over stonewares. Items associated with household use numbered 18 MIC (5.1%) and reflect both a private and public domestic use. Four of five candle snuffers for example were associated with a private home on Riley Street. The presence of ten blacking/polish bottles was also not necessarily indicative of either a distinctly private or public use, only of maintaining fireplaces and kitchen stoves. There were only two ornamental items recovered (2 MIC).

It should also be noted here that the items listed as having an unidentified general function and representing 44 MIC (12.6%) were those the author was unable to assign definite identification to, beyond the item being a stoneware bottle body or base (shape unknown) for example, or fragments so small to be unidentifiable even as to basic shape.

General Function	MIC	%
alcohol	8	2.3
beverage	20	5.7
clerical	6	1.7
food	235	67.1
h'hold	18	5.1
personal	10	2.9
pers/food	1	0.3
pharmaceutical	5	1.4
yard	3	0.9
unidentified	44	12.6
	350	100

Table 2.1: General function for ceramics from the overall site and in individual areas.

General Function	RCI	A	В	C	Total	
alcohol	1		6	1	8	2.3
beverage	17		2	1	20	5.7
clerical	3		1	2	6	1.7
food	161	4	4	66	235	67.1
h'hold	9		5	4	18	5.1
personal	10				10	2.9
pers/food			1		1	0.3
pharmaceutical			5		5	1.4
yard	2			1	3	0.9
unidentified	30	1	5	8	44	12.6
Total	233	5	29	83	350	
%	66.6	1.4	8.3	23.7		100

Table 2.2 : General functions for items found within each area.

2.2 Food Function

The food function was the most dominant one, and within this function it was those items associated with the presentation and consumption of food that dominated - teaware, tableware and serving. These were represented by 225 MIC (64%), with teaware dominating over half the number (127 MIC at 36.3%) (**Table 4**).

The breakdown of teawares found in each context indicate that the deposits associated with the Red Cow Inn contained the most teawares (**Table 4.1, 4.2**). Did the high number of teawares represent a more genteel side to the hotel? Rather than being a completely male-dominated environment, associated with the more traditional ideas of alcohol and meals, perhaps morning and afternoon teas were available to also attract many of the railways female and family passengers. Cups and saucers would also be present at meal times, especially breakfast and lunch. Cups and saucers were evident in equal numbers across the assemblage, 62 MIC for each and therefore representing 124 items and 35.4% of the collection. Only seven cups and eight saucers were found at the Inn well (4713) in contrast to 14 at the Riley's street house (4706) (**Tables 10, 14**). Although, as Table 4.2 illustrates the overall range of contexts at the Inn typically contained some teawares.

The large number of serving-related vessels (28) was also associated with the RCI, 18 of which were platters, suggested more than a private domestic assemblage. The platters may have accommodated

various dishes laid out on a sideboard or table, as well as simply representing replacement items due to breakages incurred during the lifetime of the hotel. The platters were all in common and easily replaceable decorative types ideally suited for hotel use - Whiteware, Linear Ware, and common transfer printed patterns dating from the second half of the nineteenth century: "Asiatic Pheasants", "Rhine", "Albion", "Corsina", "Gem" and "Ceres" (**Photo 4-11**).

General Function	Specific Function	Shape	MIC	%
alcohol	stout	bottle	8	2.3
bev	ginger beer	bottle	20	5.7
cleric	writing	ink bottle	2	0.6
CICIIC	witting	penny ink	4	1.1
food	cont	jar	3	0.9
1000	, ,		2	0.6
	prep bowl serve dish		5	1.4
	301 VC	jug	6	1.7
		platter	19	5.4
	store	ginger jar	1	0.3
	tableware	bowl	4	1.1
	tuore ware	egg cup	8	2.3
		plate	47	13.4
		plate-small	7	2.0
		saucer	1	0.3
	tea	breakfast cup	1	0.3
		cup	61	17.4
		saucer	62	17.7
		teapot	3	0.9
	tea/tblw	plate	1	0.3
		plate,small	3	0.9
	unid	unid	1	0.3
h'hold	light	candle snuffer	5	1.4
		candle stick	1	0.3
	maintenance	black bottle polish/black	9	2.6
		bottle	1	0.3
	ornament	figurine	1	0.3
		orna	1	0.3
personal	hygiene	ewer	5	1.4
		poe	5	1.4
pers/food	hygiene/serve	ewer/jug	1	0.3
pharm	med/toilet	pot	5	1.4
yard	garden	pot	3	0.9
unidentified	container	bottle	24	6.9
	container	lid	1	0.3
	storage	jar	1	0.3
	unidentified	finial	1	0.3
	unidentified	unid	17	4.9
			350	100.2

General	Specific						%
Function	Function	RCI	A	В	C	Total	
alcohol	stout	1		6	1	8	2.3
beverage	ginger beer	17		2	1	20	5.7
cleric	writing	3		1	2	6	1.7
food	container	2	1			3	0.9
	preparation	2	1	1		4	1.1
	tableware	50	1	2	15	68	19.4
	tea	74	1		50	125	35.7
	tea/tblw	3		1		4	1.1
	serve	28			1	29	8.3
	storage	1				1	0.3
	unidentified	1				1	0.3
h'hold	light	2			4	6	1.7
	maintenance	6		4		10	2.9
	ornament	1		1		2	0.6
personal	hygiene	10				10	2.9
pers/food	hygiene/serve			1		1	0.3
pharm	med/toilet			5		5	1.4
yard	garden	2			1	3	0.9
unidentified	container	17		3	5	25	7.1
	store			1		1	0.3
	unidentified	13	1	1	3	18	5.1
	Total	233	5	29	83	350	
	%	66.6	1.4	8.3	23.7		100

Table 3.2: Range of general and specific functions within each area of the site.

Table 3.1: General and specific functions relating to shape for the whole site and for each area.

Tableware associated items were also well represented, with 67 MIC (19.1%) reflecting the immediate consumption of meals, be it breakfast, lunch or dinner. Eggcups, bowls, plates and small plates were present, with plates, not surprisingly, the dominant vessel type at 47 MIC (13.4%) (Table

4.4). The dinner was the dominate form within the Red Cow Inn (42) as opposed to other the other areas. Egg cups were all found associated with the house in Riley Street.

These shapes, taken in relation to the serving and tableware vessels, indicate a sharp difference between the types of forms used by the Inn and by residential houses. No egg cups were found at the Inn suggesting that this type of food was not part of the typical food served at breakfast while it was common at Riley Street. Egg cups ware a typical food vessel found on sites.

The consumption of beverages, as evidenced by the large amount of cups and saucers recovered, was also indicated by a number of ginger beer bottles, 20 MIC (**Table 3**). Although not a high number when taken in the context of it having been a hotel site, ginger beer continued, unlike other cold beverages, to be sold in stoneware not glass bottles, hence their higher number being present in the archaeological record. The low number of stout stoneware bottles (8 MIC) may therefore be partly explained by the dominance of glass beer and wine bottles at this time. Also, as the nineteenth century progressed, questions concerning the hygiene aspects, efficiency and costs of recycling stoneware bottles became more prominent.

General Function	Specific Function	MIC	%
alch	stout	8	2.3
bev	ginger beer	20	5.7
cleric	writing	6	1.7
food	container	3	0.9
	preparation	2	0.6
	serve	30	8.6
	storage	1	0.3
	tableware	67	19.1
	tea	127	36.3
	tea/tblw	4	1.1
	unid	1	0.3
h'hold	light	6	1.7
	maint	10	2.9
	orna	2	0.6
pers	hygiene	10	2.9
pers/food	hyg/serve	1	0.3
pharm	med/toilet	5	1.4
yard	garden	3	0.9
unid	cont	25	7.1
	store	1	0.3
	unid	18	5.1
		350	100.1

Table 4.1: Specific and general functions, all contexts.

				MIC	
Area	Context	Shape	MIC	Sum	%
Area B	4737	cup	2	2	2
RCI	4702	breakfast cup	1		
	4702	cup	13		
	4702	saucer	15		
	4709	cup	8		
	4709	saucer	7		
	4710	cup	1		
	4710	saucer	2		
	4711	cup	2		
	4713	cup	7		
	4713	saucer	7		
	4714	saucer	1		
	4716	cup	6		
	4716	saucer	3		
	4716	teapot	1	74	58
Riley St	4705	cup	3		
	4705	saucer	1		
	4706	cup	14		
	4706	saucer	20		
	4706	teapot	2		
	4722	cup	2		
	4722	saucer	4		
	4723	cup	3		
	4723	saucer	1	50	39
Station St	4703	saucer	1	1	1
			127	127	100

Table 4.2: Count of tea shapes found within the various areas.

Area	Context	Shape	MIC	Sum'y MIC	%
Area B	4737	platter	1	1	3
RCI	4702	dish	4		
	4713	dish	1		
	4702	jug	1		
	4709	jug	0		
	4710	jug	1		
	4711	jug	1		
	4713	jug	1		
	4714	jug	1		
	4702	platter	7		
	4709	platter	2		
	4713	platter	7		
	4716	platter	2	28	93
Riley St	4706	jug	1	1	3
			30	30	100

Table 4.3: Service shapes within each area.

Area	Context	Shape	MIC	Shape MIC	Sum MIC	%
Area B	4737	plate	1	1	1	1
RCI	4702	bowl	1			
	4713	bowl	2	3		
	4702	egg cup	1	1		
	4702	plate	17			
	4709	plate	3			
	4710	plate	4			
	4713	plate	11			
	4714	plate	3			
	4716	plate	2			
	4720	plate	1			
	4722	plate	1	42		
	4713	plate-small	3			
	4714	plate-small	1			
	4723	plate-small	3	7		
	4713	saucer	1	1	54	81
Riley St	4706	bowl	1	1		
	4705	egg cup	1			
	4706	egg cup	6	7		
	4706	plate	3	3	11	16
Station St	4704	plate	1	1	1	1
			67	67	67	100

Table 4.4: Tableware forms within each area.

Shape	MIC	%
black bottle	9	2.6
bottle	52	14.9
bowl	6	1.7
breakfast cup	1	0.3
candle snuffer	5	1.4
candle stick	1	0.3
cup	61	17.4
dish	5	1.4
egg cup	8	2.3
ewer	5	1.4
ewer/jug	1	0.3
figurine	1	0.3
finial	1	0.3
ginger jar	1	0.3
ink bottle	2	0.6
jar	4	1.1
jug	6	1.7
lid	1	0.3
orna	1	0.3
penny ink	4	1.1
plate	48	13.7
plate-small	10	2.9
platter	19	5.4
poe	5	1.4
polish/black bottle	1	0.3
pot	8	2.3
saucer	63	18.0
teapot	3	0.9
unid	18	5.1
	350	100

 Table 5: Range of shapes

2.3 Ceramic Decoration

The range of ceramic decorative types represented within the assemblage was indicative of the wide range of ceramics available within the Sydney marketplace from the mid-nineteenth century onwards (**Table 6.1, 6.2, 6.3**). Thirty-two decorative types were recorded, although 62.3% were represented by just six types: salt glaze (70 MIC), gilded whiteware (56), whiteware (130), blue-transfer print (30) and purple-transfer print (18). The salt glaze was associated with stoneware containers and bottles, whereas the glided whiteware was found on finer teaware cups and saucers, of the variety featuring gilded lines and tealeaf motifs commonly popular from the mid-nineteenth century onwards. These teawares, readily available and replaceable, would be ideally suited to a commercial establishment where breakages were common and replacement cost effective. The ever popular blue transfer print was as always well represented within a nineteenth-century assemblage; however the presence of other colours, such as the purple, indicated that a greater variety of colours was readily available to the customer, especially towards the later half of the nineteenth century. Mass produced transfer printing (tp) is represented by 100 MIC (28.6%), in blue flow, black flow, black tp, blue tp, blue tp pearlware, brown tp, green tp, red tp, purple tp and clobbered.

Decoration	No. Frags	%	MIC	%
bl flow	21	2.3	3	0.9
blk flow	22	2.5	6	1.7
blktp	38	4.2	11	3.1
bltp	130	14.5	30	8.6
bltp pearl	11	1.2	1	0.3
bristol gl	9	1.0	2	0.6
brntp	69	7.7	14	4.0
glazed	12	1.3	1	0.3
grntp	15	1.7	12	3.4
hp	3	0.3	3	0.9
linear	29	3.2	9	2.6
redtp	7	0.8	4	1.1
ppl tp	33	3.7	18	5.1
rock gl	6	0.7	3	0.9
salt gl	84	9.4	70	20.0
selfslip	4	0.4	3	0.9
sponge	23	2.6	12	3.4
ww	130	14.5	37	17.5
ww mou	73	8.1	16	4.6
ww gilt	56	6.2	40	11.4
ww mou	53	5.9	8	2.3
banded bl	1	0.1	1	0.3
clobb	1	0.1	1	0.3
ww mou gild	0	0.0	1	0.3
hp gild	51	5.7	14	4.0
tp,glz,gild	26	2.9	1	0.3
moriage	5	0.6	1	0.3
sprig	35	3.9	11	3.1
flow gild	1	0.1	1	0.3
	895	105.6	334	102.5

Table 6.1: Decorative types from all contexts.

Decoration	Area	MIC	%
bl flow	RCI	3	0.9
blk flow	RCI	6	1.7
blktp	RCI	11	3.1
bltp	RCI	29	8.3
bltp	Riley St	1	0.3
bltp pearl	RCI	1	0.3
bristol gl	RCI	1	0.3
bristol gl	Station St	1	0.3
brntp	RCI	10	2.9
brntp	Riley St	4	1.1
clobb	Area B	1	0.3
flow gild	RCI	1	0.3
glazed	RCI	1	0.3
grntp	RCI	10	2.9
grntp	Riley St	2	0.6
hp	RČI	3	0.9
hp gild	RCI	5	1.4
hp gild	Riley St	9	2.6
linear	RCI	8	2.3
linear	Riley St	1	0.3
linear bl	Area B	1	0.3
moriage	Riley St	1	0.3
ppl tp	RCI	18	5.1
redtp	RCI	3	0.9
redtp	Riley St	1	0.3
rock gl	RCI	1	0.3
rock gl	Riley St	2	0.6
salt gl	Area B	17	4.9
salt gl	RCI	44	12.6
salt gl	Riley St	9	2.6
selfslip	RCI	2	0.6
selfslip	Riley St	1	0.3
sponge	Area B	1	0.3
sponge	RCI	11	3.1
sprigg	RCI	11	3.1
tp,glz,gild	RCI	1	0.3
wgl	Area B	1	0.3
wgl	RCI	13 20	3.7
wgl	Riley St	3	5.7
wgl	Station St	-	0.9
wgl gilt	RCI	15 24	4.3 6.9
wgl gilt wgl mou	Riley St Area B	24	0.6
wgi mou wgl mou	RCI	2	0.6
wgi mou wgl mou	Riley St	4	1.1
wgi mou wgl mou	Kincy St	_	1.1
gild	Riley St	1	0.3
ww	Area B	6	1.7
ww	RCI	16	4.6
ww	Riley St	2	0.6
ww gild	Station St	1	0.3
ww mou	RCI	7	2.0
ww mou	Riley St	1	0.3
		350	100.6
Table 6 2: I	Docorativo t		cording

		Dilor	Area	Station		
Dogo Tymo	RCI	Riley			Total	%
Deco Type		St	В	St	Total	
bristol	1			1	2	0.6
flow	1				1	0.3
glazed	1				1	0.3
hp	3				3	0.9
hp gild	5	9			14	4.0
linear	8	1	1		10	2.9
moriage		1			1	0.3
rock gl	1	1			2	0.6
salt gl	44	9	17		70	20.0
selfslip	2	1			3	0.9
sponge	11		1		12	3.4
sprigg	11				12	3.4
transfer						
print	91	8	1		100	28.6
tp,glz,gild	1				1	0.3
wgl	13	20	1	3	37	10.6
wgl gilt	15	24			39	11.1
wgl mou	2	4	2		8	2.3
wgl mou gild		1			1	0.3
ww	16	2	6		24	6.9
ww gild				1	1	0.3
ww mou	7	1			8	2.3
Total	233	82	29	5	350	100.3
	66.6	23.4	8.6	1.4		100

Table 6.3: Decorative groups according to areas. Note different coloured transfer printed wares are all included under transfer print.

Table 6.2: Decorative types according to areas.

2.4 Patterns

Within the confines of transfer-printed wares the identified pattern named examples helped to convey an overall indication of the range of ceramics available in the marketplace during the occupation of the Red Cow Inn and other areas of the Penrith Plaza site. Of the 22 individual known patterns identified across the assemblage, 54 MIC (81.5%) were transfer printed and featured 18 unique

patterns. The remaining 11 items (16.6%) were comprised of four moulded patterns on either whiteware or semi-vitrified whiteware (**Tables 7.1, 7.2**).

5	D. (1)	MATC	0.4	D. // N	D.CI	Du G		Station	7 0 . 1
Decoration	Pattern Number	MIC	%	Pattern Name	RCI	Riley St	Area B	St	Total
blktp	Alma	1	1.5	Albion	10				10
	Asiatic Pheasants	3	4.5	Alhambra	1				1
	Ceres	2	3.0	Alma	1				1
	Rhine	4	6.1	Asiatic Pheasants	11	1			12
bltp	Albion	10	15.2	Athens	2				2
	Asiatic Pheasants	9	13.6	Berlin Swirl		2			2
	Athens	2	3.0	Cable	1				1
	Fibre	1	1.5	Ceres	3				3
	Gem	1	1.5	Corsina	1				1
	W3	1	1.5	December	1				1
brntp	Alhambra	1	1.5	Delaware	1				1
	Corsina	1	1.5	Denmark		1			1
	Rhine	3	4.5	Dresden Sprig	1				1
grntp	Denmark	1	1.5	Fibre	3				3
	Fibre	2	3.0	Garden Sprig			1		1
	November	1	1.5	Gem	1				1
	Rhine	2	3.0	Honeysuckle	4				4
redtp	Dresden Sprig	1	1.5	Lily of the Valley	6	1			7
ppl tp	Cable	1	1.5	November	1				1
	Ceres	1	1.5	Rhine	9				9
	December	1	1.5	Sydenham	1				1
	Honeysuckle	4	6.1	Vintage Shape	1				1
	Sydenham	1	1.5	W3	1				1
ww mou	Berlin Swirl	2	3.0	Total	60	5	1	0	66
	Garden Sprig	1	1.5	Table 7.2: Identified p	atterns	from all a	reas.		
	Lily of the Valley	7	10.6						

Table 7.1: Identified patterns from all contexts.

1890s+: "Ceres" (3 MIC), "December" (1 MIC)

Vintage Shape

The transfer printed patterns were represented by a range of colours: black, blue, brown, green, red and purple. This is an indicator of the choices available to the consumer. Twenty-seven of the items were represented by four common patterns in different colours: "Ceres" (3 MIC) in purple and black, "Fibre" (3 MIC) in green and blue, "Rhine" (9 MIC) in black, green and brown, and "Asiatic Pheasants" (12 MIC) in blue and black. The overwhelming majority of the 18 transfer-printed patterns were datable from the mid to late-nineteenth century.

98.1

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1810+: "Willow" (1 MIC)
1830s+: "Fibre" (3 MIC)
1840s+: "Athens" (2 MIC), "Dresden Sprig" (1 MIC)
1850s+: "Albion" (10 MIC), "Asiatic Pheasants" (12 MIC)
1860s+: "Alma" (1 MIC), "Cable" (1 MIC), "Corsina" (1 MIC), "Denmark" (1 MIC), "Gem" (1 MIC), "Honeysuckle" (4 MIC), "November" (1 MIC), "Rhine" (9 MIC), "Sydenham" (1 MIC)
1870s+: "Alhambra" (1 MIC)
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Casey & Lowe Red Cow Inn & Penrith Plaza

The two most dominant patterns, "Asiatic Pheasants" (12 MIC) and "Albion" (10 MIC) are typically found on sites with features dating from the mid-nineteenth century, and because of their popularity within the marketplace they would have been ideal for a hotel setting where accessing matching pieces for reasonable prices would be preferable. These two patterns alone accounted for 33.3% of the identified patterns. The fact that all the identified transfer printed patterns were commonly found on most sites of this period pointed here to ceramics that were being bought not just for aesthetic appeal, but because they'd be reasonably cost effective and easy to replace when breakages occurred.

Given that only one item of the ubiquitous "Willow" pattern was recovered on site also pointed to there being a greater range of patterns and decorative types available to the consumer at this time. No matter how cheap the "Willow" pattern may have been to buy, there were obviously far more options available to the consumer.

The moulded whiteware patterns would also have been popular and suitable wares for an inn, durable fabric for heavy usage and simple, non-fussy patterns. Seven of these items featuring the patterns "Lily of the Valley" and "Vintage Shape" could have been used in distinct sets or used together to create the impression of matching pieces. The fact that the "Lily of the Valley" pattern was found on six items at the Inn, all plates, would suggest this pattern was popular at some stage during the lifetime of the inn. Moulded designs proved increasingly popular during the latter half of the nineteenth century, and were produced in large quantities by potteries in the United Kingdom for both local and overseas export markets. Many of these were found during excavations at the Conservatorium of Music Site.²

2.5 Basemarks

T.J. & J. Mayer, Longport, first registered the "Berlin Swirl" pattern on 21 January 1845. "Garden Sprig" pattern was attributed to the pottery of J. & G. Meakin, Hanley, c1870+. "Vintage Shape" pattern had a basemark for C. Challinor, dating between 1892-96. "Lily of the Valley" pattern featured two different basemarked examples: Anthony Shaw, Burslem, c1860-1900 and John H. Davis, Hanley, 1881-1891. There were only five base-marked examples (4702, 4706, 4709, 4713 and 4737) among the 17 contexts containing ceramics (**Table 8**).

Twenty-six basemarks were recovered, with only one representing local Sydney manufacture. A stoneware ginger beer bottle with impressed mark "T FIELD" / "POTTER" / "SYDNEY" - c1855-1860 (4702/35,013).

Five marks were of Scottish origin and all were Glasgow based potteries. Four were on stoneware stout bottles and one a red transfer printed saucer:

- Context 4702 & 4706, cat. no.: 35,003 & 35,039: 2 stout bottles with impressed mark "H. KENNEDY" / "BARROWFIELD" / "POTTERY" / "GLASGOW" c1866-1929.
- Context 4737/5,060 & 35,061: 2 stout bottles with impressed mark "PORT DUNDAS" / "GLASGOW" / "POTTERY COY" c1850-1932.
- Context 4702/35,150: a red transfer printed saucer in "Dresden Sprig" pattern with impressed mark "R.C. & Co" (Robert Cochrane and Co, Glasgow) 1846-1918.

The remaining 20 basemarked items were all from various potteries in the United Kingdom, further confirmation of the dominance of imported ceramics within the local marketplace. All marked wares recovered from the five contexts date from at least the mid-nineteenth century, the earliest being from 1846+. Marks dated from the 1860s dominate (12 MIC), with the 1850s (4 MIC), 1880s (5 MIC) and 1890s (4 MIC) equally represented in numbers.

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² Casey & Lowe 2001 Archaeology Investigations, Conservatorium Site, for NSW Dept of Public Works & Services.

Context	Cat #	Decoration	From	To	Country
4702	35003	salt gl	1866	1929	Scot
	35013	salt gl	1855	1860	Aus
	35150	redtp	1846	1918	Scot
4706	35039	salt gl	1866	1929	Scot
	35185	ww	1880		UK
	35214	ww mou	1881	1891	UK
	35216	brntp	1885		UK
4709	35238	ppl tp	1897	1904	UK
	35239	ww mou	1860	1900	UK
4713	35266	ppl tp	1865	1886	UK
	35269	ww mou	1860	1900	UK
	35270	ww mou 1860 1900		1900	UK
	35271	ww mou	ww mou 1860 1900		UK
	35272	ww mou	1860	1900	UK
	35273	ww mou	1892	1896	UK
	35289	bltp	1850		UK
	35290	bltp	1887	1912	UK
	35294	blktp	1897	1904	UK
	35298	ppl tp	1896		UK
	35299	ppl tp	1865	1886	UK
	35300	ppl tp	1860		UK
	35301	blk flow	1880	1930	UK
	35303	bltp	1865	1886	UK
4737	35059	salt gl	1862	1900	UK
	35060	salt gl	1850	1932	Scot
	35061	salt gl	1850	1932	Scot

 Table 8: Basemark dates within contexts

3.0 Analysis of Specific Contexts

3.1 Contexts 4706 and 4713

As mentioned above, three contexts contained 62.2% of the ceramics recovered, with context 4702 featuring the most items. Because this was assigned to artefacts recovered during general cleanup and machine excavation, the ceramics from here were not discussed in detail within the scope of this report. Instead the two contexts, which represent rubbish fills and contained the most ceramics aside from 4702, were concentrated upon. Context 4713 was the backfill of a timber-lined pit underneath additions to the Red Cow Inn and was therefore associated with an early phase of the Inn and context 4706 which was the backfill of a cistern of a house on Riley Street.

3.2 Context 4706

Context 4706 was the fill from a circular brick cistern on Riley Street. It contained 60 MIC ceramics, the overwhelming majority relating to the function of food (47 MIC), and of these 26 were teaware items: cups (14 MIC), saucers (20 MIC) and teapots (2 MIC) (Tables 4.2, 9, 10). Although eggcups (6) were listed under the specific function of tablewares, they could also be included within the teawares category because they were often sold in breakfast sets, which included cups, saucers and small plates. The eggcups were all either plain or gilded whiteware (cat nos:35,167-35,172), decorative styles in themselves commonly found on teawares.

Four of the five candle snuffers recovered from the site were also from this context, and again these were all gilded whiteware (cat nos:35,208-35,211). A fifth snuffer was in context 4702 (cat no. 35,085) and was the same decoration as the other four.

General Function	Specific Function	Shape	MIC	%
alch	stout	bottle	1	1.7
bev	g beer	bottle	1	1.7
cleric	writing	ink bottle	1	1.7
		penny ink	1	1.7
food	serve	jug	1	1.7
	tblw	bowl	1	1.7
		egg cup	6	10.0
		plate	3	5.0
	tea	cup	14	23.3
		saucer	20	33.3
		teapot	2	3.3
h'hold	light	candle snuffer	4	6.7
yard	garden	pot	1	1.7
unid	cont	bottle	2	3.3
	unid	unid	2	3.3
			60	100.1

Table 9: Context 4706, general and specific functions.

Shape	4706	%	4713	%
black bottle		0.0	2	3.6
bottle	4	6.7	4	7.3
bowl	1	1.7	3	5.5
candle snuffer	4	6.7		0.0
cup	14	23.3	7	12.7
dish		0.0	1	1.8
egg cup	6	10.0		0.0
ewer		0.0	2	3.6
ginger jar		0.0	1	1.8
ink bottle	1	1.7		0.0
jug		0.0	1	1.8
ornament	1	1.7	1	1.8
penny ink	1	1.7	2	3.6
plate	3	5.0	12	21.8
plate-small		0.0	3	5.5
platter		0.0	7	12.7
pot	1	1.7		0.0
poe		0.0	1	1.8
saucer	20	33.3	8	14.5
teapot	2	3.3		0.0
unidentified	2	3.3		0.0
	60	100.1	55	99.8

Table 10: Shapes in contexts 4706 and 4713.

Decoration

Although 14 decorative types were represented within context 4706, 78.4% of the items were decorated with just four types (47 MIC): salt glazed (6 MIC), hand painted and gilded (9 MIC), whiteware (15 MIC) and gilded whiteware (19 MIC) (**Tables 11, 12**). The salt glazed stoneware items were all bottles: stout (1), ginger beer (1), ink (1), penny ink (1) and unidentified (2). The remaining three dominant decorative types were all featured on teawares (cups and saucers), the candle snuffers and eggcups. It was noted that the 13 whiteware items were in the main cup and saucer body and base sherds, which although not found to conjoin with any of the hand painted and gilded or gilded whiteware items may well have come from these or similar pieces.

Decoration	4706 MIC	%	4713 MIC	%
	MIC	70		
bl flow			1	1.8
blk flow			3	5.5
blktp			4	7.3
bltp			10	18.2
bltp pearl			1	1.8
brntp	1	1.7		
glazed			1	1.8
grntp	1	1.7	2	3.6
hp gild	9	15.0	1	1.8
linear	1	1.7		
moriage	1	1.7		
ppl tp		0.0	5	9.1
rock gl	2	3.3		
salt gl	6	10.0	8	14.5
selfslip	1	1.7		
sponge			4	7.3
sprig			2	3.6

tp,glz,gild			1	1.8
ww	15	25	7	12.7
ww gilt	19	31.7	5	9.1
ww mou	3	5.0		
ww mou gild	1	1.7		
	60	100.2	55	99.9

Table 11: Decoration in contexts 4706 and 1713

The 14 decorative types represented were all commonly available during the latter half of the nineteenth century, with such items as linear, moriage, hand painted and gilded, gilded whiteware and the moulded whitewares in particular being popular from at least the 1860s+. The linear, moulded whitewares, and teasets of hand painted and gilded and gilded whiteware were common, inexpensive and easily replaceable tableware and teaware items were required.

Table 12 also indicated that the number of identified patterns in context 4706 was small, again a reflection on the low number of tableware items recovered and the emphasis instead on teawares of non-transfer-print or moulded design. Only three known patterns were identified: a green transfer print "Denmark" pattern bowl (cat. no. 35,215) attributed to J. Dimmock & Co, Hanley, dated between 1860-1915; a moulded ironstone "Berlin Swirl" pattern cup (cat. no. 35,215), a pattern first registered on 21 January 1845 by T.J. & J. Mayer, Longport; and a moulded whiteware "Lily of the Valley" pattern plate (cat. no. 35,214) with basemark belonging to John H. Davis, Hanley, dated 1881-1891.

Decoration	Pattern Number	4706
brntp	98	1
grntp	Denmark	1
hp gild		9
linear	05	1
moriage		1
rock gl		2
salt gl		6
selfslip		1
wgl		13
wgl gilt		19
wgl mou		1
wgl mou	Berlin Swirl	1
wgl mou gild		1
ww		2
ww mou	Lily of the Valley	1
		60

Table 12: Decorations and patterns in 4706, Riley Street house.

Decoration	Pattern Number	4713
bl flow	76	1
blk flow	77	2
	79	1
blktp		1
	Asiatic Pheasants	1
	Ceres	3
bltp	Albion	
	Asiatic Pheasants	5
	Athens	1
	Gem	1
bltp pearl	Delaware	1
glazed		1
grntp	25	1
	November	1
hp gild		1
ppl tp	122	1
	December	1
	Honeysuckle	3
salt gl		8
sponge	91	2
	92	1
	93	1
sprigg	9	2
tp,glz,gild		1
wgl		2
ww		5
ww mou	Lily of the Valley	4
	Vintage Shape	1
		55
T-11. 15. D.	orations and natta	•

Table 15: Decorations and patterns in 4713, Red Cow Inn.

Basemarks

Four basemarked items were present in context 4706 (**Table 13**). One dated from the 1860s while the remaining three all dated from the 1880s, and all were of overseas manufacture.

Decoration	Pattern Number	From	To	Cat #	4706
brntp	98	1885		35216	1
salt gl		1866	1929	35039	1
ww		1880		35185	1
ww mou	Lily of the Valley	1881	1891	35214	1
					4

Table 13: Basemark Date Range

- 1 Salt Glazed stout bottle (35,039) with impressed mark "H. KENNEDY" / "BARROWFIELD" / "POTTERY" / "GLASGOW" c1866-1929
- 1 Whiteware plate (35,185) with black transfer print basemark of Royal Arms mark and "ROYAL IRONSTONE CHINA" / "W.H. GRINDLEY & CO" / "ENGLAND" c1880+
- Moulded Whiteware "Lily of the Valley" pattern plate (35,214) with black transfer print basemark of Royal Arms mark with "ROYAL STONE CHINA" / JOHN H. DAVIS" / "HANLEY" - 1881-1891
- 1 Brown Transfer Print jug (35,216) with the remains of a registration number on the base "(Rd) 40435" / "... Co LTD". Maker unknown but registration number dated from 1885+.

3.3 Context 4713

Context 4713 was the fill from a timber-lined well or pit associated with the early phase of the Red Cow Inn. It contained 55 MIC ceramics, the majority being food related (48 MIC, 78.0%) (**Tables 10, 14**).

General	Specific			
Function	Function	Shape	MIC	%
bev	ginger beer	bottle	1	1.8
cleric	writing	penny ink	2	3.6
food	preparation	bowl	1	1.8
	serve	dish	1	1.8
		jug	1	1.8
		platter	7	12.7
	store	ginger jar	1	1.8
	tableware	bowl	2	3.6
		plate	11	20.0
		plate-small	3	5.5
	tea	cup	7	12.7
		saucer	8	14.5
	tea/tblw	plate	1	1.8
h'hold	maintenance	black bottle	2	3.6
	ornament	ornament	1	1.8
personal	hygiene	ewer	2	3.6
		poe	1	1.8
unid	cont	bottle	3	5.5
			55	99.7

Table 14: Context 4713, general and specific functions.

Items associated with tablewares, bowls and plates, represented 30.9% of the assemblage, with plates, both small and large, the most featured with 15 MIC (27.3%). At first glance teawares (15 MIC, 27.2%) and tablewares (17 MIC, 30.9%) seemed fairly evenly represented, with serving items (9 MIC, 16.3%) the next most common function. However analysis of the individual shapes (Table 10) showed that items associated with the consumption of main meals, tableware and serving vessels, were more dominant than the teawares. Plates and platters had a combined total of 22 MIC (40%), compared with 15 MIC teawares (27.2%). This pattern, a large numbers of plates found in 4713 is reinforced by the overall number of plates found within all contexts within the RCI area where a total of 42 plates were recovered from contexts associated with the RCI (Table 4.4). Context 4713 had half as many cups and saucers as context 4706, and no teapots or eggcups recovered at all, the assemblage in the well appeared to be more main meal oriented than that from the Riley Street cistern (context 4706).

The three unidentified bottles (5.5%) were salt-glazed bottle body sherds of unknown shape (#35,051-35,053).

Decoration

Sixteen decorative types were represented within the well (4713), and many of these were different to those found in the Riley Street cistern (context 4706) (**Table 11**). Ten decorative types (58.2%) appeared in the well and not in the cistern (blue flow, black flow, black-transfer print, blue-transfer print, blue transfer-printed pearlware, glazed, purple-transfer print, sponge, sprigged and transfer printed, glazed and gilded), with patterns in blue-transfer print being the most frequently occurring on 10 MIC (18.2%). A total of 91 transfer-printed patterns were found within the area of the RCI while there were only 8 from the Riley Street cistern (4706).

Eight of the sixteen decorative types were the most dominant: blue transfer print on 10 MIC (18.2%), salt glazed on 8 MIC (14.5%), purple-transfer print on 5 MIC (9.1%), whiteware on 5 MIC (9.1%), moulded whiteware on 5 MIC (9.1%), black-transfer print on 4 MIC (7.3%), sponge pattern on 4 MIC (7.3%), and black flow on 3 MIC (5.5%), comprising 80.1% of the wares on 44 MIC. The remaining eight decorative types feature only one or two items each (11 MIC).

Ceramics manufactured in the United Kingdom dominated the well assemblage, with a single ginger jar (cat. no. 35,292) being of Chinese origin. None of the eight stoneware bottles were marked (cat. no. 35,046-35,053), so any evidence within this field of local manufacture was unavailable. This is markedly different to an early twentieth-century site in Parramatta (1 Smith Street) and the late nineteenth-century Queens Arms Inn, Rouse Hill. In the latter case although the artefacts were dominated by British manufactured items they certainly contained items made in China (2), Japan (3), France (1), Holland (2) and Germany (3).

Ceramic Patterns

The high number of mass-produced transfer-printed wares, flow ware included, was immediately noticeable, representing 27 MIC (49.1%) of the well contents. These transfer-printed items in turn yielded a number of identified pattern names, within the colour fields of blue, black, green and purple, nine individual patterns on 19 MIC (**Table 15**).

All of the items decorated with blue-transfer print, including a pearlware item, had identified patterns, five patterns on 11 individual items. All the patterns were those commonly found in

³ Casey & Lowe 2005a Archaeological Investigation 1 Smith Street, Parramatta, for Sydney Water. Casey & Lowe 2005b Archaeological Investigation, RH-46, Queen's Arms Inn, Windsor Road, Rouse Hill, for Mepstead & Associates on behalf of Sanctuary Investments Pty Ltd & Beechworth Homes Pty Ltd, Appendix 2, Table 15.

assemblages dating from at least the mid-nineteenth century onwards: "Albion" (3), "Asiatic Pheasants" (5), "Athens" (1), "Gem" (1) and "Delaware" (1).

Patterns identified in other colours were also mostly common occurring ones: "Asiatic Pheasants" and "Ceres" in black-transfer print (3) and "Honeysuckle" in purple-transfer print (3). The ever popular "Asiatic Pheasants" pattern occurred in both blue and black, on five platters and one plate. The presence of seven platters in the well, all in common patterns, five "Asiatic Pheasants", one "Albion" and one "Gem", suggested that the inn was at some stage using transfer-printed wares for serving and the tableware items were the moulded ironstone pattern plates, such as "Lily of the Valley" (4 MIC).

Fifteen basemarked items were identified. Ten of the marks were on transfer-printed wares and five on moulded whiteware (**Table 16**).

Decoration	Pattern Number	From	To	Cat #	4713
blk flow	79	1880	1930	35301	1
blktp	Ceres	1897	1904	35294	1
bltp	Asiatic Pheasants	1887	1912	35290	1
	Asiatic Pheasants	1850		35289	1
	Gem	1865	1886	35303	1
bltp pearl	Delaware	1827	1855	35304	1
ppl tp	122	1860		35300	1
	December	1896		35298	1
	Honeysuckle	1865	1886	35299	1
	Honeysuckle	1865	1886	35266	1
ww mou	Lily of the Valley	1860	1900	35272	1
	Lily of the Valley	1860	1900	35271	1
	Lily of the Valley	1860	1900	35270	1
	Lily of the Valley	1860	1900	35269	1
	Vintage Shape	1892	1896	35273	1
					15

Table 16: Basemark date range, context 4713.

All basemarks were dateable from at least the 1850s onwards, with the possible exception of the "Delaware" pattern poe or chamber pot (cat. no. 35,304). This item was marked "DELAWARE" / "H" within an ornate foliated scroll cartouche. The initial "H" was used by several potters and is impossible to attribute to one particular maker. Godden (1989:299) suggested a date range of 1827-1855. The majority of the dated marks were however from the 1860s (8), with the 1880s (2) and 1890s (3) also in evidence.

Four marked matching moulded "Lily of the Valley" pattern plates (#35,269-35,272) were made by Anthony Shaw of Burslem between c1860-1900, and would have been an ideal ware for an inn: simple, durable and with easily available replacements. The three blue-transfer printed basemarked examples were all on platters, and as mentioned above, may well have been used in conjunction with the "Lily of the Valley" setting. Two feature the "Asiatic Pheasants" pattern (cat. nos 35,289 and 35,290), and the third the popular "Gem" pattern (cat. no. 35,303).

- Floral spray cartouche with "Asiatic Pheasants" on scroll. Maker unknown. c1850+ (cat. no. 35,289).
- Floral spray cartouche with "Asiatic Pheasants" on scroll and initials "H & C" below. Hammersley & Co, Longton, 1887-1912 (cat. no. 35,290).

Garter mark containing "F. JONES" / "GEM". Frederick Jones, Longton, 1865-1886 (cat. no. 35,303).

The two purple-transfer printed "Honeysuckle" pattern items were from two saucers (cat. nos 35,266, 35,299). A matching cup was also recovered (cat. no. 35,267), however this had no basemark, not unusual for a cup. These three items were most likely from the same set. Both saucers featured the same basemark:

• "HONEYSUCKLE" within a garter mark with "F. JONES" below. Frederick Jones, Longton, 1865-1886.

The purple-transfer print "December" pattern small plate was one of the few ceramics found that indicated any evidence of children on site (cat. no. 35,298). This alphabet plate, so called because of the moulded letters of the alphabet around the marley, featured the remains of a bearded figure sitting on a log with a holly bush beside him. This plate was impressed on the base with "B & Co", initials attributed to L.A. Birks & Co, Stoke, and dated from 1896.

Another alphabet plate in green-transfer print and in the pattern "November" was also found in the well (cat. no. 35,302). It too had the remains of moulded letters of the alphabet on the marley, and featured on the base a robed standing female figure with birds on bare tree branches next to her. This plate had no makers mark. Because both plates featured months of the year it was probable that more plates, showing other months, existed and were part of a series or these ones may have represented individual birthday presents for children whose birthdays were in these months. Did young inn visitors use these plates or were they instead evidence of the publican's family living on site?

The one other indication of children either living on site, or else being catered to as part of the inn customer clientele, was the "Delaware" pattern poe mentioned earlier (cat. no. 35,304). This was catalogued as a child's poe because of its small rim diameter rather than its decoration.

The above three items were the only ceramics recovered from the entire site assemblage that suggested evidence of children. This small number was probably indicative of the nature of the site: an inn with a mainly adult patronage. If children were present then the items were used in sufficiently low frequency that breakages were therefore not as common as regularly used items - such as tablewares, teawares and serving items.

4.0 Conclusion

4.1 Conclusion

Ceramics recovered from the site of the Penrith Plaza and Red Cow Inn site overall reflected one of both hotel and a different residential use. The general function of food dominated the assemblage for the whole of the study area, with 67.1% relating to its preparation, serving, consumption and storage (235 from a total of 350 MIC). Although stoneware bottles associated with alcohol and beverages (stout and ginger beers) were not present in large quantities, only 1 stout and 17 ginger beer bottles were found in association with Inn deposits, this was most likely due to the increasing domination of glass bottles from the time of the inn's inception. The number of candle snuffers recovered (5) from the residence presents an interesting contrast to the Inn (1) suggesting that such niceisities were not used by the paying residents of the Inn.

High numbers of teawares (74), tablewares (50) and serving-related items (28) associated with the Inn contrasted with the Riley Street house which had 15 tableware items, 50 teaware items and only one 1 serving items. The quantity of tablewares and serving items from the Inn point to a much larger group of artefacts produced by the commercial feeding of people rather ather than a family within a house. The 18 platters found at the were in themselves were suggestive of something more than a simple domestic setting.

The range of decorative types represented across the assemblage, even one with a relatively small MIC of 350, was consistent with the occupation of the area from the 1860s onwards. The range of decorations, coupled with the presence of both transfer printed and moulded patterns, were popular and easily available from the mid-nineteenth century and on through into the early 1900s, were additional indicators of market availability, consumer choice, product suitability for the particular environment of an inn, and also buyer spending capabilities.

The domination of mass-produced imported ceramics from the United Kingdom on the Sydney marketplace was clearly in evidence here, with only one definite marked item representing local manufacture, a stoneware ginger beer bottle made by Thomas Field, dated between c1855-1860 (cat. no. 35,013).

Both contexts 4706 and 4713 were rubbish fills from a cistern (Area C) and well (RCI) respectively. Food was again the predominant function, although in context 4706 teawares, cups, saucers and teapots prevailed. In contrast in context 4713 it was the tableware items that were in the majority. The decorative types represented in both contexts were also different, mirroring their predominant function fields. In context 4706 hand painted and gilded, whiteware, and gilded whiteware, were the main decorative types, all being extremely popular styles for teaware sets.

Context 4713 had tableware and serving items dominating, and here too the range of decorative styles reflected the dominant functions: transfer printed designs in popular mid-nineteenth century patterns were particularly dominant, with moulded ironstone plates also popular.

The ceramics recovered from both the cistern and the well appeared to date from between the 1860s through to the early 1900s, and indicated that both features had ceased being used for their original purposes and became ideal locations to dump rubbish from the inn, presumably once reticulated water became available in the Penrith area and neither the well or cistern were needed anymore. In the case of the timber-lined well or pit underneath the footing of the Inn the date of the child's plate from 1896 suggests that the addition in the South Wing were not built until after this date.

5.0 Bibliography

5.1 Bibliography

- Ball, A. 1991. *The Price Guide to Pot-Lids and other Underglaze Multicolour Prints on Ware.* Antique Collectors' Club, Suffolk, United Kingdom.
- Copeland, R. 1990. Spode's Willow Pattern and Other Designs After the Chinese. Studio Vista, London.
- Coysh, A.W. & R.K. Henrywood. 1982. *Dictionary of Blue and White Printed Pottery 1780-1880, Volume I.* Antique Collectors' Club, Suffolk, United Kingdom.
- Coysh, A.W. & R.K. Henrywood. 1990. *Dictionary of Blue and White Printed Pottery 1780-1880, Volume II.* Antique Collectors' Club, Suffolk, United Kingdom.
- Evans, I. 1981. The Lithgow Pottery. The Flannel Flower Press, Glebe, Sydney.
- Ford, G. 1995. Australian Pottery: The First 100 Years. Salt Glaze Press, Wodonga, Victoria.
- Ford, G. 1998. *Encyclopaedia of Australian Potter's Marks (1st Edition)*. Salt Glaze Press, Wodonga, Victoria.
- Furniss, D.A, Wagner, J.R. & J. Wagner. 1999. *Adams Ceramics: Staffordshire Potters and Pots,* 1779-1998. Schiffer Publishing Ltd, Pennsylvania
- Godden, G.A. 1989 reprint. *Encyclopaedia of British Pottery and Porcelain Marks*. Barrie and Jenkins, London.
- Godden, G.A. 1999. *Godden's Guide to Ironstone, Stone and Granite Wares*. Antique Collectors' Club Ltd, United Kingdom.
- Henrywood, R.K. 1997. *An Illustrated Guide to British Jugs*. Swan Hill Press, Shrewsbury, England.
- Keil, R. 1981. *Collecting Australian Pot Lids & the lives of our early pharmacists*. Automatic Printing Co Pty Ltd, Port Pirie, South Australia.
- Kelly, H.E. 1999. Scottish Ceramics. Schiffer Publishing Ltd, Pennsylvania.
- Kovel, R. & T. Kovel. 1986. *Kovel's New Dictionary of Marks: Pottery and Porcelain, 1850 to the Present.* Crown Publishers, New York.
- Neale, G. 2000. Millers Blue and White Pottery: A Collector's Guide. Octopus Publishing Group, London.
- Riley, N. 1991. *Gifts for Good Children: The History of Children's China. Part 1, 1780-1890.* Richard Dennis, Somerset, United Kingdom.
- Slesin, M., Rozensztroch, D. & S. Cliff. 1997. *Everyday Things: Kitchen Ceramics*. Abbeville Publishing Group, New York.
- Snyder, J.B. 1997. Romantic Staffordshire Ceramics. Schiffer Publishing Ltd, Pennsylvania.
- Tasker, J. 1989. Old New Zealand Bottles and Bygones. Heinemann Reed, Auckland.
- Wetherbee, J. 1996. White Ironstone: A Collector's Guide. Antique Trader Books, Iowa.
- Williams, P. & M.R. Weber. 1986. *Staffordshire II: Romantic Transfer Patterns. Cup Plates and Early Victorian China*. Fountain House East, Jeffersontown, Kentucky.
- Wilson, C.A. (ed). 2004. *Eating with the Victorians*. Sutton Publishing Ltd, Gloucestershire, Britain.

Appendix 2.2: Glass

SPECIALIST GLASS REPORT RED COW INN & PENRITH PLAZA PENRITH



(Coombs & O'Brien, Penrith Aerated Water Bottle)

Jeanne Harris

1.0 Glass Artefact Analysis

1.1 Introduction

There are 764 glass artefacts representing 348 items (MIC). There are different categories of glass forms, including bottles (flasks, phials, jars), stoppers, tableware, window and mirror glass, lighting and ornamental pieces. For three artefacts no form could be determined because they were too fragmented to determine any attribute beyond colour. During cataloguing minimum vessels were identified for fragmented items. For the purpose of this study minimum vessel counts are used throughout, so that artefact counts represented in the following discussion represent whole, partial, and fragmented items.

1.2 Glass Discussion

This study will begin with a discussion of the entire glass collection. Due to their relative high frequency, bottles are subject to in depth discussion. Other categories of glass artefacts are subject to descriptive overviews. Counts for artefact by shape are shown in Table 1.1.

Table 1.1: Counts of Glass Artefacts by Shape

Shape	General Function	MIC
Basket	household	1
Bottle/phial/jar	alcohol	116
	beverage	43
	clerical	3
	food	51
	household	1
	personal	5
	pharmaceutical	41
	unspecified	28
Flat Glass		
window	architecture	6
plate	architecture	1
mirror	household	1
Tableware		19
Lighting		
light fixture	service	1
shade	service	1
candle holder	service	1
chimney	service	1
Lid	food	3
Lid	unidentified	1
Stopper	alcohol/beverage/food	18
Unidentified	unspecified	6
		348

1.3 Bottles

Bottles, with 63 whole bottles and 225 partial bottles and/or fragmented bottles, represent approximately 83 percent of the glass assemblage. The term "bottle" is used throughout this discussion to represent glass storage containers, such as bottles, flasks and jars. Bottle characteristics, such as diagnostic manufacturing technologies, contribute useful chronological data. Recognised bottle shapes enable identification of products consumed by the occupants of a site, which help answer questions about trade and economics. Patented shapes and documented manufacturer and/or

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bottler embossments contribute chronological data, as well as helping to answer questions on consumer choice and market access.

1.4 Bottle Chronology

By the end of the nineteenth-century glass containers were mass-produced, relatively inexpensive, and consequently readily disposable. Therefore, they became increasingly popular as packaging for all manner of commercial products. The frequency of container glass entering into the archaeological record since the mid-nineteenth century has also increased dramatically as a result. Chronological data for manufacturing techniques is shown in Table 1.2, these techniques formed the basis for dating of glass artefacts.

Table 1.2.	Chronological	Data for	Bottle	Glass

Tubic 1:2: Cili onological Bata for Bott	ic Glass	
Technomorphology		Date Range
Finishing tool	1820-1920s	
Fire-polished	1880-1920s	
Non-machine made	pre 1893	
Post bottom mould	1820s+	
Cup bottom mould	1850 +	
3-part mould	1820s-1920s	
Semi-automatic machine-made	1893-1926	
Machine-made	1920+	
External threaded finish	1885+	
crack-off finish	1850 –1920s	
Blobtop	1809 - 1920s	
Internal ledge finish	1850-1910	
Patent Common Name		Date Range
Codd bottle	1875-1930s	
Codd variation-ACME patent	1886+	
Codd variation-Dobson patent	1885+	
Lamont bottle and stopper Ricketts patent	1885-1900	

Documented manufacturer's marks for glass containers further serve to establish date ranges (Boow 1991; Toulouse 1971). Chronological and location data for manufacturers are shown in Table 1.3. A further chronological refinement comes from labelling practices (product embossments and labels on containers) and trademarks that also serve to aid in the establishment of data-specific information for these archaeological materials (Arnold 1985; Baldwin 1975; Boow 1991; Deutsher 1999; Fikes 1987; Zumwalt 1980). Chronological data and sources for manufacturers are shown in Table 1.3 and for bottlers in Table 1.4.

Many bottles display multiple datable diagnostic attributes that are considered together when assigning temporal information to an individual bottle. For example, there are 288 identified minimum bottles in the collection. Fifty-two bottles are manufactured in a post bottom mould; 3 of this number also have fire polished finishes, 6 have internal ledges for a "club sauce" type stopper, and 13 have finishes that were created with a finishing tool. Therefore, bottles with post-bottom moulds, alone or coupled with other datable attributes, produce four differing date ranges. Furthermore, product embossments and manufacturers' marks provide additional temporal information. Consideration of this data produced even more variety in date ranges for such bottles.

Table 1.3. Chronological and Locational Data for Manufacturers				
<u>Manufacturer</u>	Date Range	Location	Country	
Aire & Calden Glass Bottle Co.	1836-1913	Castleford, Yorkshire	England	
Australain Glass Manufacturers	1912-1922	Melbourne, VIC	Australia	
Cannington Shaw & Co.	1880s-1915	St. Helens, Lanceshire	England	
Lumb & Co.	1870s-1890s	Castleford	England	
Melbourne Glass Bottle Co.	1888-1900	Melbourne, VIC	Australia	
Melbourne Glass Bottle Co.	1902-1915	Melbourne, VIC	Australia	
J. Ross	1867-1893	Camperdown, NSW	Australia	
York City Glass Co	1860-1900	Swinton, York	England	
Consolidated Fruit Jar Co.	1860-1882	New Jersey	USA	

Table 1.4. Chronological and Locational Data for Products					
Product Name	Date Range	Location	Country		
Bonnington's Irish Moss	1892+	Christchurch	NZ		
Dawson	1896 –1898	Glenlivet	Scotland		
Eno's Fruit Salts	1880+	London	England		
St Jakobs Oel; The Charles A. Vogeler Company	1878 – 1900s	Baltimore, Md U.S.A.	USA		
Kay's Compound Essence of Linseed	1873-1912	Stockport	UK		
Lea & Perrin's Worcestershire Sauce	1837+	Worcester	England		
Lowestroft	1891+		England		
E Rimmel Perfumer	1905+	London	England		
Rowlands Macassar Oil	1793-1953	London	England		
Scott's mulsion;soda (Alfred Scott)	1871-1983	New York	USA		
Spooner's Navy Dressing	NA		England		
A. J. White - London - Sewing Machine Oil	1875-1935	London	England		
Udolpho Wolfe's Aromatic Schnapps	1848+	Schiedam	Netherlands		
Newling & Walker	1885-1926	Parramatta	Australia		
California Fig Syrup Co	1878-1970s	California	USA		
James Stewart & Co	1832+	Saucel-Paisely	Scotland		
Coombs & O'Brien	c. 1900	Penrith	Australia		
Pike W & Sons	1900s+				

Chronological data was established for 82 percent (n=236) of bottles. *Terminus post quem* date ranges from 1750 to 1920 with an 1850 mean date. *Terminus anti quem* date ranges from 1870 to 1983 with an 1896 mean date. Temporal analysis results indicate an 1850 – 1896 hypothetical date range for bottles in the collection.

1.5 Bottle Use Patterns

Bottles were classified on function or original use into six general function categories; Alcohol/liquor (n=116), Beverage (n=43), Clerical (n=3), Food (n=51), Personal (n=5) and Pharmaceutical (n=40). For 30 bottles no specific use could be identified. Each category is discussed below.

1.5.1 Alcohol/liquor

Alcohol related bottles are subcategorised into four specific functions: beer/wine (n=31), Beer (n=1), champagne (n=60) and spirits/whisky (n=18). Seven bottles could not be identified beyond the general "Alcohol" classification.

The majority (51%) of alcohol-related bottles are classified as champagne, however, most probably contained beer or wine, since nineteenth-century Australians rarely drank champagne. According to Boow (1991:68) ale and beer bottles with the champagne (and foil seal) finish type first appeared on the Sydney market in 1843 and in the catalogue of artefacts from the 1852 wreck of the *Eglinton*, off

the coast of Western Australia, bottles of this shape are classified as "champagne style" liquor bottles (Stanbury 2003:155-157). Jones states "in spite of its name the champagne finish style is common for all types of French wine and hock wine bottles" (Jones et al. 1985:79). Furthermore, Vader and Murray show photographs of several beer bottles that are the classic champagne shape. All have a champagne finish, including olive green embossed bottles from the Tooth's and Maitland Breweries, and some have the characteristic deep push up with large mamelon (Vader & Murray 1975:50–52). Therefore, bottles classified in this study as champagne contained alcohol (beer and wine), but it cannot be verified that they did indeed contain champagne. Regrettably, the identification of champagne in the assemblage would have contributed a market access and socio-economic assessment of the collection.

Observations on alcohol bottles include:

- The only machine-made bottle is a beer bottle with a crown cap finish.
- Two marked champagne type bottles are made by Nuttal & Co, England.
- There are two marked whisky bottles, both from Scotland distillers (Peter Dawson and James Stewart & Co).

1.5.2 Beverage

All but one beverage containers are aerated water bottles. The remaining bottle is Symington's Essence of Coffee & Chicory. Lamont patent-shape bottles represent the highest relative frequency (30%). Lamont bottles are typically manufactured in England. One marked bottle was made by Pike W. & Son, London, however two marked bottles are from the J. Ross Company in Camperdown.

Bottlers were identified for 20 percent of aerated waters: Coombs & O'Brien, Penrith (n=5) and Newling & Walker, Parramatta (n=4).

1.5.3 Clerical/Ink

There are three ink bottles in the collection. One bottle is from the popular J. Field Company, London.

1.5.4 Food

There are 50 food-related bottles sub-categorised into four identified categories: fish paste (n=2), sauce (n=12), oil/vinegar (n=12) and pickle/chutney (n=17). In addition there are eight food-related bottles with no specific function. This collection of products typifies food items found in association with a dining establishment such as a hotel or pub, but would not be uncommon in a residential assemblage. Identified products include:

- Sauces manufactured by Lea & Perrin, London and Stephens & Son, Gloucester
- Fish paste manufactured by Lowestrom

1.5.5 Personal

The majority of Personal related bottles are grooming related (n=4), including one contained lavender water, two perfume bottles and one opaque white cosmetic jar. One "Spooner's Navy Dressing" bottle is a shoe polish.

1.5.6 Pharmacy

The collection consists of 39 medicine and 2 medicine/toiletries. Medicine bottles are subdivided into pharmacy/chemist bottles, patent medicine bottles and poison bottles.

- Medicine
 - o <u>pharmacy bottles</u> these are bottles manufactured for exclusive use by physicians and chemists. Bottles are high quality flint glass that has been fire polished. The one

specimen in the collection has a prescription lip with off-centre bore for ground stopper.

- o <u>patent medicine bottles</u> Most of the documented patent medicines in the collection are imported or originally developed in the England or the United States. Documented embossments include:
 - Scott's Emulsion, Cod Liver Oil with Lime and Soda for consumption, coughs, etc.
 - California Fig Syrup Co. effective relief for temporary constipation
 - Bonnington's Irish Moss a preparation for the temporary relief of the coughs of colds and minor throat
 - Eno's Fruit Salts for upset stomach, infectious diseases and blood poisons.
 - Kay's Compound Essence of Linseed specific use unknown
 - Rowlands Macassar Oil a topical hair treatment
 - St Jakobs Oel a topical cure for aching sprains or pains
 - Udolpho Wolfe's Aromatic Schnapps a gin tonic, diuretic, anti-dyspeptic and invigorating cordial
- Poison bottles were identified by their cobalt blue colour, shape, and embossments.
- Pharmacy/medicine/toilet The majority of these containers are a generic rectangular or oval body shape with rounded or chamfered corners, flat front and back panels for product labelling (paper), and stoppered finishes.

1.6 Market Access

A market access study is the examination of factors affecting individual selection of goods in the context of the supply-demand interactions and spatial distribution of goods along transportation networks from manufacturer to distributor to consumer. A network could be as small as purchases from the neighbourhood shop or extend half way around the world. To determine where Penrith was looking to for its commerce requires understanding the commerce of its closest port, Sydney and of the entire nation. To understand changes in market access in Australia requires the examination of worldwide commerce.

During the nineteenth century many developments affected international commerce on a worldwide basis. In the 1869, the opening of the Suez Canal brought new and faster trade routes to Australia from Europe. The late nineteenth-century introduction of the iron steam freighter led the way to new trans-Pacific routes between Sydney and major North American ports, such as Vancouver and San Francisco (Bach 1976:146). While Germany and America were new market competitors actively cultivating the Australian market, Britain was still Australia's major trading partner. Australia's place in the world market elevated considerably due to Britain's increased dependency on Australian wool and the downturn in British agriculture. In the 1870s, Circular Quay was rebuilt to accommodate this increasing trade and Darling Harbour, Balmain, and Pyrmont all underwent reconstruction by the mid-1880s (Canon 1975:186).

One way to determine where Penrith was looking for it commerce is to look to the archaeological record. Bottles, with embossments, as well as those with paper and applied colour labels, are one of the best sources of information for observing trade practices. As previously mentioned, sources of goods ranged from local to very distant. For example, there are aerated water bottles from the Coomb's & O'Brien, Penrith and Newling & Walker, Parramatta. In the same context with patent medicine bottles for the English firms of A.J. White and the New Zealand firm Bonnington.

To interpret this data, the analysis identified trends in international and domestic markets, comparing and contrasting these trends and identifying patterns of consumerism for a particular market. Fifty-three bottles exhibit embossment that provided information on either manufactures or bottlers (see Tables 1.3 and 1.4). Of this number, manufacturers were identified for 19 bottles: Australia (n=8), England (n=9) and USA (n=1). Forty-one bottles provided locational information for bottlers:

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Australia (n=8), England (n=17), Netherlands (n=8), New Zealand (n=1), Scotland (n=3) and USA (n=4).

Australian companies include Australian Glass Manufactures, their predecessor Melbourne Glass Bottle Co., and J. Ross. Containers from these manufacturers were primarily aerated water, alcohol and food bottles. Bottles manufactured in England were made by four different companies, with the majority from Aires & Calden Glass Bottle Co (see Table 1.3).

Products identified through embossments included aerated waters, grooming, food, and patent medicines. Observed trends on products include:

- All products from the Netherlands are Udolpho Wolfe's schnapps
- All identified aerated water bottlers are from Penrith or Parramatta
- All products from the USA are patent medicines
- The widest variety of products is from England, including food, ink, perfume, grooming and patent medicines.

Results of the market access study indicate that English commerce represented approximately 41 percent of bottled products, including old familiar products, such as meat sauces, ink, perfume and even shoe polish. The USA was the most popular source of patent medicines and Scotland whisky was still a favourite. Locally, Penrith area bottlers were looking to domestic markets for their bottle suppliers.

A comparative analysis of market access between the Penrith Plaza excavation and the 1880s "1 Smith Street" excavation in Parramatta demonstrates some differences and similarities in market access trends for these two towns (Casey & Lowe 2005; Appendix 4). In the international market there was a difference in relative frequency of products suggested that the 1880s residents of Parramatta (31 percent) preferred domestic products more than residents of Penrith (19 percent). Preferences for whisky (Scotland), schnapps (Netherlands) and patent medicine (USA) were the same for both sites.

1.7 Tableware

There is a small quantity of tableware in the collection, including tumblers (n=14), stemware (n=2), a plate, a shot glass and a pilsner drinking glass. For one item no form could be assigned.

Temporal information was established through identified manufacturing technologies and decorative design patterning. Pressed glass, which was developed in the 1820s, is the foremost in the identified manufacturing techniques (n=8). Pressed glass is commonly described and dated by its decorative motif. Throughout the nineteenth century and twentieth century there were shifts in popularity of decorative motif that serve to aide in assigning dates to individual items (Jones 2000:141–232). Also used in temporal assessment were:

- needle etched design
- cut design motifs
- stemware bowl and stem shapes

Of note in this collection was the high relative frequency of fine quality drinking vessels. The majority of tumblers (n=9) are high quality (lead glass) with ground and polished bases. Two of these tumblers have heavy thick bases and three others are decorated with hand cut flutes. A stemmed goblet, a pressed glass shot glass and a pilsner drinking glass are made of high quality glass.

1.8 Lighting

Lighting-related artefacts consist of two light shades, a candle holder base and one lamp chimney. The light shades are fragmented and little can be noted beyond basic shape. The lamp chimney has a

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pie crust rim finish that was popular after 1870. The candle holder has an illegible British registry mark on its base.

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1.9 Flat Glass

Twenty-five fragments of window glass are included in the collection. Twenty-four fragments are light green and range in thickness from 1.75 to 2.2 mm. One has remnants of lead came for lead lighting. Also there are fragments of plate glass (8.5–9mm) and one fragment of mirror glass (2.8mm).

1.10 Stoppers

Sixteen stoppers are included in the collection. Ten stoppers are for 'club sauce' bottles: marked stoppers include Lea & Perrin's (1837+) and Holbrook's (1872+). Four stoppers are moulded marbles from Codd-patented bottles. The remaining two stoppers are for alcohol decanters.

2.0 Context Analysis

For the focus of glass analysis are three contexts. Context 4706 is the fill of the brick-lined cistern east of the Riley Street boundary. Context 4713 is the fill of a well that is located in the centre of Room 1 in the South wing of the Red Cow Inn. Context 4737 is timber-lined feature on an adjacent property. Each of these contexts is discussed individually and is subject to basic temporal and function analyses.

2.1 Context 4706

There are 103 glass items from the backfill (4706) of brick-lined cistern associated with the Riley Street house. A total of 93 items contributed to temporal placement. The majority of chronological data was derived from the bottle assemblage (n=86). Datable bottle manufacturing techniques, manufacturers' and product embossments contributed to chronological placement of bottles (Table 2.1). Tableware, a lamp chimney and window glass also contributed to temporal placement. Fiftynine percent (n=55) of the items have an 1860s or later TPQ. Results of temporal analysis indicate that artefacts most likely represent an accumulation of material in the cistern between 1860s and 1920s.

Table 2.1 Chronological Data for Manufacturers and Products from the Cistern (4706)

Manufacturer Name	Product Name	No.	From	То
	Rowlands Macassar Oil	1	1793	1953
	Udolpho Wolfe's Aromatic Schnapps	2	1848	1920
	E Rimmel Perfumer	1	1850	
	Scott's Emulsion with Lime & Soda /	1	1871	1983
	Cod Liver Oil			
	Newling & Walker			
Aire & Calden Glass Bottle Co.	Lea & Perrin's Worcestershire Sauce	1	1837	1913
Lumb & Co.		1	1870	1890
Lumb & Co.		1	1876	1890
Melbourne Glass Bottle Co.		3	1902	1915
J ROSS	Coombs& O'Brien	1	1876	1893

Functional analysis classified 90 percent of the glass items into nine identified groups: Alcohol (n=44), Architecture (n=2), Beverage (n=16), Clerical (n=1), Food (n=9), Household (n=1), Personal (n=2), Pharmaceutical (n=16) and Service (n=2). Alcohol and beverage containers represent the majority of the assemblage (58 percent). Alcohol bottles are mostly champagne-style bottle used for beer/wine. All beverage bottles are for aerated water.

Wolfe's Schiedam Aromatic Schnapps.

Recommended by the Medical Faculty in cases of Gravel, Rheumatism, Fever and Ague Dropsy, Gout, Dyspepsia, and General Debility, and to all persons who are unaccustomed to the change of water. This Gin has now been before the American Public for eighteen years, and has the endorsement of the whole Medical Faculty of the United States as the purest liquor now sold.

UDOLPHO WOLFE.
Sole Importer and Manufactu
w15-3m Off-ce, 22 Beaver St.,

Figure 1: 1880s Advertisement for aromatic schnapps from the *Mobile Daily Register*.

Pharmacy bottles represent the second highest frequency of use-specific items. Half of the pharmacy bottles, aromatic schnapps bottles, were typically sold as patent medicines (Figure 1) (Bonasera 2000:374, Fike 1987:187). Two bottles are embossed with product information: Rowland's Macassar Oil, a topical hair treatment, and Scott's Emulsion, for consumption, coughs and colds. Three bottles are cobalt blue castor oil bottles. One bottle is a high quality bottle used in chemists' and doctors' dispensaries. The remainder are generic patent medicine bottles.

Food items are predominantly condiment bottles, such as meat sauce, oil/vinegar and pickles. The one household item is an opaque white basket with lamp worked amber trim on the ruffled basket rim and handle. Personal items are perfume bottles; one from E. Rimmel Co. Service/lighting related items are a crimped lamp chimney and a candle holder. The one clerical-related item is an ink bottle. Remnants of two window glass panes (5 fragments) represent architectural-related items.

2.2 Context 4713

There are 51 glass items from the well/pit located in Room 1 in the South Wing of the Red Cow Inn. A total of 42 items contributed to temporal placement. The majority of chronological data was derived from the bottle assemblage (n=48). Stemware and window glass also contributed to temporal placement.

Chronological data for bottles were derived from datable technical advancement in the manufacturing process, documented manufacturer embossments and product embossments. A majority of datable bottles (n=24) have 1850–1860 TPQs and two have 1830s TPQs (Figure 2). Seven of these bottles are embossed with manufacturer or product information (Table 2.2). The remaining bottles have wide 1820s–1920s date ranges derived from manufacturing techniques that were in use throughout the nineteenth century. Window glass has an 1880s TAQ (*terminus anti quem* or date after which). The one datable stemware item, with a bucket-shaped bowl and centrally knopped bladed stem, date from 1820s–1870s.

Advancements in manufacturing technologies produced wide nineteenth-century date range and as Figure 2.2 shows, documented dates for patents, manufacturers and bottlers have TPQs that range from 1832–1860s. While the inn was built in the 1860s, the south wing extension was added in the early twentieth century. Therefore, the material in well could not have been deposited after the early twentieth century; a fact that is verified by the lack of machine made bottles in the glass assemblage. Results of temporal analysis indicate that the glass assemblage has an 1830s–1900s date range for the accumulation of materials in the well.

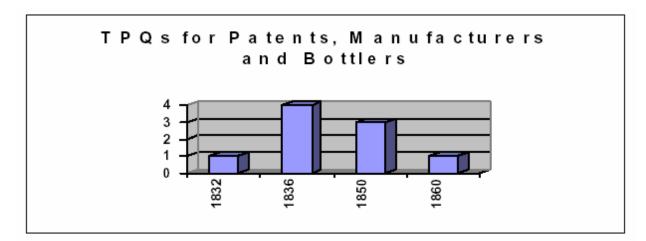


Figure 2: TPQs for Bottles from well (4713).

Table 2.2: Chronological Data for Manufacturers and Products from the Well (4713)								
Manufacturer Name	ame Product Name No. From							
	Lea & Perrin's Worcestershire Sauce	2	1850	1910				
	Udolpho Wolfe's Aromatic Schnapps	1	1850	1920				
	James Stewart & Co	1	1832	1920				
Aire & Calden Glass Bottle Co.		3	1836	1880				
York City Glass Co.		1	1860	1900				

Functional analysis classified 94 percent of the glass items into six identified groups: Alcohol (n=19), Architecture (n=2), Food (n=21), Personal (n=1), Pharmaceutical (n=4), Service/lighting (n=1). Alcohol related items are mostly beer/ wine and champagne style bottles (n=18). The remaining item is a Scottish whisky bottle. Remnants of two window glass panes (33 fragments) represent architectural-related items. Pharmaceutical bottles consist of an aromatic schnapps bottle, a castor oil bottle and two generic patent medicine bottles. Also in the glass assemblage for the well are a lavender water bottle (personal/grooming) and a light shade (service/lighting).

Food items represent 48 percent of identified items and were predominantly condiment bottles, such as meat sauces, oil/vinegar and pickles/chutneys. The remainder are two high quality tableware items; a heavy tumbler and a large stemmed goblet.

2.3 Context 4737

There are 69 glass items from pit on the property adjacent to the Red Cow Inn. A total of 56 items contributed to temporal placement. The majority of temporally sensitive items are bottles or bottle stoppers. A pressed glass tumbler is the remaining datable item (1820+).

Chronological data for bottles and stoppers were derived from datable technical advancement in the manufacturing process, registered patents, documented manufacturer embossments and product embossments (Table 2.3). Advancements in manufacturing technologies produced wide nineteenth-century date range. As Figure 2.3 shows, documented dates for patents, manufacturers and bottlers, representing 46 percent of datable bottles, indicate TPQs for the bottle assemblage extending from 1845–1912. While this is a disturbed context, looted during the course of the archaeological investigation, there is still sufficient data to indicate that the glass assemblage represents the accumulation of materials from the mid-nineteenth century to early twentieth century.

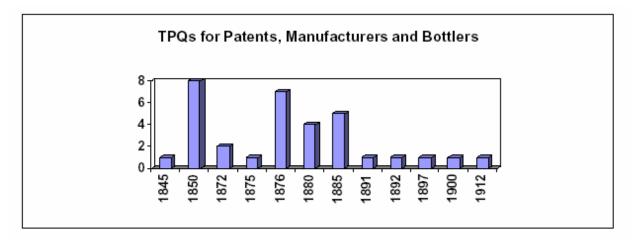


Figure 2.3: TPQs from the timber-lined feature (4737).

Table 2.3: Chronological Data for Manufacturers and Products from Timber-lined Feature (4737)

Manufacturer Name	Product Name	No.	From	To
	A. J. White - London	1	1875	1920
	Bonnington's Irish Moss	1	1892	1920
	Coombs & O'Brien	2		
	Eno's Fruit Salts	1	1880	
	J. Field	1		1920
	Kay's Compound Essence of Linseed	1	1897	1912
	Lea & Perrin's Worcestershire Sauce	5	1850	1957
	Lowestroft	1	1891	
	Newling & Walker	1	1885	1926
	Nubian Tea for the Liver	1	1912	
	Pike W & Son	1	1900	
	St Jakobs Oel; The Charles A. Vogeler	1	1845	
	Co.			
	Stephens Son & Co.	1	1850	1920
Aire & Calden Glass Bottle Co.		1	1850	1913
Aire & Calden Glass Bottle Co.	Lea & Perrin's Worcestershire Sauce	1		
Cannington Shaw & Co.	Symington & Co Ess Coffee & Chicory	1	1880	1915
J. Ross		1	1876	1900
J. Ross	Coombs& O'Brien	1	1876	1893

Functional analysis classified 97 percent of the glass items into five identified groups: Alcohol (n=19), Beverage (n=19), Clerical (n=1), Food (n=20) and Pharmaceutical (n=8). The majority of alcohol-related items are beer/wine or champagne style bottles (n=12). Four alcohol-related items are two spirit flasks and two whisky bottles and the remaining two items are fragmented alcohol bottles which are either too fragment for specific identification or are missing diagnostic finishes and bases. All beverage-related items are aerated water bottles. Food-related items are predominantly condiment containers, including meat sauce bottles and stoppers, oil/vinegar and pickle chutney bottles. One press moulded tumbler comprises the remainder of food-related items. Pharmaceutical items are patent-medicine bottles (n=7) and a castor oil bottle. An ink bottle comprises the clerical-related items.

2.4 Discussion

A comparative study was undertaken to identify similarities and difference in glass assemblages for three major contexts: a cistern (4106), a well/pit (4713) and a timber-lined feature (4737). All features were used for rubbish disposal during or after abandonment of their original use. Chronological data for each of these contexts is summarised in Table 2.4. The wide date ranges for these contexts suggest the accumulation of material over time. The glass artefacts from the well/pit only slightly predate those from the other contexts, suggesting that it was backfilled earlier than the cistern or the timber-lined feature. The 1900s TAQ for the glass artefacts from the well/pit correlates with the early twentieth-century construction of the South Wing of the inn. TAQs for glass from the cistern and the timber-lined feature suggest that use of these features for rubbish disposal had ceased in the early twentieth-century.

Table 2.4: Summary of Chronological Data for Contexts 4706, 4713 and 4737.

Context	From	To
Cistern (4706)	1860s	1920s
Well/Pit (4713)	1830s	1900s
Timber-line Feature (4737)	1850s	1910s

The glass assemblages from the three contexts were examined to see if there were any discernable use patterns (Table 2.5). Similarities between the glass assemblages for these contexts include:

- Alcohol bottles were prevalent in all contexts and most were beer or wine.
- Food containers are exclusively condiment bottles or jars for such products as fish paste, meat sauce, pickles, oil and vinegar.
- Several of the brand names were found in at least two of the three contexts, including:
 - o Coombs & O'Brien (aerated water)
 - o Newling & Walker (aerate water)
 - o Lea & Perrin (meat sauce)
 - o Udolpho Wolfe (aromatic schnapps)

Other comparative observations include:

- Glass items from the cistern show the largest variety of use-related items, including ornamental items (household) and perfume bottles (personal), suggesting that rubbish in this deposit may, in part, have resulted from the Riley Street household.
- Glass tableware from the cistern and the well/pit is high quality sturdy wares. Similar tumblers, with thick bases with ground and polished pontils, were recovered from these contexts.
- Aerated water bottles represent approximately 18–28 percent of the glass assemblages for the Riley Street cistern and the timber-lined feature, but the well/pit glass assemblage contained no aerated water bottles.

Results of this comparative study suggest that the cistern, well/pit and timber-lined features had a common 1860s–1900 time period during which all features were used for rubbish disposal. The well/pit contained rubbish characteristic of a pub or hotel assemblage, including: high relative frequencies of alcohol and/or aerated water bottles; a variety of condiment bottles is typical of pub fare; and heavy 'pub glassware (Table 2.5). The Cistern, associated with the Riley Street house, contained a greater mix of glass items aside from alcohol which contributed a high proportion of the alcohol-related artefacts. These were beverage, household and personal.

 Table 2.5: Counts and Relative Frequency of Glass by Use

Use	The Cistern 4706			/ell/Pit 13		r-lined ture 37
	MIC	Percent	<u>MIC</u>	Percent	<u>MIC</u>	Percent
alcohol	44	49.4	19	42.2	19	28.4
beverage	16	18.0			19	28.4
clerical	1	1.1			1	1.5
food	9	10.1	21	46.7	20	29.8
household	1	1.1				
personal	2	2.3	1	2.2		
pharmacy	16	18.0	4	8.9	8	11.9
TOTAL	89		45		67	

3.0 Bibliography

3.1 Bibliography

- Arnold, K. 1985 Australian Found Bottles. Crown Castleton Publishers.
- <u>Australian Academy of Technological Sciences and Engineering</u> 2000 *Technology in Australia* 1788-1988 Australian Science and Technology Heritage Centre.
- Bach, J. 1976 A Maritime History of Australia. Pan Books, Sydney.
- Baldwin, J. K. 1975 *Patent and Proprietary Medicine Bottles of the Nineteenth Century.* Thomas Nelson Inc., New York.

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- Bonasera, M. 2000 'Good for What Ails You: Medicinal Practices at Five Points', *Tales of Five Points: Working-Class Life in Nineteenth-Century New York*, Vol II, John Milner Associates, Inc., West Chester pp 374.
- Boow, J 1991 Early Australian Commercial Glass: Manufacturing Processes. Prepared for the Heritage Council of New South Wales.
- Bush, J. 1985 'Second Time Around: A look at Bottle Reuse.' *Approaches to Material Culture Research for Historical Archaeologists*. The Society for Historical Archaeology.
- Casey & Lowe 2005 Archaeological Investigation, Non-Indigenous Archaeology, 1 Smith Street, Parramatta, for Sydney Water.
- Canon, M. 1975 Life In the Cities: Australia in the Victorian Age: 3. Thomas Nelson Pty, Ltd, Melbourne.
- Fike, R. 1987 The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles. Peregrine Smith Books, Salt Lake City, pp 187
- Munsey, C. 1970 The Illustrated Guide to Collecting Bottles. Hawthorn Books, Inc., New York.
- Boow, J. 1991 *Early Australian Commercial Glass: Manufacturing Processes*. Prepared for the Heritage Council of New South Wales.
- Carney, M. 1998 'A Cordial Factory at Parramatta, New South Wales', *Australasian Historical Archaeology* 16:80-93.
- Deutsher, K. M. 1999 The Breweriers of Australia: A History. Lothian Books, Melbourne.
- Fike, R. 1986 *The Bottle Book: A Comprehensive Guild to Historic, Embossed Medicine Bottles.* Peregrin Smith Books, Salt Lake City.
- Hill, S. 1982 'Examination of Manufacture-Deposition Lag for Glass Bottles from Late Historic Sites.' *Archaeology of Urban America: The Search or Pattern and Process.* Academic Press, New York pages 291-328.
- Jones, O. and C. Sullivan, G. L. Miller, E. A. Smith, J. E. Harris, K. Lunn 1985 *The Parks Canada Glass Glossary*. Studies in Archaeology, Architecture, and History, National Historic Parks and Sites Branch, Parks Canada.
- Jones, O. R. 1986 *Cylindrical English Wine & Beer Bottles 1735-1850*. Studies in Archaeology, Architecture, and History, National Historic Parks and Sites Branch, Parks Canada
- Jones, O. R. 2000 "A Guide to Dating Glass Tableware: 1800 1940" *Studies in Material Culture Research*, edited by Karlis Karklins, Society for Historical Archaeology pp 141 232
- Low, R. A. 1992 Switched on in the West: A History of Electricity Supply to Parramatta and the Western Region of Sydney 1890-1990, Parramatta & District Historical Society.
- Panati, C. 1987 Extraordinary Origins of Everyday Things. Harper & Row, Publishers, New York.
- Stanbury, M. 2003 *The* Barque Eglinton: wrecked Western Australia 1852. Australian National Centre of Excellence for Maritime Archaeology, Special Publication No 6, The Australasian Institute for Maritime Archaeology, Pecial Publication No. 13.
- Toulouse, J. H. 1971 Bottle Makers and Their Marks. Thomas Nelson Inc., New York.
- Vader J. and B. Murray 1975 Antique Bottle Collecting in Australia. Summit Books, Sydney.
- Woodhead, E. I, C. Sullivan, and G. Gusset 1984 *Lighting Devices in The National Reference Collections, Parks Canada*. Studies in Archaeology, Architecture and History, National Historic Parks and Sites Branch, Parks Canada.
- Zumwalt, B. 1980 *Ketchup*, *Pickles*, *Sauces:* 19th *Century Food in Glass*. Mark West Publishers, Fulton, California.

Appendix 2.3: Miscellaneous, M	Aetals and Buildi	ng Materials	

SPECIALIST ARTEFACT REPORT MISCELLANEOUS, METALS & BUILDING MATERIALS RED COW INN & PENRITH PLAZA PENRITH



Robyn Stocks
For Casey & Lowe Pty Ltd

October 2005

1.0 Introduction

1.1 Introduction

The artefacts discussed in this report comprise those catalogued as Building Materials, Metal and Miscellaneous by Robyn Stocks for Casey and Lowe Pty Ltd, Archaeology and Heritage Consultants in 2005. They were discovered during the 2004 excavations between Station and Riley Streets Penrith, in the vicinity of the Red Cow Inn, during the redevelopment of the Penrith Plaza site.

The initial archaeological assessments of the site were done by Casey and Lowe Pty Ltd for Bovis Lend Lease Pty Ltd.⁴ The subsequent 2004 excavations were conducted by F. Reidel for Casey & Lowe Pty Ltd.⁵ During 2005 monitoring of building and stormwater works is outlined within the main body of archaeological report.

1.2 Artefacts Catalogue

1.2.1 Methodology

The artefacts were catalogued according to the system developed by Casey & Lowe.⁶ All information was added to an *Access* database, with each item and fragment assigned to a three-step functional category. Significant artefacts were also drawn and photographed.

1.3 Overview of Contexts

The physical world of the residents and visitors to the Red Cow Inn and other areas of the site was revealed in the remaining architectural elements, services, household fittings and furniture as well as the more personal fashion, grooming and hygiene items.

The fabric of the original Red Cow Inn (RCI) was represented by the bricks and mortar sampled from the footings of the north wing (4721). A variety of small artefacts came from deposits relating to the occupation and repair of room 1 (4711) and room 2 (4709) of this north wing. The yard to the south was cobbled (4712) with a well (4729, fill 4713) that was covered over by the construction of the south wing. Stormwater drain monitoring to the northeast (4738) recovered a stone column base added to the Inn during the 1880s, and a brick-lined well (unnumbered).

The other artefact groups discussed here came from underground features that were related to the occupation of houses to the south and west of the Inn, on Station and Riley Streets respectively.

In Area A, Station Street (Lots 15 -17) artefacts were found within mixed later deposits (4702, 4704) removed by machine. Most items were small and belonged to those people who worked in and visited Lots 15-17 before and after construction of housing in the late 19th/early 20th century.

A large pit (4703) found in this southern area was filled with many large cut up and broken metal artefacts, presumably thrown in during a large-scale cleanup of the area, probably prior to housing.

To the west of the Inn were several features with fewer artefacts including a cut (4724, fill 4716), a box drain (4717, fill 4715), a dish drain (4718, fill 4714) and pits (4722, 4723). Of the most interest was a cistern (4706, fill 4707) in Area C which was built of reused bricks.

⁵ Casey & Lowe 2004, 2005, Section 3.0

⁴ Casey & Lowe 2003a, 2003b

⁶ Casey, M 2004 'Falling through the cracks: method and practice at the CSR Site, Pyrmont', *Australasian Historical Archaeology* 22:27-43.

2.0 The Artefact Analysis

2.1 Overview of Analysis

The catalogued artefacts were analysed in order to address the research questions identified in the archaeological assessments and permit application.⁷ This was done by including information about site history and contexts from the assessments and in the excavation reports.⁸

The initial analyses of some 195 catalogued building materials, metal and miscellaneous items were done according to their function and context. Minimal item counts (MIC) was the basic numerical unit used and where relevant the three branches of the catalogue were brought together so that the entire assemblage could be analysed as a whole (Tables 1, 2).

The analysis of the building materials and certain metal artefacts enabled an understanding of the architecture of the Red Cow Inn and other structures. A number of local and more distant sources for the materials and labour used during construction will be suggested.

The function of the individual areas and services will be discussed in the knowledge that the Inn and adjacent properties were occupied at a time when light was not necessarily supplied by electricity, and horses provided the power for transport and agriculture.

Many metal artefacts were tools and fragments of vehicles, equipment and machinery. They reveal much about occupation and the technical accomplishments and standards of the time, and can often be assigned to a broad date range. It should be noted that some of the fragments not able to be assigned a specific function were included in multiple groups, for example transport and agriculture.

The miscellaneous artefacts were made from a variety of materials and included those that were used in the household, for instance as part of the preparation, serving and consumption of food and drink. The more personal items in this category also provided information about individual clothing, gender, age and occupation.

The residents and visitors to the site left many objects that were part of recreational pursuits such as gaming and smoking. Some 23 fragments remain unidentified. Finally the overall meaning and date of the significant contexts will be analysed in relation to the site as a whole.

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⁷ Casey & Lowe 2003a, 2003b

⁸ Section 3, Main Report

General Function	Spec Function	MIC	%	No. Frags	%
agriculture	machine	3	1.5	2	1.4
alcohol	unidentified	1	0.5	0	0.0
architecture	door	2	1.0	0	0.0
	finish	1	0.5	0	0.0
	non-structure	3	1.5	1	0.7
	roof	5	2.6	4	2.8
	structure	32	16.4	15	10.6
archit/transport	stru/vehicle	2	1.0	2	1.4
economy	currency	2	1.0	0	0.0
food	container	1	0.5	0	0.0
	preparation	4	2.1	8	5.6
	tableware	11	5.6	8	5.6
	tea	3	1.5	1	0.7
household	cooking	1	0.5	1	0.7
	ornament	2	1.0	4	2.8
	sewing	10	5.1	4	2.8
	time	1	0.5	2	1.4
	unidentified	2	1.0	2	1.4
h'hold/indust	cooking/heating	2	1.0	1	0.7
h'hold/transport	fitting	2	1.0	0	0.0
industrial	by-product	1	0.5	1	0.7
personal	access	1	0.5	1	0.7
	clothing	5	2.6	8	5.6
	groom	4	2.1	2	1.4
	health	2	1.0	0	0.0
recreation	game	2	1.0	1	0.7
	smoking	11	5.6	11	7.7
	toy	9	4.6	2	1.4
service	electricity	1	0.5	0	0.0
	gas	1	0.5	1	0.7
	light	3	1.5	0	0.0
	unidentified	1	0.5	0	0.0
transport	bike/scooter	1	0.5	0	0.0
	buggy	5	2.6	6	4.2
	horse	13	6.7	2	1.4
	unidentified	1	0.5	0	0.0
	vehicle	7	3.6	7	4.9
transport/agric	maintenance	1	0.5	1	0.7
transport/agric	vehicle/machine	6	3.1	2	1.4
unidentified	container	1	0.5	1	0.7
	unidentified	22	11.3	38	26.8
work	tool	7	3.6	3	2.1
	TOTAL	195	100	142	100

Table 1: Summary of artefacts by general and specific function.

General Function	MIC	%	No. Frags	%
agriculture	3	1.5	2	1.4
alcohol	1	0.5	0	0.0
architecture	43	22.1	20	14.1
archit/transport	2	1.0	2	1.4
economy	2	1.0	0	0.0
food	19	9.7	17	12.0
h'hold	16	8.2	13	9.2
h'hold/indust	2	1.0	1	0.7
h'hold/transport	2	1.0	0	0.0
industrial	1	0.5	1	0.7
personal	12	6.2	11	7.7
recreation	22	11.3	14	9.9
service	6	3.1	1	0.7
transport	27	13.8	15	10.6
transport/agric	7	3.6	3	2.1
unid	23	11.8	39	27.5
work	7	3.6	3	2.1
TOTAL	195	100	142	100

Table 2: General functional groups of artefacts.

2.2 Architecture

The architectural artefacts found in various contexts of the site are shown in Table 3. The Red Cow Inn was built in 1862 opposite the newly constructed Penrith railway station. The structure and the surrounds underwent various alterations with some of the elements reused or discarded.

During the excavation parts of the original sandstock brick structure were revealed (main report, Section 3). Foundations of the north wall of the retained original building and the north wing were made of local river cobbles bonded to the north by buff sandy shell mortar. Part of the south end of the north wing was bonded only by sand on a wide cobble base. The bricks of the walls of this wing had diamond shaped frogs.

One brick with an irregular long shallow diamond frog and light grey-brown sandy shell mortar was sampled from the north wing (4721). The clay was mixed and crushed with a mechanical pug mill and the brick formed in a metal mould. In NSW the use of crushed and burnt shell in mortar became redundant from the 1880s with the increased availability of rock lime. These features and the brick size date it to c1850-1890 which is consistent with the known history for the initial Inn construction. In

Other bricks found in various contexts included those with similar frogs as well as others made of the same highly fired fabric but with rectangular frogs. They can all be dated to the latter half of the 19th century (Table 4).

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⁹ Gemmell 1986: 3-5; Proudfoot et al 1991: 39, 45, 73, and 112

¹⁰ Varman 1993:Chapter 1; Casey & Lowe 2003b

Table 3: Architectural artefacts within contexts.

HAND PUGGED HAND MOULD C1800-1850		HAND PUGGED HAND PRESSED? C1830-1880		MECHANICAL PUGGED METAL MOULD C1850-1890				
CONTEXT	FLAT THIN	FROG DIAMOND SHALLOW	FROG OVAL	FROG DIAMOND LONG	FROG LOZENGE SHALLOW	FROG RECT SHALLOW	FROG RECT LONG	TOTAL
4703	2	1	1a					4
4707	2abcd							2
4717	1		1a	1a	1	1b	2a	7
4721				1b				1
NTH WELL	Xa							
SAMPLE TOTAL	5	1	2	2	1	1	2	14

Mortars and Cements:

- a. Mud mortar, soft, with numerous tiny ironstones, mostly orange-brown (4703, 4707, 4717), one partly crimson (4717).
- b. Sandy shell mortar, well crushed, firm, light brown (4707) & light grey-brown (4717, 4721).
- c. Cement, hard, crimson (4707).
- d. Cement, hard, grey (4707).

Table 4: Types of sandstock bricks and mortars (See Gemmell; Varman Chapter 1).

Note: Xa indicates unsampled and uncounted bricks from the northern well discovered during stormwater monitoring.

Five flat thin bricks were retrieved from part of the cistern and box drain structures (4707, 4717) to the west and in the pit to the south (4703) (Table 4). Others were observed laid with no mortar in a well contemporary with, and on the north side of, the original Red Cow Inn (See monitoring, Main Report, Section 3). They exhibit a technology and size that point to a date of manufacture in the first half of the 19th century. The bricks found in 4703 were worn and had no attached mortar. It is

¹¹ Varman 1993: 55-66

highly probable that these bricks came from an earlier structure or structures, location unknown. They could date to as early as the original land grant of 1804 or have come from another structure owned by the Inn's proprietor Thomas Smith. Although none of these flat bricks were noted by the excavator in the walls of the original Inn several have similar sandy shell mortar still adhering (see below). It is possible that the structure from which the bricks came may not have been demolished until shortly before the construction of the cistern and filling of the pit by the early 20th century (c1919?). This may point to a time when the northern well fell into disuse.

Bricks with shallow frogs (4703, 4707) were of a type made in the colony from the 1830s. ¹² Those from the site with oval frogs are slightly thicker and correspond more closely to bricks dating from the 1850s.

Most of the bricks in the assemblage had traces of mortar and cement (Table 4). The two sampled flat bricks from the cistern (4707) were clearly reused, with a sequence of mortars and cements. The last layer of grey cement and render was that used to construct the cistern in the late 19th/early 20th century (Main Report, Section 3).

The flat and shallow frogged bricks may have been manufactured locally. Early brickmaking in the region began in the early 1800s at the government agricultural (convict) establishment at Emu Plains. This was on a fairly large scale with 80,000 bricks being made in 1820. There were six brickmakers working at Windsor in 1802. At St Marys other evidence for early manufacture exists on farming properties, such as the 'King Farm' Dunheved (St Marys), and shown by the late 1830s Magdalene Church built with bricks made by James Payne. By 1885 thirteen brickmakers are listed working in the St Marys area.

The Nepean Brick and Tile Company was the most successful yard in Penrith in the second half of the nineteenth century. It was established by William Fleming in 1866 and closed in 1897. This clay pit in the Hornseywood Estate of Castlereagh Street to the northwest of Penrith Plaza was used by others until the 1920s. Fleming made sandstocks impressed with diamond or rectangular frogs or "W F". 15

It is probable that some or all of the mechanically made sandstock bricks from the Penrith Plaza site were made by Fleming. However, due to the historically recorded date of construction the frogged bricks from the original Red Cow Inn were more likely to have been made by others in Penrith or perhaps Fleming himself at another unrecorded local yard.

It is possible that the clay utilised by Fleming had been worked previously. Indeed the flat bricks (4703, 4707) and those with oval and long shallow diamond and rectangular frogs (4703, 4717) have similar orange clay with numerous tiny ironstone inclusions. This clay has obvious similarities to the sandy mud mortar on some of the bricks indicating a common origin within the alluvium of the floodplain. The mud mortar may be the same as that noted by Reidel at the south end of the north wing of the Inn, and the brick lined northern well.

The addition of a second floor with covered balcony and verandah in the 1880s was reported to have reused sandstone columns and other elements from Sir John Jamieson's c1825 mansion of 'Regentville' south of Penrith, destroyed by fire in the 1860s. Although it appears to be slightly smaller, the sandstone column base or capital (4738) is similar to those on either side of the Station Street doorway in a c1918 photo. The has a socketed hole with two types of grey cement indicating

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¹² Gemmell 1986: 53

¹³ Gemmell 1986: 73

¹⁴ Varman 1993: 61

¹⁵ Gemmell 1986: 73

¹⁶ Casey & Lowe 2003b:4

¹⁷ Casey & Lowe 2003b: cover

reuse. The presence of the column points to an alternative origin for the early bricks with mud mortar found at the site.

The nails used and discarded during the repair and occupation of the c1862 north wing rooms (4709, 4711) predominantly were of types manufactured from the 1870s to 1890s. Three nails were possibly made earlier. A galvanised nail with washer and several lead strips from flashing are the only indications as to the nature of the roof above. Fittings from small doors or cupboards from structures on Lots 15-17 Station Street were found near the surface (4702) and inside the pit (4703).

2.3 Services

There were six items that could be positively identified as part of light and power fittings (Table 5). From the Inn area only one unidentified fragment, perhaps a lamp collar, was found within the late occupation of the north wing (4709) (unidentified in Table 1). The glass prism from modern fill above the well (4710) could have decorated either a hanging or wall lamp. These items and the thin brass collars (4702, 4703) were powered either by kerosene, gas or electricity. Kero and gas were in general use in the area from the 1870s. ²⁰

Context	General Function	Specific Function	Shape	From	То	MIC	No. Frags
4702	service	light	collar	1870	-	1	0
4703	service	light	collar	1870		1	0
4703	service	gas	pipe	1873	-	1	1
4703	service	unid	pipe	-	-	1	0
4710	service	light	prism	-	-	1	0
4723	service	elect	connector	1890	-	1	0
				TOTAL		6	1

Table 5: Services artefacts by context and date.

One porcelain connector found in the western area (4723) probably came from the electric circuitry of one of the houses on Riley Street. Several copper wire fragments found in various contexts (4703, 4705, 4709, 4722) were possibly fuses (unidentified in Table 1). Electricity was connected in Penrith after 1890.²¹

One large curved section of pipe (4703) was probably part of the water or sewerage service of the structures on Lots 15-17 Station Street.

2.4 Agriculture & Transport

The types of artefacts described here were part of machinery and vehicles used in both agriculture and transportation. Due to this ambiguity the two categories have been combined (Table 6).

All the artefacts in this category were found only to the south of the Inn, in Area A Station Street. Only one object was found in each of the two cleanup deposits (4702, 4704) but thirty-five were within the southern pit (4703). The artefacts had been detached and cut from vehicles and agricultural machines during repair. They point to the presence of a blacksmith and/or farrier who would have serviced the Inn and the wider community (see below for a description of the tools).

²¹ Low 1992:6

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¹⁸ Varman 1993: Chapter 2, espec. p. 211, Illust. 145-149

¹⁹ Cuffley 1982; Gledhill 1999; Seymour 2001:313-317

²⁰ Low 1992:7

	General	Specific				No.	
Context	Function	Function	Shape	MIC	%	Frags	%
4702	transport	horse	horseshoe	1	2.7	0	0.0
4703	agriculture	machine	chaffcutter	1	2.7	0	0.0
			harrow	1	2.7	1	6.3
			plough	1	2.7	1	6.3
	transport	bike/scooter	handlebar	1	2.7	0	0.0
		buggy	spring	3	8.1	1	6.3
			spring/loop	1	2.7	1	6.3
			spring/loop	1	2.7	2	12.5
		horse	horseshoe	5	13.5	0	0.0
			horseshoe	1	2.7	1	6.3
			nail	3	8.1	0	0.0
			nail	1	2.7	1	6.3
		unidentified	ring	1	2.7	0	0.0
		vehicle	axle	1	2.7	2	12.5
			axle	2	5.4	1	6.3
			bracket, step	1	2.7	1	6.3
			bracket, step	1	2.7	0	0.0
			shaft	2	5.4	1	6.3
	transport/agric	maintenance	mug	1	2.7	1	6.3
		vehicle/mach	bolt	1	2.7	1	6.3
			bracket	1	2.7	0	0.0
			plate/bracket	1	2.7	0	0.0
			ring	1	2.7	0	0.0
			shaft	1	2.7	1	6.3
			shaft	1	2.7	0	0.0
4704	transport	horse	horseshoe	1	2.7	0	0.0
			saddle	1	2.7	0	0.0
			TOTAL	37	100	16	100

Table 6: Artefacts from agriculture and transport by context.

From at least 1909 until 1919 a blacksmith called Jesse Harrison is recorded as having occupied Lots 15-17, running his business from an iron shed on Lot 16.²² This structure existed at the time of the initial housing subdivision of 1900.²³ It is highly likely that the artefacts within the pit (4703) came from the workshop run by Harrison or an earlier blacksmith, and were deposited prior to the residential subdivision and construction of the houses.

Horses provided transport. Their presence is confirmed by a variety of horseshoes, from small to large draughthorse. Several were irregular and one from the southern pit was a rough unused blank (**Photo 4-2**, main report). Other small items from horses included loose cut nails and an iron harness ring. There were also two buggy steps, used for standing on to get into the buggy, and springs (**Photo 4-1**, main report). The Station Street cleanup (4704) revealed a copper alloy saddle fork and horn (**Photo 4-2**, main report). This piece would have fitted into the pommel (front) of a Western Style saddle. The horn was used during the lassoing of animals such as cattle.

Due to their fragmentary nature it was difficult to discern what type of vehicle or machine the brackets, axles and shafts from the pit (4703) were from (**Photo 4-4**, main report). The step and other brackets, springs and loops and the different axle sizes point to at least two different kinds of vehicle, such as a buggy or a cart.²⁴ Various ferrules, fragments of plates, straps, wire (Table 1) and spikes

²² Casey & Lowe 2003: Appendix 4 p. 5

²³ Casey & Lowe 2003a: Figure 2.5 ²⁴ Sears, Roebuck & Co. 1906:198-220

(Table 3) may have also belonged to such vehicles or machinery. Grease relating to their maintenance was captured in one or more reused enamelled mugs (4703).²⁵ The broken bicycle or scooter handlebar was from the only vehicle that may have belonged to a child (4703).

Fragments from a plough, a harrow and a chaffcutter were found in the pit, machines typical of the cultivation and harvesting practices of New South Wales in the 1870s to 1890s (Photo 4-3, main report; Table 6). It was a time of invention and increased use of mechanisation in order to maximise exploitation of the land. These examples were probably made in Australia and represent repaired machines used by local farmers. The plough and the harrow were pulled by horses.

The size of the mouldboard and its shallow pitch indicates that it came from either a Stump Jump or British type of general purpose plough (Figs 1, 2). 26 Both these ploughs were able to be used on varied types of land. The back end of the mouldboard recovered from 4703 is damaged and the cutting/turning edge worn (Photo 4-3). It is possible that the blacksmith removed this mould board and replaced it with new one.

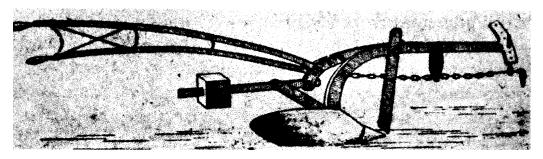


Figure 1: The first single furrow Stump Jump Plough made by R.B. Smith, exhibited in November, 1876. Wheelhouse 1966:21.

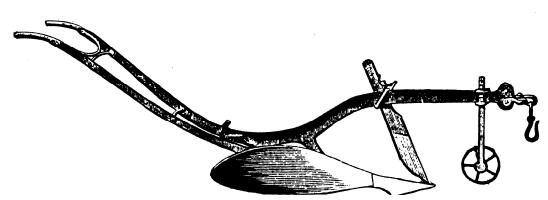


Figure 2: Australian made, English style, general purpose plough, with knife coulter and gauge wheel, by Hudson Bros. c1887. Simpson 1988:fig 7

The angled beam fragment with three tines is tentatively identified as part of a rectangular or zigzag or stump-jump, multi-sectioned, multi-rowed harrow (Photo 4-5, Figs 3, 4). The crescent-shaped knife blade came from a rotating chaff cutter, possibly 'The Winnower'. 27 A machine similar to this would have been used to cut fodder eaten by horses. This type of chaffcutter, invented in 1838, was commonly used in Australia. At first rotated by hand many were later converted to horse power.

²⁵ Booher 1977; Field:100

²⁶ Simpson 1988:12, Fig. 7

²⁷ Simpson 1988:77-79; Wheelhouse 1966: 77-79, 82-84.

The leather offcut and other worked fragments found in the pit showed the versatility of the work undertaken by the blacksmith including the repair of saddles and possibly footwear (industrial on Table 1).

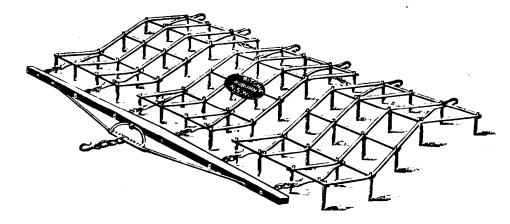


Figure 3: Australian three-section, four-beam, five-row zigzag harrow, by Ritchie Bros, c1892. Simpson 1988:fig.47.

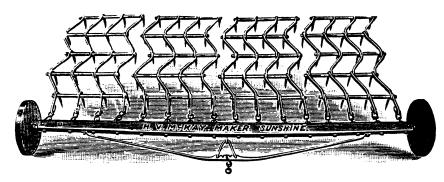


Figure 4: Australian hardwood and steel, four-section, four-beam, five-row "Sunrise" stump-jump harrow, with eighty teeth, and optional wheels, by H.V. McKay. Simpson 1988: fig.49

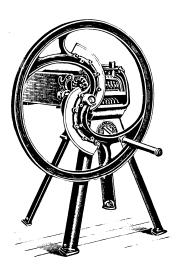
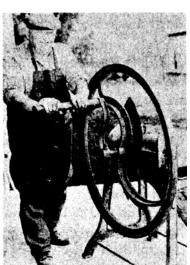


Figure 5: (left) English hand-powered two-blade chaffcutter with wormdriven feed roller, by Richmond & Chandler. Simpson 1988: fig 116

Figure 6: (right) The Winnower. A hand-operated chaffcutter. Thousands of these were made by John Stokes Bagshaw, NSW, patented 1838. Wheelhouse 1966:77.



2.5 **Work Tools**

The pit (4703) also contained a group of six tools and fragments relating to the working of wood and metal (Photo 4-7, Table 7). The punch and four different types of files were probably used by the blacksmith or farrier to ensure the wellbeing of the horses and running of vehicles and machinery (described above). The punch was a type known as a farriers' pritchel or blacksmiths' drift.²⁸ The axe head fragments would have been socketed onto wooden handles. In the 19th century the axe was a common tool for chopping wood needed for construction and fuel. One was a side axe used by wheelwrights and coopers.²⁹ One ferrule probably came from where a handle was attached to a tool, such as a broom (unidentified in Table 1).

Context	Gen Function	Spec Function	Shape	MIC	No. Frags
4703	work	tool	axe	2	2
4703			file	4	2
4703			punch	1	0
			TOTAL	7	4

Table 7: Work tools by context and shape.

2.6 Household

Artefacts used within the household numbered twenty (Table 8). Within the occupation deposit of the north wing of the Inn were nine machine made dress pins (4709).³⁰ The rest of the items were found behind the houses on Station and Riley Streets.

Context	General Function	Specific Function	Chana	MIC	No.
			Shape	MIC	Frags
4702	h'hold/transport	fitting	hook	1	0
4703	h'hold	ornament	frame	2	4
4703	h'hold	time	clock	1	2
4703	h'hold	unidentified	plate	2	2
4703	h'hold/indust	cooking/heating	stove	2	1
4703	h'hold/transport	fitting	bracket	1	0
4705	h'hold	cooking	stove	1	1
4705	h'hold	sewing	scissors	1	1
4709	h'hold	sewing	pin	9	3
	_		TOTAL	20	14

Table 8: Household artefacts by context and date.

The two cast iron stove (Photo 4-6) or small furnace fragments found in the pit (4703) along Station Street may have been used by the blacksmith, whereas parts of decorative and functional brass items such as a small rectangular alarm clock, two picture frames (oval and rectangular) and another unidentified item (extant as pressed plates) may have been part of repaired objects.

Also in this area was a small hook or cleat possibly used to tie back horse reins on a painted vehicle, or to tie back a curtain or blind (4702). It had been over painted twice, the last time with a dark green colour similar to a blob found in the fill of a trench to the west (4716).

An oven door fragment and part of long scissors were found in the upper part of the Riley Street cistern fill (4705).

2.7 Food/Beverage

²⁸ Arnold 1999:9; Seymour 1984:69

²⁹ Seymour 1984:82, 88

³⁰ Tylecote 1972: 186

Some nineteen metal items reveal what the residents of the site used to store, cook and handle food and drink (Table 9). Only five were found in association with the late occupation of the north wing of the Inn (4709).

The table cutlery found in the north wing (4709) and to the areas to the south and west can be dated to the 1880s or later.³¹ There was a variety of spoons, three used for tea, one for salt or condiments, one for dessert and two tablespoons for serving. Almost all of the Sheffield-made EPNS spoons and three forks had fiddle pattern handles.³² Only one of the dessert spoons from the western cistern (4706) had an old English pattern. Two of the table knives had celluloid handles (4702, 4706) whereas the other was made of bone (4702).³³ The similarity of the cutlery across the site may point to a common origin, perhaps the Inn, or limited availability of sources from which to purchase.

	General	Specific					No.
Context	Function	Function	Shape	From	To	MIC	Frags
4702	food	tableware	knife	1850		2	4
4702	food	tableware	knife	1883		1	1
4702	food	tableware	spoon, salt	1880		1	0
4702	food	tea	tea spoon	1880		1	0
4702	food	tableware	spoon table	1880		1	0
4702	food	tableware	fork	1880		2	0
4703	food	preparation	skewer			1	2
4703	food	preparation	saucepan	1880		1	1
4706	alcohol	unid	seal			1	0
4706	food	tableware	spoon, dessert			1	0
4706	food	tableware	knife	1880		1	1
4706	food	tea	tea spoon	1880		2	1
4709	food	container	lid			1	0
4709	food	tableware	fork	1880		1	0
4709	food	tableware	spoon table	1880		1	2
4709	food	preparation	handle			1	1
4709	food	preparation	saucepan			1	4
				TOTAL		20	17

Table 9: Food and alcohol artefacts by context and date.

A glimpse of the Inn's cooking ware was represented by only one or two iron saucepan fragments that were perhaps used on stoves similar to those mentioned above.³⁴ Fragments of these and a brass canister lid were found in the north wing (4709).

Another enamelled iron saucepan (**Photo 4-6**) and part of a skewer was found in the southern pit (4703) and may have been used by the blacksmith on the stove.³⁵ A lead seal from a liquor bottle was found in the western cistern (4706).

³¹ Dunning 2000; Moore 1995

³² Cook 1979:106, 110-112

³³ Dunning 2000:41-42

³⁴ Field 1984

³⁵ Booher 1977; Field 1984:100

2.8 Personal

The 12 personal artefacts found at the Inn and surrounding areas were worn and used by men and women, adults and children (Table 10). Clothing forms the largest category with three brass buttons for male clothing, one fragment of a black stocking and a shoe heel. One button from the surface deposit in Area A Station Street was from a pair of work trousers (4702).

Context	General Function	Specific Function	Shape	From	То	MIC	No. Frags
4702	personal	clothing	button			1	0
4702	1	clothing	button	1840		1	0
4702		grooming	comb	1934		1	0
4702		grooming	brush	1850		1	1
4703		health	spectacle lens			1	0
4706		accessory	purse			1	1
4706		clothing	shoe	1862		1	3
4709		grooming	comb	1839		1	1
4709		clothing	button	1880	1903	1	0
4713		grooming	comb	1839		1	0
4722		clothing	stocking			1	5
4723		health	spectacle lens			1	0
				TOTAL		12	11

Table 10: Personal artefacts by context and date.

Two other buttons were from military jackets with insignia on their faces and backmarks of two large Birmingham manufacturers.³⁶ One found in the same southern deposit, made by Smith, Kemp and Wright, was damaged but the design on the face showed that it was worn by a soldier of a Royal Regiment of the British Military Forces (4702).³⁷ It can be dated from c1840. The other button made by Green & Baker for the NSW Military Forces was of a style dating from 1880-1903.³⁸ It was found in the north wing of the Inn (4709).

United under the name of NSW Military Forces from 1855 were numerous small and changing volunteer country regiments that expanded during times of war, such as the Crimean, Sudan and South African Campaigns.³⁹ State forces were officially amalgamated into the Australian Military Force by an Act passed in 1903.⁴⁰ A low heel from a child's shoe was found within the cistern (4706) and dated by its machine punched copper wire nails to after 1862.⁴¹

Grooming articles included two black combs from the area of the Inn, one inside the well (4713) and another from the north wing (4709). Both were of a type possibly used by men, being made of vulcanite patented in 1839.⁴² Another smaller comb of brightly coloured and mottled acrylic, produced after 1934,⁴³ was found with a hand or shoe bone brush in the surface deposit of Station Street (4702).⁴⁴ The multicoloured comb was presumably used by a woman or child.

Two different prescription oval lenses from spectacles to correct short sightedness were found in separate pits behind Station and Riley Streets (4703, 4723). One damaged thin leather purse with a

³⁶ Houart 1977:58, 111

³⁷ Montague 1981

³⁸ Cossum 1988 :6

³⁹ Cossum 1988: preface

pers. comm. curator NSW Lancer's Museum, Parramatta, September 2005).

Anderson 1968

⁴² Katz 1994: 17

⁴³ Katz 1994: 27

⁴⁴ Shackel 1993: 42-49, 155-156

silvered brass frame was found in the western cistern (4706). Probably not used as an everyday handbag, it originally had ball clasps and hung from a fine chain.

2.9 Recreation

The children and adults living at and working in the Inn and surrounding houses clearly enjoyed recreational pursuits such as games, playing with dolls and tea sets, as well as smoking pipes (Table 11). Interestingly none were found in the blacksmith's Station Street pit (4703).

	General						
Context	Function	Spec Function	Shape	From	To	MIC	No. Frags
4702	recreation	toy	doll	1865	1939	1	1
4702		toy	marble		1914	1	0
4702		toy	cup			2	0
4702		smoking	pipe	1860	1950	1	1
4702		smoking	pipe	1839	1902	1	1
4702		smoking	pipe	1847	1868	1	1
4702		smoking	pipe	1847	1868	1	1
4702		smoking	pipe	1847	1868	1	1
4702		smoking	pipe			1	1
4702		smoking	pipe			1	1
4702		smoking	pipe	1875		1	1
4704		toy	marble	1850	1918	1	0
4706		toy	marble	1770	1914	2	0
			chess				
4709		game	piece			1	0
4709		game	domino			1	1
4709		toy	marble		1914	1	0
4709		smoking	pipe			1	1
4709		smoking	pipe			1	1
4713		toy	cup			1	1
4713		smoking	pipe	1875		1	1
			·	TOTAL		22	14

Table 11: Recreation artefacts by context.

Five marbles of limestone, porcelain and clay, and two of glass (See J. Harris, Glass Report within this volume) attest to a popular child's game. The types known as 'china alleys' and 'stonies' were imported from Germany until trade was disrupted during WWI. The machine made 'clays' were manufactured in several countries and in common use until about the same time. The glass marbles were reused stoppers from Codd patent aerated water bottles (1885-1930s) and called 'pop alleys'. Only one 'stonie' and a 'pop alley' were found in a north wing occupation deposit (4709), the rest were from the Riley Street cistern (4706) and cleanup deposits to the south on Station Street (4702, 4704). This distribution coincides with the location of family housing.

Dominoes and chess are represented by single game pieces from the north wing of the Inn (4709). The sawn ivory face of a drilled 2 /6 domino had been affixed to a base by two copper or brass pins. The small castle or rook piece had been made from turned bone.

The cleanup debris (4702) revealed a porcelain doll's arm and two white glazed porcelain cups from different tea sets.⁴⁶ Another cup from one of these sets was found in the well below the south wing (4713). These items were typical of girls' play from late Victorian times, the doll made sometime after 1865.

46 King 1977

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⁴⁵ Baumann 1971; Opie 1997; Randall 1971

The mainly adult pursuit of smoking forms the largest component of this group. Finely moulded clay pipes were broken easily and discarded readily on most nineteenth century sites.⁴⁷ Most of those found at the Inn were relatively robust and short stemmed 'dudeens', a type favoured by working men. It should be noted that pipes were also used by children to blow bubbles and the broken stems (with paper) by women as heated hair curlers.⁴⁸

Eight of these pipes were found within the surface deposit of Area A, Station Street (4702), with at least four imported from Scotland. Three of these were made by McDougall in Glasgow (1847-1868) including one marked 'CUTTY PIPE'. One stem is marked with the name of 'DIXON / SYDNEY', a Sydney tobacconist (1839-1902) who commonly ordered his pipes from Scotland. Another one had a stem marked with "CORK / CORK" referring to a popular style made by several firms. The use of red wax on the mouthpiece to prevent burning was a common practice after about 1875 and found on two pipes (4702, 4713). Two other pipe fragments came from the occupation of the north wing (4709) with one of the stems having part of an embossed mark, possibly Dutch.

2.10 Economy

Only two coins were found at the site (Table 12). An Australian or English penny of unknown date was found on the pebble yard of the Inn (4712), and a George V Commonwealth of Australia 1917 halfpenny was found in the fill of the later drain behind Riley Street (4714).

Context	General Function	Specific Function	Shape	From	То	MIC
4712	economy	currency	coin			1
4714	economy	currency	coin	1917		1
				TOTAL		2

Table 12: Economic artefacts by context and date.

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⁴⁷ Gojak & Stuart 1999; Harley 1963; Oswald 1975

⁴⁸ Ayto 1994: 10; Birtwistle & Collins: 60

⁴⁹ Oswald: 204-206 ⁵⁰ Wilson: 366

⁵¹ Gojak & Stuart: 45

⁵² Ayto:15

CONTEXT	ARCHITECTURE	TRANSPORT & AGRICULTURE	WORK TOOLS	SERVICES	HOUSEHOLD	FOOD & BEVERAGE	PERSONAL	RECREATION	ECONOMY	INDUST	UNID	TOTAL
4702	3	1		1	1	8	4	12			2	32
4703	9	35	7	3	8	2	1			1	11	77
4704		1						1				2
4705					2						1	3
4706	1					5	2	2				10
4707	2											2
4709	12				9	5	2	5			5	38
4710	1			1								2
4711	4											4
4712									1			1
4713							1	2				3
4714	1								1			2
4716	1											1
4717	7											7
4721	1											1
4722	2						1				4	7
4723				1			1					2
4738	1											1
NTH												
WELL	X											X
TOTAL	45x	37	7	6	20	20	12	22	2	1	23	195

Table 13: Simplified Artefact Functional Categories within Contexts. Note: x indicates the presence of a brick lined well, not sampled.

Area	Context	Architecture	Transport & Agriculture	Work Tools	Services	House- hold	Food & Beverage	Personal	Recreation	Economy	Industry	Unid	Total
A	4702-4704	12	37	7	4	9	10	5	13		1	13	111
С	4705-4707 4714-4717 4722-4723	14			1	2	5	4	2	1		5	34
RCI	4709-4713 4721	18			1	9	5	3	7	1		5	49
NTH MONIT ORING	4738 Nth well	1x											1x
Total		45x	37	7	6	20	20	12	22	2	1	23	195

Table 14: Artefacts by Area. Note: x indicates the presence of a brick lined well, not sampled.

3.0 Area Contexts and Dating

3.1 Methodology

Utilising the analysis above and with the aid of simplified tables grouping the functions and contexts the different areas of the site are discussed below (Tables 13 & 14).

The deposits, structures and pits found in each area were dated in accordance with known manufacturing dates of the artefacts (Table 15). In the first column the complete date range was listed. The second column has an averaged date to provide a more probable time frame for the manufacture of the artefacts found at the site. The third column shows the earliest known dates for the most recent artefacts within each context, giving an absolute date before which the context cannot have been constructed or deposited (TAQ). This information was in turn compared to any documented date associated with the development of the site.

AREA	CONTEXT	ARTEFACT DATE RANGE	PROBABLE ARTEFACT MANUF DATE	CONTEXT TAQ DATE
A	4702	1788-1950	1870s	1934
SOUTHERN	4703	1770-1918	1880s	1901
SOUTHERN	4704	1850-1918	1880s	1850
	4705	1870	1870s	1870
	4706	1770-1914	1880s	1890
	4707	1880-1850, 1880	1890s	1880
C	4714	1870-	1917	1917
WESTERN	4716			
	4717	1800-1890	1860s	1850
	4722		1870s	
	4723	1890	1890s	1890
	4709	1839-1940	1880s	1890
D	4710		1870s	
D RED COW	4711	1815-1940	1870s	1890
INN	4712			1862
IININ	4713	1839-	1880s	1875
	4721	1850-1890	1860s	1862
NORTHERN	4738	1825-1889	1889	1889
MONITORING	NTH WELL	1800-1850	1830s	1800

Table 15: Dates for contexts by area.

3.2 Area A (Southern) Lots 15-17 Station Street

The machine-dug surface deposits to the south of the Inn contained small artefacts deposited sometime between the 1870s to the 1940s (4702, 4704). Most of the items had probably been discarded during occupation of the houses and structures of Lots 15-17 Station Street. However, it is possible that some may have been thrown behind the stables of the Inn, while others may have originated from the cottage on Lot 11, constructed prior to 1865, and displaced during redevelopment. The housing along Station Street can be seen in the 1947 aerial photo. The housing along Station Street can be seen in the 1947 aerial photo.

Most of the artefacts relate to recreational activities such as smoking and children's toys. The pipes were imported mostly from Scotland, a major manufacturer of the later quarter of the 19th century. The cutlery was of the plain EPNS fiddle type made in Sheffield from the 1880s. The clothing included buttons from male work trousers and a British army military jacket. The grooming articles were inexpensive, including a hand or shoe brush made of bone (bristles missing) and a multi-coloured

⁵⁴ Casey & Lowe 2003a: Fig. 2.4

⁵³ Casey & Lowe 2003a: Fig. 2.5

acrylic comb. The plastic comb also heralds the coming of new materials and technology to the fashionable domestic scene.

The large pit 4703 is perhaps the most interesting context of the assemblage with tangible evidence of a blacksmith's workshop. The tools and objects also suggest that work was being done by a farrier and a leatherworker. It is possible that the blacksmith was multi-skilled. The artefacts comprise a range of tools and repaired/used objects such as buggies, agricultural machinery, a stove or furnace, an enamelled saucepan, as well as horse shoes and equipage. Several broken early flat bricks as seen in a cistern and a drain behind Riley Street were also in the fill. They had probably been reused in the construction of the shed. The range of objects points to the area being used as an independent workshop or ancillary area for the Inn stables and coachhouse from the 1870s. The artefacts in the pit compliment the historical record of a blacksmith called Jesse Harrison who owned Lots 15–17 during 1909 to 1919. His business was run from an iron shed on Lot 16 in a structure built by 1900.

The cut objects were probably retained on site by the blacksmith in order to recycle the metal, but then were left behind when he moved away. They were perhaps only dumped into the pit (4703) when of no more use to later occupants or during demolition of the shed and general cleanup of the area.

3.3 Area C (Western) Riley Street

The artefacts from this area were discarded by the occupants of the houses along Riley Street during the first half of the 20th century. The most significant context in this area was the large fairly late cistern (4707). The structure was constructed of reused bricks which showed evidence of their previous bonding of successive mortars and cements. The bricks and original mortars were of sandy shell and sandy mud used to construct the original Red Cow Inn and northern well (see below). It is possible that they came from another early building.

The fills from the cistern include several items of plain Sheffield EPNS cutlery, mostly fiddle patterned spoons. All except one had the same pattern as the cutlery from the north wing of the Inn and Area A, Station Street. A small lead seal is the only evidence of the consumption of liquor in this collection. The fragmentary oven door shows that at least one house had a cast iron stove.

Little was found relating to the clothing and accessories worn by the residents except for a woman's purse and a child's shoe. There are also a few items relating to other activities such as playing marbles and sewing. The various drains and pits relating to the backyards of the houses on Riley Street contained a few artefacts relating to construction and repair from the 1870s onwards (4714, 4716, 4717, 4722, 4723). A 1917 halfpenny was also found along with small fragments from broken household furniture and fittings including a possible wireless.

The box drain (4717) was made from a variety of bricks, some of which were similar to those reused in the cistern and in the Station Street pit. However, most bricks were of a late 19th-century form with frogs typical of those made in Penrith.

3.4 Red Cow Inn, Station Street

The brick sampled from the north wing (4721) supports the documented date for the construction of the Inn during 1862. The sandy shell mortar was the same as that seen on reused bricks from the cistern and box drain behind the Riley Street houses. The recycling of the earlier flat bricks in these structures and possibly the blacksmith's shed may have occurred once the northern well became disused. It is possible that the well was built before the Inn.

There was little left *in situ* relating to the occupation of the Inn. Both rooms 1 and 2 of the north wing revealed nails, possibly from flooring, that date mostly from repairs done in the 1870s and 1890s (4709, 4711).

All other artefacts were found in room 2 (4709). These included items from the structure and furniture such as flashing, screws and straps. Fragments from cast iron saucepan(s) show that this part of the Inn

had at least one upright stove. It is possible that Room 2 was a kitchen, further corroborated by several examples of typical table and kitchenware of the late 19th century. A copper alloy canister lid was unique to the Inn whereas the plain fiddle patterned, Sheffield EPNS spoon and fork were the same as those found in other areas of the site. The widespread use of this cutlery, with celluloid and bone handled knives, probably reflects the limited range of affordable stock available to the residents of Penrith. Alternatively, the cutlery may have originally been used at the Inn and some of the discarded pieces moved to other parts of the site during later disturbance.

Smaller more personal items lost in room 2 by included nine dress pins, a vulcanite comb and a NSW Military Forces jacket button of 1880-1903. They point to the presence of both male and female occupants. The penny that lay discarded on the cobble courtyard of the Inn (4712) was unfortunately illegible.

The well on the south side of the courtyard was backfilled (4713) prior to being covered by a new south wing. It contained a few artefacts including a cup from a tea set which matched one of those from Area A, Station Street (4702). These cups point to a shift of deposits south of the Inn during some time prior to the construction of the carpark.

The clay pipe mouthpiece and a black vulcanite comb probably represent articles used by men at the Inn. The red wax on the mouthpiece to prevent mouth burning was in general use from c1875.

3.5 Northern Area Stormwater Monitoring

The finely carved stone column base/capital (4738) provides evidence for the historically recorded use of 'Regentville' architectural elements at the Inn during the 1880s. These pieces added an extra touch of class to the structure and gardens. This piece fits with the photographic evidence of the columns fronting the Station Street entrance c1918. Other similar artefacts may remain in the stormwater drain area to the north of the extant Inn.

The flat unmortared bricks observed in the northern well of the Inn provide the most convenient source for those found in other parts of the site. However, the size of the bricks indicates that they were made well before the construction of the Inn.

4.0 Conclusion

4.1 Conclusion

The artefacts catalogued as Building Materials, Metal and Miscellaneous have revealed important information about the construction and occupation of the Red Cow Inn and adjacent houses. It can be shown that the areas to the north, south and west were used for different purposes. Where dating has been possible the items support the known historical chronology of the site, from first construction in 1862, through to later subdivision in the early 1900s and occupation of the 1940s.

The reused flat bricks found in several contexts were most likely due to the common practice of recycling building materials in the colony, reflecting limited resources and isolation. The British origin of many objects shows Australia's dependence on foreign goods and fashion styles during the 19th century.

The two different military jacket buttons further emphasise this historic connection. They were lost shortly after control of the armed forces in the colony had changed in the 1850s from Britain to NSW. Penrith was a convenient transit point for country soldiers and many would have probably visited the Inn.

Although little *in situ* evidence remains of the occupation of the Inn, glimpses of the variety of people who visited and resided there can be gained. The artefacts from the rooms of the north wing may

indicate that similar items found elsewhere on the site were originally used at the Inn. The personal and household objects have a small range of types and styles possibly due to the restricted resources of the people as well as availability of affordable goods in 19th century Penrith. Many items were plain and not expensive. The people were working class, their clothes and personal items mostly utilitarian. The few slightly frivolous objects such as the lamp glass prism from the Inn and the multi-coloured comb reveal other modest aspirations.

Some of the personal items reveal much about the habits of the time, such as pipe smoking, and the pastimes of children, such as playing marbles. More examples of children's toys were found in the housing areas of Station and Riley Streets than at the Inn. Here, however, the more adult games of dominos and chess were evident. These artefacts reveal that there was at least some time for recreation, although most pipes could have been smoked while working.

The pit filled with a wide range of blacksmith's debris is a good example of how a single assemblage from within a sealed pit can provide evidence of specific land use. Blacksmithing was a common and necessary trade of the period, servicing the whole community. This business was typical of the premodern world with its emphasis on horses not petroleum for power. The repaired agricultural machinery and transport vehicles were examples of innovative, possibly Australian, hand-made technology.

5.0 References

5.1 References

Anderson, A.	1968 Historia	The Archaeology of Mass-Produced Footwear. cal Archaeology 2:56-65.
Arnold, K.	1999 Crown	Farmyard Relics. Identification Guide. Australia: Castleton.
Ayto, E.G.	1994	Clay Tobacco Pipes. Princes Risborough, England: Shire.
Baumann, M.E.	1971	Early Marbles. <i>Historical Archaeology</i> 5: 102-105.
Birtwistle, S. & S. Collins	1995	The Making of Pride and Prejudice. London: Penguin & BBC.
Booher, F. & R.	1977	Graniteware: Identification and Value Guide. Paducah Kentucky: Collector Books.
Casey & Lowe	2003a	Archaeological Assessment Penrith Plaza Proposed Extensions Jane, Station, Henry and Riley Streets. Unpublished report for Bovis Lend Lease. Sydney. January, revised August.
Casey & Lowe	2003b	Archaeological Assessment Red Cow Inn Station Street Penrith. Unpublished report for Bovis Lend Lease. Sydney. August.
Casey & Lowe	2004	Excavation Permit Application Penrith Plaza Proposed Extensions and the Red Cow Inn Penrith. Unpublished report for Bovis Lend Lease. Sydney. June.
Cook, P.	1979	The Antique Buyer's Handbook for Australia. Australia: Reed Books.
Cossum, J.K.	1988	Buttons of the Defence Forces of Australia. Sunbury Victoria: J.K. Cossum.
Cuffley, P.	1982	Oil & Kerosene Lamps in Australia. Australia: Pioneer Design Studio.
Dunning, P.	2000	Composite Table Cutlery from 1700 to 1930. Historical Archaeology 34: 32-45.
Everleigh, D.J.	1983	Firegrates and Kitchen Ranges. Princes Risborough, England: Shire.
Fawdry, K. & M.	1979	Pollock's History of English Dolls and Toys. London: Ernest Bonn.
Field, R.	1984	<i>Irons in the Fire</i> . A History of Cooking Equipment. Marlborough: The Crowwood Press.

Gemmell, W.	1986	And So We Graft From Six To Six. The Brickmakers of New South Wales. Australia: Angus & Robertson.
Gledhill, D.	1999	Gas Lighting. Princes Risborough, England: Shire.
Gojak, D. & I. Stuart	1999	The Potential for the Archaeological Study of Clay, Tobacco Pipes from Australian Sites. <i>Australasian Historical Archaeology</i> 17: 38-49.
Harley, L.S.	1963	The Clay Tobacco-Pipe in Britain. Stratford, Essex: Essex Field Club Special Memoirs Vol. VIII.
Houart, V.	1977	Buttons a Collector's Guide. London: Souvenir Press.
Katz, S.	1994	Early Plastics. Princes Risborough, England: Shire.
King, C.E.	1977	The Collector's History of Dolls. London: Robert Hale Ltd.
Lindbergh, J.	1999	Buttoning Down Archaeology. <i>Australasian Historical Archaeology</i> 17: 50-57.
Low, R.A.	1992	Switched on in the West: A History of Electricity Supply to Parramatta and the Western Region of Sydney – 1890 to 1990. Sydney: Parramatta and District Historical Society Inc.
Montague, R.	1981	Dress and Insignia of the British Army in Australia & New Zealand 1770-1870. Sydney: Library of Australian History.
Moore, S.	1995	Table Knives and Forks. Princes Risborough, England: Shire.
Opie, I. & P.	1997	Children's Games with Things. Oxford: Oxford University Press.
Oswald, A.	1975	Clay Pipes for the Archaeologist. Oxford: BAR 14.
Proudfoot, H. et al	1991	Australia's First Government House. Sydney: Department of Planning with Allen & Unwin.
Randall, M.E.	1971	Early Marbles. <i>Historical Archaeology</i> 5: 102-105.
Reidel, F.	2005	Penrith Plaza Excavation Report. Unpublished Report for Casey & Lowe Pty Ltd.
Ross, L.A. & Light, J.D.	2000	A Guide to the Description and Interpretation of Metal Files. In Karl Karkins (ed.) <i>Studies in Material Culture Research</i> , pp. 20-31. Society for Historical Archaeology: California University of Pennsylvania.
Shackel, P.A.	1993	Personal Discipline and Material Culture. An Archaeology of Annapolis, Maryland, 1695-1870. Knoxville: The University of Tennessee press.
Sears,	1906	Catalogue. Chicago.

Roebuck & Co.

Seymour, J.	1984, 2001	The Forgotten Arts. A practical guide to traditional skills. London & USA: Darling Kindersley.
Simpson, M. & P	1988	Old Farm Machinery in Australia. A Fieldguide & Sourcebook. Australia: Kangaroo Press.
Snow, M.R.	1984	Brushmaking: Craft and Industry. Oxford: Oxford Polytechnic Press.
Tylecote, R.F.	1972	'A Contribution to the Metallurgy of 18 th - and 19 th -Century Brass Pins', <i>Post Medieval Archaeology</i> 6:183-190
Varman, R.J.	1993	Bricks and Nails: Building Materials as Criteria for Dating in Sydney and Environs from 1788. A Documentary Survey and Assessment of Dating Potential. Unpublished PhD Thesis, University of Sydney.
Wheelhouse, F.	1966	Digging Stick to Rotary Hoe. Men and Machines in Rural Australia. Australia: Rigby.
Wilson, G.C.	1999	Ceramics and Tobacco Pipes Artefact Report. In Godden Mackay Heritage Consultants <i>Cumberland/Gloucester Streets Site, The Rocks Archaeological Investigation</i> Vol. 4i, pp.207-366. Sydney.