

**ARCHAEOLOGICAL MONITORING
OF THE
CANWEST GLOBAL PARK
BASEBALL FACILITY
PARKING LOT**

Submitted to

PRE-CON BUILDERS

**QUATERNARY
CONSULTANTS
LIMITED**

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TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF APPENDICES	ii
LIST OF FIGURES	iii
LIST OF TABLES	iii
1.0 INTRODUCTION	1
1.1 Scope of the Project	1
1.2 Study Team	1
1.3 Archaeological Monitoring Methods	1
1.4 Laboratory Procedures	3
2.0 STRATIGRAPHY	4
3.0 HISTORIC ARTIFACTS	6
3.1 Architectural Objects	6
3.1.1 Hardware	6
3.1.1.1 Spikes, Nails, and Screws	6
3.1.1.2 Door Knobs	7
3.1.1.3 Strap	7
3.1.2 Accoutrements	7
3.1.3 Detached Structure	7
3.2 Lighting Equipment	8
3.3 Food Processing	8
3.4 Clothing	8
3.5 Recreation	8
3.6 Adornment	8
3.7 Housewares	9
3.8 Unknown	9
3.9 Faunal Remains	9
3.10 Containers	11
3.10.1 Storage	11
3.10.1.1 Ceramic Containers	11
3.10.1.2 Glass Containers	12
3.10.1.2.1 Condiment and Food Produce Containers	12
3.10.1.2.2 Beverage Bottles	12
3.10.1.2.2.1 Winnipeg Bottling Firms	12
3.10.1.2.2.2 Unidentified Bottling Firms	14
3.10.1.2.3 Wine Bottles	15
3.10.1.2.4 Gin Bottles	15
3.10.1.2.5 Whisky Bottles	16
3.10.1.2.6 Unassigned Bottles	16
3.10.1.2.6.1 Marked Unassignable Bottles	16
3.10.1.2.6.2 Unmarked Unassignable Bottles	16

3.10.2 Ornamental	17
3.11 Dinnerware	18
3.11.1 Glass Artifacts	18
3.11.2 Ceramic Artifacts	18
3.11.2.1 White Ceramics	18
3.11.2.1.1 Manufacturers of White Ceramics	19
3.11.2.1.2 Embossing/Molding on White Ceramics	21
3.11.2.2 Gold-on-White Ceramics	23
3.11.2.3 Blue-on-White Ceramics	24
3.11.2.4 Green-on-White Ceramics	25
3.11.2.5 Blue/Green-on-White Ceramics	25
3.11.2.6 Ceramics of Various Colours	26
4.0 PRE-CONTACT ARTIFACTS	29
4.1 Lithic Artifacts	29
4.2 Ceramics	30
4.3 Faunal Remains	30
4.3.1 Butchering Remains	30
4.3.2 Naturally Deposited Fauna	32
4.4 Floral Remains	32
4.5 Summary	32
5.0 DISCUSSION	33
6.0 BIBLIOGRAPHY	34
6.1 References Cited	34
6.2 Internet Sources	38

LIST OF APPENDICES

APPENDIX A: Heritage Permit	39
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LIST OF FIGURES

1: Location of Project Components	2
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LIST OF TABLES

1: Stratigraphic Profiles from Drilled Holes	4
2: Stratigraphic Profiles from Trench Locations	5
3: Historic Faunal Remains	10
4: Identified Winnipeg Beverage Bottles	13
5: Wine Bottles	15
6: Unmarked Unassigned Bottles	17
7: Plain White Dinnerware	19
8: Wheat Patterns	22
9: Embossed/Molded White Ceramics	23
10: Gold-on-White Decoration	24
11: Blue-on-White Ceramic Sherds	24
12: Butchering Remains from Cultural Horizon	31

1.0 INTRODUCTION

In conjunction with the expansion of the CanWest Global Baseball Facility, located on the north side of Pioneer Avenue, the development of a parking lot between Pioneer Avenue and Water Avenue was part of the project. As there was to be sub-surface impact as a result of components of the construction, Pre-Con Builders engaged Quaternary Consultants Ltd. to provide archaeological monitoring of the project. The archaeological monitoring program was conducted under the terms of Heritage Permit A26-03 (Appendix A), issued by Historic Resources Branch, Manitoba Culture, Heritage and Tourism.

1.1 Scope of the Project

Two catchbasins for drainage of the parking lot had been installed before Quaternary Consultants Ltd. was notified of the project. In addition, the upper 50 to 60 cm had been removed by mechanized excavation. The archaeological monitoring consisted of observing the excavations for the placement of electrical wiring for plug-ins. The electrical wires were placed in trenches, 30 centimetres wide and averaging 100 centimetres in depth (Figure 1).

In addition, three holes for poured concrete piles were drilled using a truck-mounted auger with a 45 centimetre bit. The holes were drilled to depths approximating seven metres and the monitoring archaeologist recorded the depths and thicknesses of cultural horizons and buried soil horizons. Mitigative recovery was undertaken when cultural resources were encountered.

1.2 Study Team

The archaeological monitoring project was directed by Sid Kroker, Senior Archaeologist. The field monitoring was undertaken by Sid Kroker. Laboratory operations were conducted by Sid Kroker and Pam Goundry. Computer cataloguing of recovered artifacts was conducted by Pam Goundry. Artifact analysis and report preparation was undertaken by Pam Goundry and Sid Kroker.

1.3 Archaeological Monitoring Methods

During both the drilling of auger holes and the backhoe excavations, the monitoring archaeologist visually monitored the excavations. During the drilling of holes, a strategy was worked out with the driller. The driller would auger downward until the bit length was filled. When the auger was brought to the surface, the monitoring archaeologist examined the soil on the auger and recorded changes in soil stratigraphy including the depths and thicknesses of different soil layers. Due to the rotary action of the auger, thin soil layers (less than 1 cm thick) are seldom discernable.

During the backhoe trenching, the archaeologist observed the extracted soil and the walls of the trench. When Pre-European cultural material was encountered, the backhoe operator would place the extracted soil encapsulating the cultural material to the side of the trench, in the non-active area, for the

archaeologist to examine at a time when the machinery was not operating. This allows construction to proceed with minimal down-time.

In addition to recording the soil stratigraphy, the archaeologist recovered all artifacts present. In the upper levels, these artifacts were from the historic fill horizons and included some diagnostic artifacts, i.e., those which can provide evidence of time period, company of manufacture, and/or function.

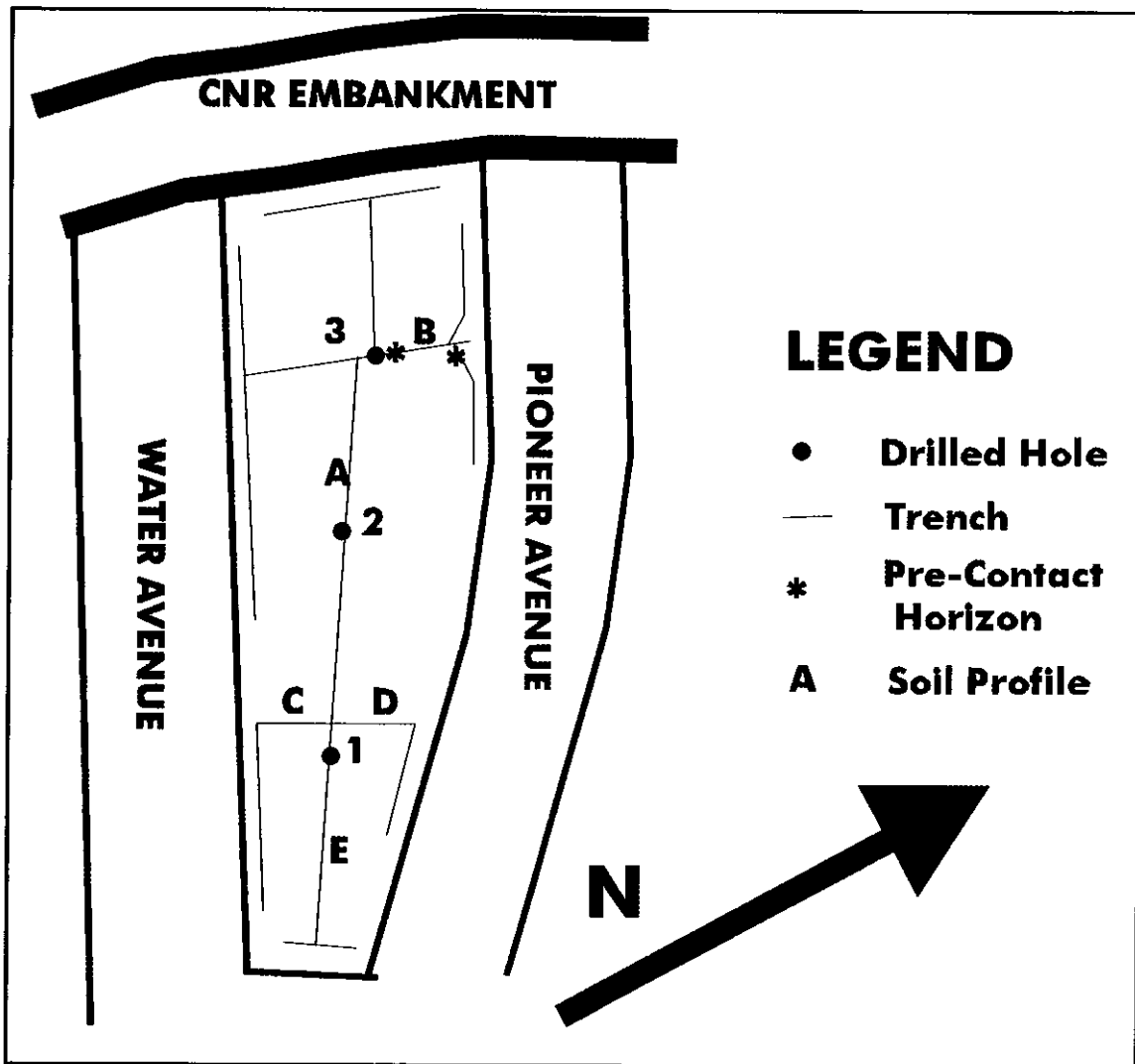


Figure 1: Location of Project Components.

The monitoring archaeologist watched for buried soil horizons and changes in soil texture which could indicate possible former ground surfaces. The indicators watched for are charcoal layers, ash lenses, and/or reddish stained soil. The colour change is usually indicative of oxidation of the iron particles in Red River silt by heat—the more intense the heat, the redder the soil. These features can indicate either

a natural event such as a brush or prairie fire or a cultural event such as a campfire. When evidence of fire is observed, the layer is investigated to ascertain if the cause was natural or cultural. The presence of food remains, particularly mammal or fish bones, resting upon a buried soil is a positive indicator of an archaeological occupation horizon. Other positive indicators are fragments of earthenware containers and/or lithic tools or flakes resulting from tool manufacture.

1.4 Laboratory Procedures

During the project, all recovered artifacts were brought to Quaternary Consultants laboratory facilities, where they were washed and sorted by material class and identified by the lab personnel. The Pre-Contact cultural layer was wet-screened through diminishing meshes. Larger artifacts were retrieved on the 4 mm mesh, while smaller artifacts and fragments of artifacts were recovered on the 2 mm and 1 mm meshes.

A total of 349 artifacts—322 historic and 27 Pre-Contact—were curated. Material of the same type (e.g., plain white dinnerware plate sherds) was combined under a single catalogue number. Identification was carried to the limit permitted by the condition of the artifact. Obviously, severely fragmented or eroded specimens cannot be identified as completely as whole artifacts.

Each artifact received a catalogue number consisting of the Borden designation (Borden 1954) for the site and a sequential number for permanent identification. This area, north of Water Avenue, east of the CNR Main Line embankment, south of Lombard Avenue, and west of the Red River, had been previously designated as DILg-69 (Quaternary 1996). As this was the latest of several projects to be conducted at the site (Quaternary 1996, 2000a, 2001, 2003a, 2003b), the practice of adding a year identifier (03) was continued. The identifier is added to the Borden number to produce a catalogue number (DILg-69:03/#####). All pertinent data associated with the artifact was entered into a computer cataloguing system, based upon the Canadian Heritage Inventory Network (CHIN) system (Manitoba Museum of Man and Nature 1986; Kroker and Goundry 1993:Appendix B). The cataloguing program, derived from DBASE3®, generates individual artifact catalogue cards.

Processed artifacts were prepared for storage by inserting the specimens and the catalogue card into standard plastic storage bags, then stapling the bags closed. At the end of the project, all recovered artifacts will be delivered to the Manitoba Museum which has been the repository for artifacts from other projects at this site.

2.0 STRATIGRAPHY

The area developed for the parking lot has had a continuous history of utilization since the early 1870s. Residential and commercial structures have occupied the area, becoming sparser since 1960 (Quaternary 2001). The upper layer which was removed prior to the notification of the archaeologist would have contained evidence of this occupation. During the monitoring of the West Roads Project (sub-surface services and roadbed construction), some stratigraphic evidence was obtained. The drilling of vertical shafts for the installation of the land drainage sewer (Quaternary 2003b) provided stratigraphic columns adjacent to the south edge of the new alignment of Pioneer Avenue.

Traces of the residential occupation layer, resting on the original top soil, remained in isolated portions of the parking lot area. Locations of former basements contained fill, the age of which was dependent upon the year of demolition. In most of the trench locations (Figure 1), the surface consisted of riverine silty clay which had originally been located under the top soil which would have dated to the 1890s. The deepest impact resulted from the three drilled holes. The stratigraphy recorded from these is presented in Table 1.

STRATUM	Hole 1	Hole 2	Hole 3
Basement fill	0 - 275		
Medium brown silty clay	275 - 365	0 - 215	0 - 180
Buried soil horizon			180 - 182
Medium brown silty clay			180 - 230
Buried soil horizon			230 - 231
Hematite stained silty clay	365 - 380	215 - 225	
Medium brown silty clay	380 - 425	225 - 320	231 - 245
Sandy silt			245 - 275
Hematite stained silty clay	425 - 440	320 - 340	
Medium brown silty clay	440 - base	340 - base	275 - base

Table 1: Stratigraphic Profiles from Drilled Holes

A buried soil horizon would have been the surface of the ground upon which any evidence of occupation would occur. When a flood deposited sediment over the ground surface, the upper humic layer (loam) remains as an indicator of that former ground surface. As the rotary action of the drill can distort or smear thin layers, many of the thinner soil horizons are not discernible. Also, due to the necessity for minimizing construction slow-down, the focus of the archaeologist is on recording cultural layers rather than changes in soil texture or colour. These changes, however, are of scientific interest for determining flood sequences and the geologic history of the area, and should be recorded when time and conditions permit.

Detailed stratigraphic profiles were also recorded at various locations along the trenches (Figure 1). The depth of the trench varied, reaching 120 centimetres in the western portion of the area. The profiles recorded along the trench wall have an advantage in that thinner soil layers can be observed (Table 2).

STRATUM	Profile A	Profile B	Profile C	Profile D	Profile E
Fill			0 - 12	0 - 10	0 - 10
Medium brown silty clay	0 - 50	0 - 78	12 - 30	10 - 51	10 - 25
Buried soil horizon (2 mm)	50 - 50		30 - 30	51 - 51	25 - 26
Sand	50 - 52				
Medium brown silty clay	52 - 89	78 - 88	30 - 62	51 - 56	26 - 35
Buried soil horizon (5 mm)				56 - 59	35 - 35
Layered sandy silt/silty clay					
Grey brown silty clay	89 - 89				
Medium brown silty clay					35 - 58
Buried soil horizon (5 mm)					58 - 58
CULTURAL HORIZON		88 - 91			
Medium brown silty clay	89 - 96	91 - 107		59 - 65	58 - 89
Marly brown silty clay		107 - 118			
	base	base	base	base	base

Table 2: Stratigraphic Profiles from Trench Locations

Stratigraphic profiles provide some information on past depositional history of the area. Variations in texture (clayey silt, silty clay, sandy silt, sand) and colour indicate different flood episodes. The sand and/or sandy silt layers indicate fast moving waters from a larger flood episode, while the finer grained sediments indicate deposition from slower water. All of the riverine sediments overlay the lacustrine clays deposited in Glacial Lake Agassiz, which drained circa 8500 years ago. None of the auger holes drilled deep enough to encounter the lacustrine clays which have been recorded at depths of 10.4 to 11.0 metres at the north bank of the Assiniboine River (Kroker and Goundry 1990:147).

Examples of the detailed stratigraphy are provided in Table 2. The major stratigraphic problem in flood deposition areas is that of correlating strata across intervening distances. With sediments deposited by floods, the layers are not placed in uniform horizontal bands. Tree falls and ice jams can result in erosion at one spot while only a few metres away, a thick layer of sediment is deposited on the existing ground surface. Thus, linkages of layers across more than five metres becomes tenuous.

The existence of several Pre-Contact cultural horizons had already been determined during prior projects. They had been recorded at various depths during services installations along Water Avenue (Quaternary 2000a, 2003b). Cultural horizons relating to the Peace Meeting of 700 years ago have been identified south of Water Avenue (Quaternary 1990a, 1990b, 1990c, 1999a, 2000b, 2003b) as well as the ballpark area (Quaternary 1996, 2000a, 2003a). The cultural horizon identified during this project has an elevation too high to be considered part of the Peace Meeting horizon and is estimated to have resulted from a campsite approximately 300 years ago.

3.0 HISTORIC ARTIFACTS

The historic artifacts, recovered during this project, have been analysed within functional categories based on the Canadian Heritage Inventory Network (CHIN) cataloguing format. A total of 322 historic artifacts were recovered.

3.1 *Architectural Objects*

Artifacts used in the construction, the maintenance, and the furnishing of structures are catalogued in this category. However, due to corrosion and fragmentation, many metal, glass, or wood architectural objects cannot be assigned to a manufacturer or a time period. Twenty-six artifacts were curated, in the sub-categories of Hardware, Accoutrements, and Detached Structure.

3.1.1 *Hardware*

Hardware consists of items that are used in the construction of a structure. Twenty-one artifacts were catalogued as hardware items. These consist of a spike, nails, a screw, door knobs, and some strap.

3.1.1.1 Spikes, Nails, and Screws

DILg-69:03/174 is a complete, square, hand-wrought spike with a rose head and a wedge-shaped tip. The overall length is 185.1 mm and the shank measures 12.2 mm by 11.7 mm. This specimen is extremely rusty and it would have been manufactured by a blacksmith.

DILg-69:03/171 is a broken, square, hand-wrought nail with a T-head. The extant length is 129.8 mm with a shank measurement of 7.7 mm by 6.9 mm. Given that minimal tapering occurs on the remaining portion of this blacksmith-made nail, it probably was considerably longer.

Hand-wrought nails are the earliest form of nail and were used, in Canada, throughout the 17th and 18th century as well as into the 19th century (Nelson 1968:6). These nails were made on an individual basis by a blacksmith and are distinguished by a square cross-section with a relatively uniform taper from the head to the point. Numerous styles such as rose-head, T-head, and L-head can be identified. Rose heads received their name due to the petal-like configuration of the head, caused by the blacksmith's hammer strokes when annealing the head to the shank.

DILg-69:03/172 consists of twelve sheet-cut nails of differing lengths and degree of completeness. Nine specimens are complete with three being 4 inches (102.9 mm). Five nails are 2¾" (73.2 mm), with the shortest being 2½" (65.4 mm). All have rectangular heads and if marks from annealing are present, they are obscured by rust or corrosive exfoliation.

Sheet-cut nails were developed about 1790 (Nelson 1968:8) and were mass produced by rolling sheets of iron or steel to a uniform thickness then cutting the sheet into nails which taper from top to bottom. The thickness of the nail remains constant from head to point, while the width tapers. The T-shaped or

L-shaped head was added to each individual shank. Sheet-cut nails were being produced in Montreal in the early part of the 19th century; however they only became common in the Winnipeg area after 1860 when river steamboats transported quantities of American goods into this region (Kroker *et al.* 1991:105; McLeod 1983:148). The first steam boat to arrive in the vicinity of The Forks was the Anson Northup which came up the Red River from Minnesota (Collard 1967:39). Her first regular run began in June of 1860 and two years later she was replaced by a larger steamboat.

DILg-69:03/170 is a complete wood screw measuring 2 inches (51.7 mm) in length. The head has a single screwdriver slot and comparison with illustrations in the Ashdown Hardware Company Catalogue (Ashdown 1909:413) show this specimen to be a #14 size.

3.1.1.2 Door Knobs

Four circular door knobs were curated. DILg-69:03/165 and 166 are complete, white porcelain knobs with a diameter of 56.3 mm. DILg-69:03/165 has a portion of the iron spindle still attached. DILg-69:03/167 is one-half of a white porcelain door knob. DILg-69:03/168 is a small portion of a brown-coloured door knob which has been made from shale by carving, grinding, polishing, and threading. Ashdown (1909:273) illustrates 2¼" door knobs in either white porcelain, jet, bronze, copper, or mineral.

3.1.1.3 Strap

DILg-69:03/169 is two pieces of iron strap. The width is 18.6 mm and the thickness measures 1.5 mm. Both pieces are heavily corroded and the shorter piece appears to have been punctured by a nail. The functional category of strap is open to debate, some strap could have been used as a structural component, some could have been used as part of a machine, and some could have been used for packing.

3.1.2 Accoutrements

Artifacts in this category are those used to put the finishing touches on a structure. Only windowpane was curated. DILg-69:03/109 is a flat, thin (2.1 mm) fragment of standard clear windowpane. DILg-69:03/110 is a fragment of patterned brown windowpane with a thickness of 3.5 mm. One side has an irregular pattern of raised lines and blobs. DILg-69:03/111 consists of two translucent blue pieces which measure 3.1 mm in thickness. A low-relief pattern of large bumps occurs on these sherds. DILg-69:03/110 and 111 are stained glass pieces from either a door or a window. Ashdown (1909:143-144) lists fancy glass in varying designs and colours. The blue and brown fragments both appear to be variations of the pattern designated as muffled.

3.1.3 Detached Structure

This category contains those artifacts which are not part of the basic structure, *per se*, but are attached to it in some form. DILg-69:03/120 is one piece of brown, glazed bole sewer tile.

3.2 Lighting Equipment

At the beginning of the 20th century, a rapid evolution in lighting techniques took place. Formerly, oil lighting and candle light had been prevalent but electric lighting became much more available. Five artifacts were catalogued in this category. DILg-69:03/116 is a tapered, heavily pitted, cylindrical section of glass which may have been part of a candlestick. It has a slight amethyst tint indicating manufacture prior to 1914. Early glass used manganese as a clearing agent which caused the glass to turn to an amethyst colour after lengthy exposure to sunlight. Germany controlled the majority of the world's supply of manganese and the beginning of World War I sharply curtailed the available supplies for English and American glass manufacturers. They were forced to find, and use, other clearing agents.

DILg-69:03/112 is a small curved fragment of clear glass from a light bulb. DILg-69:03/113 is part of the basal flange of a white ceiling-mounted glass globe. Numerous styles of shades and globes were prevalent in the early part of the 20th century (Ashdown 1909:1803-1832). DILg-69:03/114 consists of two clear glass sherds which would derive from a globe, a sconce fixture, or a table lamp. Portions of an embossed pattern of grapes and leaves are on the body, with two raised circumferential lines separating the pattern from a portion of plain clear glass which appears to curve into a central opening.

3.3 Food Processing

DILg-69:03/175 is a clasp knife with the iron blade extended. The blade is 71.0 mm in length and the bone handle consists of side plates riveted to an iron core. The full length measures 151.4 mm with the handle portion being 21.4 mm wide and 15.2 mm thick. A knife like this probably was carried as a personal item rather than being used in the kitchen, however it could have been used to pare fruit, etc.

3.4 Clothing

Two remnants of shoes were recovered. DILg-69:03/176 is the sole and heel portion from a woman's shoe with remnants of the iron nails in the heel. The overall length is 21.2 centimetres (8³/₈") and it is a right side shoe. DILg-69:03/177 is the upper portion of a lace-up boot with five brass eyelets present.

3.5 Recreation

The recreation category can include such items as smoking equipment, games, musical instruments, and toys. DILg-69:03/75 is a complete, white porcelain tea pot from a child's tea set. It measures 32.9 mm in height and has patterns of three vertically incised lines equidistant apart on the body as well as on the spout. There is a small chip out of the lip and the lid is missing. There are no marks on the base to indicate the manufacturer of this artifact.

3.6 Adornment

The adornment category includes items of jewellery as well as toiletry pieces. DILg-69:03/164 is a portion of a black plastic comb. The extant length measures 63.0 mm with a width of 26.1 mm. The

1902 Sears Roebuck Catalogue (Amory 1969:935) illustrates several styles of black hard rubber combs, a few of which resemble this specimen.

3.7 Housewares

Housewares is a generalized category covering most items used in the internal operation of a household and decorative elements added to enhance the appearance.

DILg-69:03/178 is a Tailors' Goose. Illustrated in the Ashdown Hardware Catalogue (Ashdown 1909:743), the recovered specimen consists of the external, heatable component to which a handle is attached when in use. This iron specimen resembles a blunt sterned boat with a tapered prow. The overall length is 183.3 centimetres with a maximum width of 80.3 mm tapering to a point. The external height is 38.6 mm with an internal depth of 31.8 mm. The sad iron shape would enable pressing of most portions of a garment while the massive construction would allow for the heat to be retained longer than the average household iron.

DILg-69:03/74 is the head portion of a porcelain figurine. It is a woman, possibly a young girl, with pale features, black eyes, and short blond hair. She is wearing a pink sun hat which has a green ribbon, knotted in front, encircling the crown. This figurine head is somewhat similar to 'Greta' and 'Victorian Lady', both Royal Doulton figurines, in hair style, hat style, and youthful appearance of the figure (Dale 2000: 148, 434). However, it is highly unlikely that DILg-69:03/74 was made by the Royal Doulton company as it is of a much more coarser paste and design than Doulton material.

3.8 Unknown

The Unknown category is reserved for artifacts of all materials which are incomplete or not well enough preserved for a positive identification to be made but, for which further in-depth research may elicit an identification. DILg-69:03/173 appears to be part of a machine or an electrical device. This flat brass specimen measures 66.3 mm in height, 65.2 mm in width, and 1.7 mm in thickness. There are two cut-outs, one rectangular and the second in a reverse-Z shape. Minute screw holes occur on all four corners. A larger hole with a short vertical sleeve occurs at mid-point on one edge, adjacent to a small, possibly movable, lever anchored to a pivot near the edge.

3.9 Faunal Remains

One hundred and two faunal artifacts were recovered. The specimens were identified using standard references: Gilbert (1973), Olsen (1960, 1964, 1971), and Schmid (1972). All were examined and identified as specifically as possible: body part, age of individual, and species. Any evidence of butchering techniques, such as cutting or sawing, was recorded as was the condition of the specimens, i.e., charred, broken, chewed, or gnawed.

TAXON	ELEMENT	CAT.#	QTY	WT	COMMENTS
Mammal					
Large	unidentifiable	139	8	43.1	sawn, cut marks
Medium/Large	rib	140	9	55.4	sawn, spiral fracture
Bovidae					
Cow (<i>Bos taurus</i>)	axis	122	1	14.5	cut marks, juvenile
	carpus/tarsus	123	1	25.0	complete
	vertebra	124	4	50.6	sawn
	calcaneus	125	1	94.8	chewed
	radius	126	2	180.5	sawn, cut marks
	ulna	127	1	165.8	sawn
	ulna	136	1	40.0	sawn
	tibia/fibula	128	1	248.0	sawn, copper stain
	mandible	129	1	199.1	cut marks
	femur	130	4	141.6	sawn
	tibia	131	2	269.4	sawn, axed
	radius/ulna	132	1	543.0	sawn, cut marks
	humerus	133	4	681.7	sawn
	innominate	134	8	428.7	sawn
	rib	135	14	635.1	sawn, cut marks
	metacarpal	137	1	21.7	juvenile
	sternabra	138	1	2.1	xiphoid process
Pig (<i>Sus scrofa</i>)	atlas	143	1	8.8	sawn
	axis	144	1	14.1	sawn
	innominate	145	1	53.5	sawn
	radius	146	2	73.2	sawn
	ulna	147	1	13.5	eroded, juvenile
	tibia	148	1	35.1	sawn, juvenile
	femur	149	1	29.3	sawn, juvenile
Sheep/Goat (<i>Ovis/Capra</i>)	mandible	150	1	22.4	spiral fracture
	humerus	151	1	13.4	spiral fracture, juvenile
	humerus	154	1	26.1	sawn
	femur	152	1	18.0	juvenile
	metatarsus	153	1	41.8	complete
	scapula	155	1	27.5	sawn, juvenile
Canidae					
<i>Canis</i> sp.	metapodial	156	1	1.0	juvenile
	sternabra	157	1	0.9	xiphoid process, juvenile
	carpus/tarsus	158	2	1.3	juvenile
	sacrum	159	1	4.5	juvenile
	ulna	160	1	9.1	broken, juvenile
	radius	161	1	10.0	juvenile
	vertebra	162	5	9.6	juvenile
	rib	163	9	12.2	juvenile
TOTAL MAMMAL			100	4265.4	
Aves					
Medium	sternum	141	1	1.3	-
TOTAL AVES			1	1.3	
Fish					
Undifferentiated	vertebra	142	1	1.7	-
TOTAL FISH			1	1.7	
TOTAL			102	4268.4	

Table 3: Historic Faunal Remains

Forty-eight of the elements could be identified as cow (*Bos taurus*), with a total weight of 3741.6 gms (Table 3). Most of the specimens, except DILg-69:03/122 and 137, derive from adult animals with the majority showing evidence of butchering activities such as sawing, axing, and cutting at the joints. Some of the cuts indicate that the animal was sectioned into roasts and steaks. Pig (*Sus scrofa*) is represented by eight specimens, three of which are juvenile. All show evidence of butchering. The six specimens identified as *Ovis/Capra* (sheep/goat) are probably all from sheep but, due to the similarity of many bones, the distinction was not made. Three of the sheep/goat bones are juvenile.

Two non-mammal specimens representing food resources were recovered. These are the sternum of a medium size bird, possibly chicken, and a single fish vertebra.

Twenty-one bones identified as juvenile dog were recovered from a single location. It would appear that this represents the burial of a family pet, as this area was densely residential until the middle of the 20th century.

3.10 Containers

This category includes all artifacts, or portions of artifacts, which are used to contain products. As such, it tends to cross-cut other functional divisions, with assignment to the category based upon form, as much as function. The category contains several sub-categories (Manitoba Museum of Man and Nature 1986), three of which are applicable to the recovered artifacts:

- a. Storage - the purpose of the container is to hold material, e.g., bottles, jars, tin cans;
- b. Ornamental - decorative items such as vases; and
- c. Dinnerware - the artifact is used in the serving or eating of food.

3.10.1 Storage

Storage containers include most of the commonly used artifacts in today's material culture. Many products are sold, transported, carried, or stored in a container of some type: bag, box, barrel, jar, sealer, can, bottle, pail. Containers come in a variety of material types such as metal, plastic, paper, ceramic, and glass. Only ceramic and glass artifacts were recovered from this project.

3.10.1.1 Ceramic Containers

Three ceramic artifacts, both crocks, were recovered. Ceramic containers were prevalent during the 19th and earlier part of the 20th century. Many products were sold in stoneware bottles, jars, or jugs and stoneware crocks were used for storage, food processing, or home preserving.

DILg-69:03/119 is a body sherd from a crock. The interior glaze is a dark brown and the exterior is a mottled pale red-brown on tan. According to DePasquale (DePasquale *et al.* 1990:143), mottling as a decoration was introduced about 1906 on ceramics produced by the companies in Red Wing, Minnesota.

DILg-69:03/121 consists of two body, base sherds from a large crock, estimated to be a two gallon size. The interior is a dark brown with the exterior being tan. There are no marks on these sherds to indicate

the manufacturer which could have been one of the companies from Red Wing, Minnesota or Medicine Hat, Alberta, two of the more common suppliers in western Canada.

3.10.1.2 Glass Containers

A large number of complete glass containers and sherds were recovered. Indications of the method of manufacture, which provide information about time period and technology, are often present on these artifacts. Where possible, the specimens have been identified to type of container, i.e., bottle, jar, and to a functional sub-type such as condiment, beverage bottle, wine bottle, etc.

3.10.1.2.1 Condiment and Food Produce Containers

Representatives of this class are often difficult to identify as many producers used unmarked bottles to which paper labels were affixed. Sometimes the shape of a sherd or a bottle can identify the product, such as the distinctive Ketchup bottle. Some producers had bottles manufactured in private molds which were embossed with their name, e.g., the Heinz Company. One sherd, DILg-69:03/91, was designated as a condiment container. It consists of the lip, neck, and a portion of the shoulder with the glass stopper also present. A portion of the product name, "...RE SA...", is embossed on the shoulder. This bottle could have contained Worcestershire Sauce for which the Lea & Perrins company is renowned or Yorkshire Sauce produced by Goodall Backhouse & Company. John Wheeley Lea and William Henry Perrins, both chemists, opened a shop in Worcester in 1823. They began to commercially produce Lea & Perrins Worcestershire Sauce in 1837. In 1930, Lea & Perrins was sold to HP Foods (www.lea-perrins.com). At this time, no history of Yorkshire Sauce or Goodall Backhouse & Company could be found. This bottle was produced prior to 1920 as the v-shaped lip was applied in a separate operation (Jones and Sullivan 1985:93).

3.10.1.2.2 Beverage Bottles

Breweries bottled both soft drinks and beer and often used the same type of bottle for both products. Without paper labels, it is usually impossible to ascribe a specific product to an archaeologically recovered bottle. Thus, the bottles are assigned to the generalized Beverage class. Depending upon the data embossed on the artifact, it may be possible to identify the producer of the contents, the manufacturer of the container, both, or neither. Nine specimens were curated, eight from Winnipeg bottling firms and one from an unidentified firm.

3.10.1.2.2.1 Winnipeg Bottling Firms

The passage of the Manitoba Temperance Act in 1916 resulted in all Winnipeg brewers concentrating on the manufacture of soft drinks and beer for export. The local market for 'Temperance Beer' and medicinally prescribed spirits was further diminished by the 1918 Federal War Measures Act which was in force for one year and prevented importation of alcohol. Broad-based restrictions were eliminated by the introduction of the Liquor Control Act in 1923.

There was an active beverage industry in Winnipeg with several firms vying for the market. Recoveries from this project include bottles representing three of these companies that dominated the local market: Blackwoods, Drewry, and Pelissier (Table 4).

Blackwoods has a long and involved history. In 1882, it began as the Manitoba Brewing Company and became Blackwoods Brothers shortly after. In 1901, the name was changed to Blackwoods Limited. Another name change occurred in 1921, this time to Blackwoods Beverages (Aerated Water Manufacturing Company Limited). In 1923, the Whistle Bottling Company was formed to take over Blackwoods' business and, in 1934, the name reverted to Blackwoods Beverages Limited (Stock 1978:19; Chopping 1978:99-109). The early incarnations of the Blackwoods business had various locations. Just after 1900, William and A.T.R. Blackwood bought a pre-existing building (built in the early 1880s) at 409-421 Mulvey Avenue East. In 1920, Blackwoods sold this property. Originally, the building on the Mulvey site had been a factory and then, over the years, it was the home of other brewing companies—E.L. Drewry, Pelissier Brewery, Labatts. Today, various manufacturing companies occupy it (Peterson and Sweeney 1998:27).

COMPANY	CAT. #	QTY	COLOUR	PORTION	CHOPPING NO.
Blackwoods	87	1	aqua	body,base	MWIN BA?
	88	1	aqua	body,base	MWIN BA14
	89	1	aqua	body	MWIN BA?
Drewry	84	1	clear	body,base	MWIN BG11-1
	85	3	clear	body	MWIN BG?
Pelissier	86	1	clear	body	MWIN BR
TOTAL		8			

Table 4: Identified Winnipeg Beverage Bottles

DILg-69:03/88 is unusual in that it is one of the few types without the ownership clause embossed on the body of the bottle. Two versions of this clause are known and appear to occur only on bottles produced by Winnipeg brewers. DILg-69:03/89 has a portion of the earliest Winnipeg ownership clause, which in full would read "ANY ONE FILLING BUYING SELLING OR DESTROYING THIS BOTTLE WILL BE PROSECUTED WINNIPEG". This clause is found only on blown-in-mold bottles, most of which are Hutchinson stoppered. The later clause also appears on Hutchinson bottles but continues into crown finish bottles. Without more than the small body sherd, DILg-69:03/89 could derive from Chopping type MWIN BA5, BA6, BA8, or BA25 (Chopping 1978:100-109). DILg-69:03/87 is tentatively identified as a Blackwoods product in that the word "WINNIPE..." is embossed on the curve of the body,base juncture with the text reading vertically. Most of the producers that have Winnipeg at this location on the bottle—Blackwoods, Imperial Brewers Limited, Manitoba Brewing Company, Pelissier & Sons—have the word inverted. Only three Blackwoods types have the word in the same

orientation as the sherd. These are Chopping types MWIN BA12, MWIN BA13, and MWIN BA14 (Chopping 1978:104).

The Drewry company began in 1877 when E.L. Drewry leased the Redwood Brewery and produced beverages labeled with his name. In 1904, the company name was changed to E.L. Drewry Limited and, in 1921, it became Drewrys Limited. As well as the Redwood location, Drewry purchased the premises of the Empire Brewing Company at Mulvey Avenue East in 1892. Those facilities were sold to Blackwood Brothers shortly after the turn of the century (Peterson and Sweeney 1998:27). Drewry produced several brands of beer as well as numerous soft drinks (Stock 1978:11-19).

Drewry products are extremely useful as temporal markers in that the date of manufacture is embossed on the base of the bottles. DILg-69:03/84 is largely complete and has most of the later Winnipeg ownership clause embossed on the body: "THIS BOTTLE IS OUR PROPERTY ANY CHARGE MADE THEREFOR SIMPLY COVERS ITS USE WHILE CONTAINING GOODS BOTTLED BY US AND MUST BE RETURNED WHEN EMPTY". The company name, "E.L. DREWRY", and "WINNIPEG" are embossed on the base as well as the date indicator "04". DILg-69:03/85 has the later ownership clause, which, based on the Drewry dates, appears to have started around 1901. As most of the base is missing, the exact year cannot be ascertained.

The Pelissier Brewery has a rather convoluted history. In 1911, Pelissier & Sons manufactured soda water at 721 Furby. In 1914, the company, still manufacturing soda water, changed its name to Beaver Brewing and Bottling Company and in 1918 it expanded from 721 to 719 Furby. In 1920, there was another name change, to the Home Brewery, and a further expansion, from 719 to 723 Furby. At this time, Alphonse, Cleophas, and Henry Pelissier were all listed as executives of the company. The final expansion of the Home Brewery, on the Furby site, took place in 1924, with the Brewery now occupying 715 to 723 Furby. In 1925, the company moved to Osborne and Mulvey and changed its name to Pelissiers Limited. It remained at this location, under variations of the same name, until 1977 when it became Kiewel-Pelissier's Breweries.

As DILg-69:03/86 is a body sherd containing portions of the later Winnipeg ownership clause and "...ELISSIER AN..." (for Pelissier and Sons), the manufacturer can be identified. However as the base is missing, it is impossible to identify this to a Chopping type.

3.10.1.2.2.2 Unidentified Bottling Firms

DILg-69:03/83 is a neck, body sherd from a green torpedo bottle. Torpedo bottles are named due to their resemblance to a military torpedo in that the base is totally rounded. These bottles cannot be stood on end and the result is that the cork, closing the bottle, stays moist and retains a complete seal. This is particularly relevant if the contents are beer or carbonated beverages. The specimen has been blown in mold with the mold seam extending into the broken portion of the neck. The glass contains elongate air bubbles indicating manual manufacture. Many companies had their names embossed on these bottles, however, this generic version probably was identified with a paper label.

3.10.1.2.3 Wine Bottles

Nine specimens were identified as wine bottles (Table 5). One of the identifying features of early wine bottles was the kick-up which is a raised section of the base. This feature originated as a sediment trap and is currently retained as a tradition. Often, a mamelon—a small downward projecting dome of glass—is present in the centre of the kick-up. Colour is another indicator of early wine bottles as is the type of lip. Most 19th century bottles are olive in colour and have applied lips which would be closed with a cork.

DILg-69:03/77 can be identified, on the basis of the embossed mark on the base, to a British manufacturer. Toulouse (1971:556-557) assigns the tear drop mark to Nuttall & Co. of St. Helens, Lancashire, England. This company operated from 1872 to 1913 when it became the Ravenhead factory of United Glass. Given the applied, down tooled lip this bottle probably was made during the period when the factory was an independent company.

Turn molding as exemplified by DILg-69:03/78, 79, and 80 was a general technique used for wine, champagne, claret, and brandy bottles from the 1870s through World War I (Jones and Sullivan 1985:31). The Ricketts mold pre-dates turn molding and was used in the liquor trade from the 1820s until late in the 19th century (Jones and Sullivan 1985:30).

CAT.#	QTY	PORTION	COLOUR	COMMENTS
77	1	complete	dark olive	761, tear drop
78	3	body,base	dark olive green	kickup, turn molded
79	1	body,base	dark olive	turn molded
80	2	body,base	green	kickup, mamelon, turn molded
81	2	lip,neck,body	light green	Ricketts mold, flattened applied string rim
	9			

Table 5: Wine Bottles

3.10.1.2.4 Gin Bottles

DILg-69:03/82 consists of eighteen sherds from a single dark olive bottle. It is square in cross-section with no decoration or markings. It is probably a case gin bottle. These bottles are distinguishable by their square cross-section and, in some cases, decorative vertical ribbing. The shape was a function of ocean shipment of the product, as square bottles could be packed with more to a box and were less likely to break, due to rough handling, than round bottles. They were made in Holland, England, and America in the 19th century. Bottles with no embossing were probably made pre-1850, while bottles with embossing were manufactured post-1850 (Klamkin 1971:82-83).

3.10.1.2.5 Whisky Bottles

One blue basal sherd was assigned to the Whisky category. DILg-69:03/76 is circular in cross-section and is embossed with "J. WALKER'S...", "3", and "V?". The Johnnie Walker Distillery was established at Kilmarnock in the west of Scotland in 1820 (www.scotchwhisky.com). This bottle probably contained a single malt scotch whisky although blended whiskies were becoming popular in the latter part of the 19th century.

3.10.1.2.6 Unassigned Bottles

Artifacts in this grouping have some identifying characteristics, such as shape or manufacturer's marks. However, the data is insufficient to permit identification of the function of the container; i.e., sealer versus milk bottle or medicine bottle versus condiment bottle. Some specimens with marks can be attributed to a manufacturer but not to a functional grouping. Occasionally, the style of manufacture of the neck and lip of bottles suggests the possible contents of the container. Also, the type of closure and evidence of manufacturing technique can provide approximate dates. For example, the length of the mold seam can indicate a general age; if the seam extends to the lip of the bottle, it was produced after 1920.

There are eighteen specimens in this sub-type. These vary in colour and in shape. The recoveries were divided into two sections: those sherds which have some form of marking and those which have no marking whatsoever.

3.10.1.2.6.1 Marked Unassignable Bottles

DILg-69:03/90 is a complete, small, aqua, blown-in-mold bottle with an applied string lip. It measures 72.8 mm in height and has a diameter of 31.7 mm. The base is embossed with the mold number "1". The combination of the size and type of lip suggests that it may have contained a medical product.

DILg-69:03/98 is an aqua body, base sherd. The base is embossed with "AYE..." and a mold number "4". This could represent the J.C. Ayer Company which was established in 1841 in Lowell, Massachusetts (www.larrysantiques.com). This was a well-known patent medicine firm lasting until the 1940s.

DILg-69:03/104 is a body, base sherd from a brown panelled (perhaps a flask) bottle. The base has an outer rim with a slightly elevated central area on which a "C" is embossed. This is too incomplete to determine the manufacturer of the bottle or if the mark represents a mold number.

3.10.1.2.6.2 Unmarked Unassignable Bottles

The fifteen unmarked unassignable sherds could not be assigned to a specific type of bottle and have no identifying markings (Table 6). Four colours are represented: aqua, blue, brown, and clear.

Two specimens have distinctive decorative aspects. DILg-69:03/103 has ten panels on the tapering neck and it would appear that these grade into offset panels at the shoulder. The upper portion of the panelling terminates in a saw-toothed design just below the applied Perry Davis type finish (Jones and Sullivan 1985:88). The contents could have been a condiment such as vinegar, lime juice, etc. DILg-69:03/96 is

the shoulder/neck of a cylindrical, clear bottle. Moving from the outer edge of the shoulder towards the neck, there is concave groove and two stepped horizontal plateaus. The neck is 11.7 mm in height and had been burst-off and ground. This may be an early precursor to the latter, more recognizable, retail size ink bottles.

CAT #	QTY	PORTION	COMMENTS
AQUA			
92	1	body	panelled
93	1	neck, shoulder	cylindrical
94	1	body	cylindrical
97	1	body	cylindrical
99	1	lip, neck	Hutchinson type finish
100	2	body	panelled
103	1	lip, neck, shoulder	panelled, applied lip
BLUE			
101	2	body	cylindrical
102	1	base	rectangular
BROWN			
105	1	body, shoulder	cylindrical
106	1	body, base	cylindrical, concave base
CLEAR			
95	1	lip, neck	crown finish
96	1	neck, shoulder	cylindrical, ridged, ground lip
TOTAL	15		

Table 6: Unmarked Unassigned Bottles

3.10.2 Ornamental

The artifacts assigned to this sub-category were primarily used for their decorative features rather than any utilitarian function. Four sherds (three catalogue numbers) were recovered. DILg-69:03/73, 108, and 117 are all sherds, probably from vases.

DILg-69:03/73 is an ornately-shaped, white ceramic handle which has a painted gold stripe on the upper surface. The handle is an A-shape with two protruding pieces coming out of one side. One end of the A has a very small portion of the body still attached. The handle is quite large, measuring 60.8 mm in height and 38.4 mm in width. The fragment is too incomplete to speculate on the shape and function of the original object.

DILg-69:03/108 is a small, blue, opaque glass body sherd. It measures 22.8 mm by 18.0 mm. One side has an embossed pattern consisting of intertwining curlicues. This may be a decorative plate or more likely a vase.

DILg-69:03/117 consists of two tan stoneware sherds which fit together. One is a body sherd while the other is the base and part of the body. The exterior surface is decorated with alternating vertical rows. Bands of dots alternate with wider bands of ovals, with raised centres, on a stippled background. There are no marks on the base to indicate a manufacturer. This artifact may have a vase or a bowl.

3.11 Dinnerware

Plates, cups, bowls, etc. are types of containers. Technically, they are catalogued as a sub-category of the container hierarchy. However, due to the often large number of recoveries of dinnerware and the different types of information that may be derived from these artifacts as opposed to other containers, they are elevated to a separate section. Dinnerware comes in a variety of material types, glass, ceramic, metal, plastic, paper, although only glass and ceramic dinnerware was recovered from this site.

3.11.1 Glass Artifacts

DILg-69:03/107 is a portion of a clear wine glass. The interior of the base is concave. The surface of the circular base rises with two stepped platforms to the pear-shaped tapering stem. The bowl is missing.

DILg-69:03/115 consists of three white glass sherds which fit together to form a lid from a milk glass dish. The lid is in the shape of a sitting bird, probably a chicken. The flat edge has numerous minute flutes perhaps designed to resemble the straw of a hen's nest. Lee (1944:Plates 107-115) illustrates a variety of milk glass dishes with differing types of lids including hens, ducks, swans, fish, along with animals such as dogs, cats, lions, horses, etc. These dishes probably contained condiments such as horseradish, pickles, relishes, etc.

3.11.2 Ceramic Artifacts

Ceramic dinnerware includes place settings—plates, small bowls, cups and saucers—and serving pieces—platters, large bowls, creamers. Archaeological recoveries are often too fragmented to allow exact identification and this is reflected in the use of object types such as bowl?, plate?/saucer?, etc. Because dinnerware is usually manufactured in sets of the same pattern, the decorative features of a set cross-cut the types of objects. One hundred and fourteen ceramic dinnerware artifacts were recovered. These are separated into groups based on colour and, within these colour categories, decorative design and any information such as manufacturer, jobber, company of use, etc. will be discussed.

3.11.2.1 White Ceramics

White sherds are only fragments of complete objects—there may be patterns with other colours that fit onto these sherds. Sixty-two white sherds were recovered. Of these, twenty-eight sherds are plain white with no indication of a pattern or manufacturer (Table 7). These plain white sherds represent all the usual types of dishes—plates, saucers, cups, and bowls, with the majority being place setting dishes. The sherds vary in thickness, from very thin (2.3 mm) on DILg-69:03/49 to DILg-69:03/68 which measures 8.2 mm in thickness. The thickness may indicate age as earlier products were often thicker or, more likely, it represents the distinction between coarse utilitarian everyday ware versus the finer, more

expensive special-occasion china. In addition, the sherds vary in coarseness of paste from finer paste, like DILg-69:03/49, to much coarser paste as indicated by DILg-69:03/68. DILg-69:03/68 is also very heavily crazed. This refers to the crackling of the glaze into an overlapping dendritic pattern which is usually a result of age. Two bowl sherds, DILg-69:03/56 and DILg-69:03/57, are heavier footed bowls and may have been serving dishes. DILg-69:03/55 is a small diameter dish which was probably used as a butter pat dish, perhaps in a restaurant or in a railway dining car.

CAT. #	QTY	PORTION	OBJECT
47	2	lip,body,base	saucer
48	1	lip,body	saucer
49	2	lip,body	cup
50	1	body,base	cup
51	1	lip,body	cup
52	1	lip,body,base	cup
53	1	lip,body,base,handle	cup
54	1	lip,body	cup
55	1	lip,body,base	butter pat
56	1	body,base	bowl
57	1	body,base	bowl
58	1	body,base	bowl
61	1	body,base	plate
62	3	body,base	plate
63	2	body,base	plate
64	1	body,base	plate
65	1	base	plate
66	1	lip,body,base	plate
67	1	lip,body	plate
68	1	lip,body,base	plate, heavily crazed
69	1	body	bowl
70	1	body	bowl
71	1	lip,body	plate
TOTAL	28		

Table 7: Plain White Dinnerware

3.11.2.1.1 *Manufacturers of White Ceramics*

A few of the white sherds have portions of a maker's mark which, in some cases, permits the identification of the company that manufactured the dinnerware item. In addition to identifying the company, the period of manufacture can often be determined due to changes in the logos over time. Occasionally, the client for whom the dinnerware was produced is denoted by a name or insignia on the sherd.

Alfred Meakin

DILg-69:03/25 is a heavily crazed basal sherd from a plate. A portion of a black Royal Arms mark is on the base with "...CHINA" printed above it. The name "...D MEAKIN" is printed below it, with "...LAND" printed below that. The mark is somewhat blurred and does not match exactly with any of the marks illustrated in Godden (1964:425-427). However, footnotes indicate that England was added to the company marks after 1891 and Ltd. was added to the company name after 1897. This provides a six year period in which this mark was used. The Alfred Meakin firm has been in business since 1875 at Tunstall, Staffordshire.

Charles Meakin

DILg-69:03/24 is a lip,body,base sherd from an unusual shaped dish. The dish is oval and is somewhat shallow with the sides measuring 32.3 mm in height. The interior of the dish has a raised wave-like piece that goes from side to side. It is possible that there was a similar corresponding piece at the other end of the dish, but this is now missing. This dish may have been used as a holder for cutlery or for some type of food. A portion of a black Royal Arms mark is on the base with "...STONE CHINA", "...RLES MEAKIN", and "BURSLEM" printed, in black, below the mark. This dish was made by the Charles Meakin Pottery firm (Godden 1964:426). Godden notes that the mark usually had Hanley printed below it, however similar marks without Hanley refer to an earlier pottery in Burslem. The Hanley name occurs on pottery from 1883 to 1889, while the earlier Burslem material was manufactured from 1870 to 1882. As DILg-69:03/24 has the Burslem name printed on it, this dish would have been manufactured in the 1870 to 1882 period.

J. & G. Meakin

DILg-69:03/23 consists of seven sherds from a large footed bowl, likely a serving dish. The basal mark is a black Royal Arms mark with "IRONSTONE CHINA" printed above it and "J. & G. MEAKIN", "HANLEY", "ENGLAND" printed below it. This mark was used circa 1890 by J. & G. Meakin Ltd. of Hanley, Staffordshire, England. The firm has been in business since 1851 (Godden 1964:427).

Mellor & Co.

DILg-69:03/22 is a body,base sherd from a saucer. The base has a red flower with "MELLOR & CO." printed, in red, below it. This is a mark of the Cook Pottery Company of Trenton, New Jersey in the United States. This particular mark was used ca. 1894 (Kovel 1986:121). The company was in business from 1894 to 1929 and used a variety of marks, including a Royal Arms mark, very few of which had the name Cook on them (Kovel 1986:15, 27, 48, 118).

Powell & Bishop/Bishop & Stonier

DILg-69:03/26 is a lip,body,base sherd from a small, shallow bowl. The depth of this specimen measures 22.8 mm. A black maker's mark on the base has a crown over a circle with "IRONS..." in a horizontal

banner across the circle. While the mark is incomplete, it closely resembles an illustrated mark of Powell & Bishop (Godden 1964:509). This firm, under this name, was short lived from 1876 to 1878 when it became Powell, Bishop & Stonier. In 1891, it became Bishop & Stonier and Godden (1964:76-77) illustrates a mark which also is very similar to the mark on this specimen. The main distinguishing characteristics between the two marks are the company name and the addition of the word England, both of which are in the lower portion of the mark and missing from DILg-69:03/26. The Bishop & Stonier mark occurred between 1899 and 1936.

Royal Arms Mark

DILg-69:03/27 is a small basal sherd from a plate. It has a portion of a black Royal Arms mark. The British Royal Arms mark was used by many firms in England, the United States, and Europe, so it is often impossible to assign these marks to any one company without further information on the sherd.

3.11.2.1.2 Embossing/Molding on White Ceramics

Twenty-two sherds have some form of an embossed pattern—either the Wheat pattern or another pattern. Embossed patterns were very common during the Victorian era.

Wheat Pattern

The Wheat pattern is a long-lived popular design which was manufactured by many companies in England, a few in Scotland, at least one in Canada, and possibly one in France (Sussman 1985:7-10). In addition, Sussman notes that the Wheat pattern seems to have been manufactured solely for the North American market and, although expensive in the beginning (the 1850s and 1860s), it eventually became, by 1897, one of the cheaper dinnerwares. Many sites in this area of have yielded examples of the Wheat pattern (Kroker and Goundry 1990:92; Quaternary 1996:69-70). Sussman (1985:15) states that often the patterns of wheat from various companies are not distinguishable. She divides the Wheat pattern into a type with three rows of kernels in the head and a second type with two rows of kernels in the head.

Eleven sherds have some characteristics of either the Wheat pattern or one of the derivations (Table 8). DILg-69:03/28 does not have any of the Wheat pattern but does have the scalloped juncture between the lip and body that is typical of Wheat pattern dishes. It is also crazed and has a minuscule portion of a black maker's mark which is insufficient to identify the manufacturer. DILg-69:03/42, a body, base cup sherd, has the basal fluting characteristic of Wheat pattern cups (Sussman 1985:69).

DILg-69:03/29, 30, and 46 all have the heads of wheat, with DILg-69:03/29 and 30 being the 2-row heads and DILg-69:03/46 being too blurred to identify. Both DILg-69:03/30 and 46 have vertical ribs producing a mildly scalloped cross-section of the cup. DILg-69:03/31 has the characteristics leaves of the Wheat pattern and the beginnings of the scalloped ribbing. While DILg-69:03/29, 30, and 31 have no indication of a manufacturer, it is possible to limit the maker's by comparison with the patterns illustrated in Sussman (1985). For example, the wheat head and leaf on DILg-69:03/29 resembles the pattern on examples from J. & G. Meakin, Mellor, Taylor and Company, and the William Taylor Company, all English firms. The wheat head and leaf on DILg-69:03/30 resembles those from the

William Adams and Sons company in England and the St. Johns Stone Chinaware Company in Quebec, Canada. The distinctive leaves on DILg-69:03/31 resemble those on examples from Robert Cochran and Company of Glasgow, Scotland. However, these are not firm assignments to a specific maker.

CAT. #	OBJECT	QTY	PATTERN	COMMENTS
28	plate	1	-	body scallops
29	saucer	1	2-row	Royal Arms
30	cup	1	2-row	-
31	cup	1	leaves	-
32	plate?/saucer?	1	Wheat and Daisy	-
33	bowl?	1	Wheat, Rope and Ribbons	-
34	cup	1	Wheat, Rope and Ribbons	-
35	pitcher?	1	Wheat and Rose	-
42	cup	1	-	basal fluting
46	cup	2	?-row	-
TOTAL		11		

Table 8: Wheat Patterns

DILg-69:03/32 is a lip, body sherd from a plate. It has a scalloped lip and a portion of the Wheat and Daisy pattern on it. Three companies, William Adams and Sons, Bishop and Stonier, and Johnson Brothers Ltd., produced this pattern. Slight variations in the design allow for the identification of DILg-69:03/32 as a product of Bishop and Stonier. Sussman (1985:74) notes that examples from this company, in Hanley, Staffordshire, are dated between 1899 and 1936.

DILg-69:03/33 and 34 both have portions of the Wheat, Rope and Ribbons pattern on them. Sussman (1985:71) states that this pattern was only produced by Thomas Furnival and Sons of Cobridge, Staffordshire. The pattern, which is unnamed, was registered on April 20, 1878. Thomas Furnival and Sons produced pottery, under this name, until 1890 when the name was changed to Furnivals Limited. Sussman notes that:

As marked examples of this pattern have not been found, there is no saying how long it was produced. There is no evidence that the pattern was produced by any other manufacturer.
(Sussman 1985:71)

DILg-69:03/35 is a body sherd from a large pitcher. It has a portion of the Wheat and Rose pattern on it where the two elements of the design are combined in a single spray rather than separated as on the plate illustrated by Sussman (1985:77). The flower is definitely a rose as compared to other floral elements combined with the Wheat pattern. Only one firm has been identified with the Wheat and Rose pattern—Alfred Meakin Limited of Tunstall, Staffordshire. Examples of this pattern are known to post-date 1897 and may not have been made after 1930 (Sussman 1985:77).

Other Embossed/Molded Patterns

Eleven sherds have decorative designs formed by embossing or molding (Table 9). The simplest decorations are those formed during the molding of the vessel. In the cases of DILg-69:03/44 and 59, slight grooves are made during the manufacture resulting in the presence of vertical ribs on the finished product. A similar process occurred on the handle (DILg-69:03/72). Both DILg-69:03/44 and 72 have the pale blue-grey tint that is generally indicative of mass-produced hotelware. Both DILg-69:03/59 and 72 are large pitchers, either milk jugs or water jugs.

CAT. #	OBJECT	PORTION	QTY	DECORATION	COMMENTS
36	plate	lip,body	1	diamond, leaves, cartouche	dinner plate
37	plate	lip,body	1	diamond, leaves	dessert plate
38	plate	lip,body	1	leaf, buds	dinner plate
39	plate	lip,body,base	1	wavy lines, dots, scalloped	dinner plate
43	bowl	lip,body	1	waves, wavy line	-
44	cup	body	1	molded ribs	hotelware
59	pitcher	body,base,handle	4	molded ribs	crazed
72	pitcher	body,handle	1	molded ribs	hotelware
TOTAL			11		

Table 9: Embossed/Molded White Ceramics

DILg-69:03/36 and 37 have the same pattern indicating that they are part of the same set. The pattern consists of two diverging branches with simple leaves on each side of a central diamond. DILg-69:03/36 is the larger deeper plate and also has a depressed oval cartouche on the body. Neither sherd has any marks to denote a manufacturer.

The three remaining sherds have insufficient portions of the pattern to distinguish either the pattern name or the manufacturer. DILg-69:03/38 is from a large, heavy dinner plate, while DILg-69:03/39 is from a lighter, smaller plate. DILg-69:03/43 is from a bowl which has an in-curved body wherein the opening would be smaller than the largest diameter of the vessel.

3.11.2.2 Gold-on-White Ceramics

Six sherds have some form of the ubiquitous gold line pattern on them (Table 10). The decoration consists of a varying number and widths of gold lines, usually parallel to the lip. This gold line pattern is a common find in this area (Kroker and Goundry 1993:92-93; Quaternary 1996:72, 1999b:24, 37, 2000a:46, 2002:95-96).

The most ornate pattern in this grouping is DILg-69:03/20, a saucer, which has a gold line painted along the scalloped lip, three closely spaced thin gold lines encircling the body, just below the lip, and a single

thin gold line at the juncture of the body with the cup indentation. In addition, the body has vertical ribs giving the saucer the appearance of a sea shell.

DILg-69:03/21 is a large basal sherd, 92.7 mm in diameter, with a small portion of the body still extant. The thin gold line encircles the exterior body just at the base. This was probably a serving dish.

CAT. #	QTY	PORTION	OBJECT	DECORATION
18	2	lip,body,handle	cup	gold band, 1 gold line
19	1	lip,body	cup	2 gold lines
20	1	lip,body,base	saucer	scalloped lip, 5 gold lines, ribs
21	1	body,base	bowl	1 gold line
45	1	lip,body,base	saucer	faded gold band
TOTAL	6			

Table 10: Gold-on-White Decoration

DILg-69:03/18 has a wider gold band, 3.1 mm, just below the lip with a thinner gold line just below that. A very small portion of the handle is present on one of the sherds. DILg-69:03/19 has a thin gold line on the top of the lip and a second thin line 17.0 mm down the body from the lip. DILg-69:03/45 has an extremely faded (almost non-existent) thick gold band below the lip.

3.11.2.3 Blue-on-White Ceramics

Nine sherds have different blue patterns on them (Table 11). DILg-69:03/6, 7, and 8 are all a blurred dark blue in colour. This dark blue or flow blue colour was also called Royal Saxon blue. Hamilton (1985:6-7) notes that

“this term was used to describe a particular blue that had “flow” qualities and the design a “blurred-look”, an effect that was popular during the second quarter of the nineteenth century.”

CAT. #	QTY	PORTION	OBJECT	DECORATION
3	2	lip,body,base	plate	floral, curlicues, embossed, scalloped lip
4	1	lip,body	plate	floral
5	2	body	bowl?/cup?	large leaf
6	2	lip,body	plate	flow blue, floral, stems, scalloped lip
7	1	lip,body	plate?/saucer?	flow blue, floral
8	1	body,base	plate	flow blue, flowers, leaves
TOTAL	9			

Table 11: Blue-on-White Ceramic Sherds

DILg-69:03/6, 7, and 8 are all various types of floral patterns. Flowers and leaves are present on DILg-69:03/6 and 8 with flowers and fern-like fronds on DILg-69:03/7. None of the patterns match each other and as flow blue floral designs were ubiquitous, it is impossible to determine the complete patterns or the manufacturers.

The two sherds in DILg-69:03/3 fit together to form a dinner plate with a scalloped lip. The pattern covers the body and flows down onto the junction of the body with the base. Embossed curlicues and bumps occur just below the lip. DILg-69:03/4 is a thicker sherd than the others and has a coarser paste. The pattern is single abstract blue flowers with blotches of blue interspersed among them. This sherd is also quite crazed. DILg-69:03/5 has two sherds which also fit together and have a large blue leaf transfer printed on the body. None of the blue-on-white sherds have any indication of a maker's mark.

3.11.2.4 Green-on-White Ceramics

DILg-69:03/13 is twelve sherds from a dinner plate. The pattern consists of connecting clumps of varying types of green flowers and leaves, on the body, with a wavy line connected by single flowers at the trough of each wave, just below the lip. In addition, there is an embossed pattern of dots below this wavy line and the lip appears to be slightly scalloped. A garland of green daisy-like flowers occurs just below the junction of the body with the base. A green maker's mark is printed on the base. It is a green circle with a crown with "W.T.H. SMITH" and "LONGPORT" printed inside the circle, "ENGLAND" printed below the circle, and "IVANHOE" printed below that. The W.T.H. Smith company was in business, in Longport, Staffordshire, England, from 1898 until 1905 and used this particular mark throughout that time period (Godden 1964:584; Kovel 1986:107). The pattern was called Ivanhoe.

3.11.2.5 Blue/Green-on-White Ceramics

Due to the numerous shades between blue and green that are used in ceramic decoration and the propensity for individual eyesight to result in differing zones of demarcation for each primary colour, those specimens which appear to be intermediate will be characterized as having a blue/green colour. Three artifacts (two catalogue numbers) fit this category.

DILg-69:03/9 is two lip,body,base sherds which fit together to form part of a saucer. The pattern is a garland of small flowers just below the lip and a larger spray of various types of flowers and leaves on the body with smaller pieces of stems and leaves on the cup indentation. The base has a blue/green mark consisting of a crown over a banner with "HANWELL" printed above the crown and "ALFRED MEAKIN LTD" printed inside the banner. This refers to Alfred Meakin Ltd. of Staffordshire, England which has been in business from 1876. This mark has been used from 1891 (Godden 1964:426). The Hanwell may refer to the pattern name. There is also a green potter's mark, a "3", on the base.

DILg-69:03/10 is a body,base sherd from a plate, probably a dinner plate. The pattern, on the body, consists of large green leaves and petals from a smaller green flower. A small portion of a mark on the base consists of what appears to be a triangle over a square. This mark could not be identified using the available ceramic references.

3.11.2.6 Ceramics of Various Colours

Blue and Gold-on-White

(DILg-69:03/2, 11, 12)

Seven sherds have blue and gold-on-white patterns. DILg-69:03/2 consists of five sherds which fit together to form a nearly complete saucer. The dark blue pattern has large floral sprays, with flowers, leaves, and fruit, in the cup indentation as well as covering most of the body. In addition a series of heart-shape forms (four to a group) occur at equidistant points on the body, just below the lip. A single faded gold line is painted along the edge of the lip and sections of the leaf designs are highlighted with gold. A blue maker's mark is printed on the base: a crown over a shield mark with "FAM", in script monogram, and "1755" inside the shield, "ROYAL" printed above the crown, and "BONN", "WILDROSE", and "GERMANY" printed below the shield. This is the mark of the Franz Anton Mehlem Earthenware Factory of Bonn, Rhineland, Germany. The firm was in business from 1836 to ca. 1920 with this particular mark being used from 1888 until 1920 (Kovel 1986:116). The pattern is Wildrose. The dark blue is a flow blue colour.

DILg-69:03/11 is a lip,body sherd from either a plate or a saucer. The pattern on the interior surface is somewhat similar to that on DILg-69:03/2 at least in the flow blue colour, the blurred look of the design of some of the stems and leaves, and the gold outlining some of the stems on the interior pattern. A thin gold line is also painted on the top of the lip. The exterior of this sherd is decorated. It is a solid dark blue with white leaves on it and gold lines outlining some of the leaf patterns. As patterns and designs can vary in a set of dishes, it is possible that DILg-69:03/11 belongs to the same set as DILg-69:03/2.

DILg-69:03/12 is a lip,body sherd from a bowl. The pattern, which occurs on the interior and exterior surface, also has some similarity to part of the pattern on DILg-69:03/2. On the exterior surface of DILg-69:03/11, there are blue heart shaped outlines. These measure 17.8 mm in length and overlie a dark blue band, falling below the band onto the body. A thin gold line is painted along the lip edge. The interior pattern consists of identical smaller heart shapes overlying a smaller blue band and falling below it onto the body. Below these hearts, there is a dendritic pattern of twigs. While, not wholly identical to the pattern on DILg-69:03/2, the paste of both specimens is similar and there is a slight chance that DILg-69:03/12 could also be from the same set as DILg-69:03/2 and DILg-69:03/11.

Brown

(DILg-69:03/118)

DILg-69:03/118 is a thick, curved stoneware body sherd. A small square-shaped extrusion may indicate a handle. Both the interior and exterior are dark brown and it is possible that this is a sherd from a tea pot, perhaps a Brown Betty style.

Brown-on-White

(DILg-69:03/15, 16)

DILg-69:03/15 is a lip,body sherd from a dinner plate. It measures 5.0 mm in thickness. A reddish-brown floral pattern of flowers, stems, vines, and leaves flows over one half of the body. An embossed line of curlicues occurs just below the scalloped lip.

DILg-69:03/16 is a lip, body sherd, also from a plate. However, it is a thicker sherd than DILg-69:03/15 measuring 6.0 mm in thickness and is made of a coarser paste. The pattern, a busy geometric one, consists of an eye-shaped form filled with alternate small dark brown and white triangles. Below this are different geometric shapes—one has vertical brown lines with a central white circle containing a brown and white flower; a second has horizontal brown lines with a white kaleidoscope shape; and a third has a white centre with only a small portion of an unidentifiable pattern. This could be dinner plate or a dessert plate. Neither one of these sherds has any indication of a manufacturer.

Brown and Black-on-White (DILg-69:03/41)

DILg-69:03/41 is a small body, base sherd from a plate, possibly a dessert plate or a decorator plate. The pattern is crudely painted on the base and consists of black twigs with stylized triangular shaped black leaves and faded brownish petals at the ends of the black twigs. This sherd is a finer paste and has a more polished surface appearance than many of the other specimens.

Green (DILg-69:03/17)

DILg-69:03/17 is a portion of the body of a teapot with a complete spout attached. It is colour slipped with a light green.

Grey-on-White (DILg-69:03/40)

DILg-69:03/40 is a large body, base sherd from a dinner plate. It measures 7.0 mm in thickness. The pattern covers the base and body and consists of large grey irregular blotches with thin grey jagged lines interspersed among them. There are no marks to indicate the manufacturer of this sherd.

Pink-on-White (DILg-69:03/60)

DILg-69:03/60 is a basal sherd with a very small portion of the body still extant. The thickness of the base, towards the middle, measures 4.3 mm while the thickness at the edge of the base, where it curves into the body, measures 11.4 mm. This sherd is also a very coarse paste and is cream coloured on the exterior surface with a pink wash on the interior surface. This could be a bowl or a cup sherd.

Purple-on-White (DILg-69:03/1)

DILg-69:03/1 is seven sherds from a dinner plate. The ornate pattern consists of a row of white beads on a striped purple band just below the lip, with masses of purple flowers and leaves on the body, and a zig-zag purple band and a line of purple dots at the junction of the body with the base. The base has an impressed maker's mark "COPELAND", an impressed mold number "34", a purple printed number "14", and the name of the pattern "VIOLET", also printed in purple. Violet was produced by the W.T. Copeland company prior to 1867 and by W.T. Copeland and Sons through the 20th century (Sussman 1979:226).

The first era of this company was known as the Spode period (Sussman 1979:9). This period began in 1776, when Josiah Spode I, after having been apprenticed to various other potters, bought out the William Banks pottery. Josiah Spode I revolutionized pottery making with the introduction of steam power to drive the machinery in his factory and, according to Sussman (1979:8), "...mastered the art of underglaze transfer printing on earthenware...". This pottery company, in Stoke-on-Trent, flourished and eventually Josiah Spode II established a retail shop in London in 1778. The pottery factory used the names Josiah Spode and Spode up until 1833. However, the London retail outlet went through a series of name changes reflected by the changes in partnership over the years: William Spode and Company (1805 to 1811), Spode and Copeland (1811 to 1823), Spode, Copeland and Son (1824 to 1826), Spode and Copeland (1826 to 1833) (Sussman 1979:8-9).

In 1833, after the death of Josiah Spode III, William Taylor Copeland (the son of William Copeland), who was a partner in the London business, and Thomas Garrett, who was a clerk in the London retail store, joined together to take over the firm. It became Copeland & Garrett (Coysh 1972:22; Cushion 1992:303). Copeland & Garrett bought not only the London firm but also the factory in Stoke-on-Trent. Under their ownership, the factory expanded in size to eleven acres of land and the number of ovens increased to twenty-five (Cushion 1992:305). In addition, Cushion (1992:305) also notes that "Copeland and Garrett were employing...seven hundred and eighty hands, seventy-seven of whom were children under the age of fifteen years". Godden (1974:177) states that the Copeland & Garrett firm continued many of the old Spode patterns and "...there is no clear-cut demarcation line between the products of the two". Copeland & Garrett were the first firm to produce what is known as parian ware, that is small porcelain statues that look and feel like marble, in the 1840s. Many other pottery firms followed suit (Cushion 1992:306; Godden 1974:177). Copeland & Garrett maintained an affiliation with the Spode name by including the words Late Spode on some of their stamped marks (Sussman 1979:9).

In 1847, Thomas Garrett retired and William Taylor Copeland continued the business under the name W.T. Copeland until 1867. This firm also included the words Late Spode on some of their marks. In 1867, W.T. Copeland's four sons came into the partnership and the company became known as W.T. Copeland and Sons (Cushion 1992:234; Godden 1961:49, 1964:171-173, 589-590; Sussman 1979:9).

This company continued, under the direction of subsequent generations of the Copeland family, well into the 20th century. In 1932 "...the company was incorporated and the Copeland family ceased to be solely responsible for running the business" (Sussman 1979:9).

Multicoloured

(DILg-69:03/14)

The multicolour category consists of those artifacts which have a pattern of more than three colours. DILg-69:03/14 is the lip, body portion of either a saucer or a shallow bowl. A thin gold line is painted on the body, just below the lip. A green fan-like flower with a brown stem covers the body. A second stem is evident just below the first stem. The flower petals and the stems are outlined in a brown stitch-like pattern. Both the interior and exterior surface are heavily crazed.

4.0 PRE-CONTACT ARTIFACTS

Two disjunct occurrences of a Pre-Contact occupation level were encountered during the trench excavation in the northwestern portion of the area (Figure 1). Lying approximately 50 centimetres below the current surface, the level would have been approximately 60 to 65 centimetres below the 1890 soil horizon which had been removed in this immediate location. The horizon was very thin, 0.7 centimetres at its thickest. Both occurrences extended less than 50 centimetres along the trench wall, with only faint traces of a buried soil horizon between them.

Lithic artifacts and sherds from ceramic cooking pots are the components of the material culture which are least perishable. In some instances, bones from the food animals can be preserved. The soils are non-acidic and this component of the archaeological record is preserved at this location.

4.1 *Lithic Artifacts*

The lithic component of pre-European tool kits is the portion that tends to preserve the best. Bone and wooden tools, as well as clothing and other organic artifacts, decay or burn during prairie/forest fires. Due to the indestructibility of stone artifacts, they have become one of the standard diagnostic tools for assessing cultural affiliations. This assessment is predicated upon the assumption that there were standardized forms for each type of artifact within each cultural group at a specific time period. However, considerable variation can occur due to the degree of skill of the individual tool maker, the quality of the lithic material from which the tool is being made, and the borrowing of ideas from other cultural groups. The above discussion applies to tools such as projectile points and scrapers, rather than non-diagnostic lithic detritus.

Detritus is the category under which the byproducts and waste elements of the tool manufacturing process are catalogued. This category refers to lithic material and includes flakes and cores. It can also include fragments of copper and, in proto/post-Contact times, iron. This category also includes waste products from the manufacture of bone or wooden tools.

The manufacture of stone tools is a complex process. Cobbles and pebbles of the desired raw material are struck with a hammerstone to remove flakes. A source cobble with flakes removed is known as a core. The flakes which have been removed are further shaped, using a stone or antler billet to strike off smaller flakes to thin the original object and to produce the desired shape. At this time, a pointed implement called a flaker, usually made of antler, is used to press small flakes from the edge to produce a sharp, straight cutting edge. During this process, many flakes are produced—some are further modified as retouched flakes, others are used *as is* as expedient cutting tools, but most are discarded at the place of manufacture.

A single chert flake (DILg-69:03/180), weighing 0.1 grams, was recovered. It would have been produced during tool manufacture. The source material would have been obtainable at glacial gravel deposits throughout southern Manitoba. Therefore, it is not possible to ascertain the location from which the toolmaker obtained his raw material.

4.2 *Ceramics*

In every ceramic assemblage, the bulk of the sherds are from the body of the pot. Mathematically, this makes sense since the decorated upper portions of the vessel, which are defined as the rim, usually account for less (generally much less) than 20% of the total vessel surface. Body sherds have traditionally been considered less diagnostic than the rims, necks, and shoulders that comprise the decorated portion of the vessel. However, it is the experience of archaeologists who replicate pottery that decorations are normally easier to reproduce than surface impressions. Until a systematic method of analyzing and describing the visible variation in the body sherds is developed, the level of description tends to be relatively coarse.

Rim sherds are defined as the upper, usually decorated, portion of the vessel and consist minimally of the lip and parts of the neck. For some types of ceramic wares, the decorations extend to the shoulder junction and fragments of these also fall under the definition of rim sherd. The various styles of decoration can be temporally and geographically assigned, providing clues to the identity, the home region, and the time period of the people whose evidence occurs at a particular occupation horizon.

Four minuscule body sherdlets (DILg-69:03/179) were recovered from the southern portion of the cultural layer. They weigh 0.5 grams. The artifacts are too fragmentary to determine the type of surface treatment and, as they derive from the undecorated portion of the cooking pot, it is not possible to identify the type of ceramic ware or the people who produced it.

4.3 *Faunal Remains*

In many archaeological sites, the preponderance of recovered artifacts are the remains resulting from food procurement. The combinations of permeable types of soil, frequent floods causing relatively thick layers of riverine sedimentation, and the lack of forest fires result in a very high degree of preservation of faunal material within the general area of The Forks.

All recovered faunal material is identified using the standard references, among them: Casteel (1976), Gilbert (1973), Mundell (1975), Olsen (1960, 1964, 1968, 1971), and Schmid (1972). The faunal remains are examined and identified as specifically as possible: body part, age of individual, and species. Evidence of butchering techniques, such as cut marks, is recorded as is the condition of the specimen, i.e., charred, broken, chewed, or gnawed.

4.3.1 *Butchering Remains*

Butchering remains are the evidence of food procurement and food preparation by the inhabitants of the campsite. Fifteen fragments of bone were curated (Table 12). In contrast with many other occupation sites in the vicinity, there is little variety in the types of taxa represented. The butchering remains appear to derive from a single animal, an adult bison. The unidentifiable bone artifacts are likely fragments of the larger, identified bones. Only three small scales are indicative of the harvesting of fish from the nearby river.

TAXON	ELEMENT	CAT. #	QTY	WT
Mammal				
Large Mammal	Long bone	186	2	17.7
	Unidentifiable	187	9	4.6
Deer/Cow Family (Artiodactyla)				
Cow/Bison Family (Bovidae)				
Bison (<i>Bison bison</i>)	Radius	185	1	27.6
TOTAL MAMMAL			12	49.9
Fish				
Undifferentiated Fish	Scale	184	3	0.1
TOTAL FISH			3	0.1
TOTAL			15	50.0

Table 12: Butchering Remains from Cultural Horizon

Samples are an expeditious mechanism for the cataloguing of myriads of minuscule recoveries. These consist of specimens recovered on a 2 or 1 millimetre screen and contain diverse artifacts, i.e., charcoal fragments, shell fragments, and small fragmented bone elements. Intensive detailed study of the material catalogued as samples may result in the identification of various plant or animal species, but most of the dominant taxa are already represented by larger recoveries. The additional information obtained through a comprehensive analysis of samples is usually that of degree and further confirmation of specific taxa rather than the identification of previously unrecorded species.

The single sample (DILg-69:03/188) is predominately bone with minor amounts of charcoal and shell fragments. It weighs 0.9 grams. There is some evidence of post-depositional trauma which occurred during or immediately after the food preparation process when bone fragments were placed into the fire. The result is bone which is either charred or calcined (so thoroughly burned that only the inorganic white calcium carbonate remains). The calcined bone fragments within the sample indicate that bone had been burned in the campfire either to lessen odors from decomposition or for use as fuel.

Archaeologists have many techniques to analyse the protein component of Pre-Contact diets. The most common method is to determine the minimum number of individuals of each species represented at the site. This is done by selecting the most frequent element, e.g., left dentary of a catfish, right femur of a bison, etc., and using that number as the minimum number of animals that would have been harvested. A rigorous analysis uses these minimum numbers and an average body weight of the particular species to determine the amount of usable meat that is represented by the bones in the faunal assemblage. This can be further refined by using base line measurements of the specific element and calculating percentage size ratios of the recovered specimens and then applying that corrected value to the usable meat formula. As an example, a dentary from a 10 kilogram catfish measures a certain length and the archaeological specimens may range from 50% to 150% of that size. The usable meat would be a compilation of the

combined ratios times 10 kilograms. A study of this type is applicable when large portions of an occupation site have been excavated. It is not valid for a project where a very limited portion of the cultural horizon has been excavated.

For many smaller sites, a simpler level of analysis is undertaken by determining the frequency of the butchering remains by both quantity and weight. Usually, the fish remains overwhelm the other taxa in terms of quantity. However, as fish bone is small and light in comparison to the larger and denser mammal bone, the proportions are reversed when weight is considered. In this simplistic type of analysis, the amount of available meat is deemed to be relatively proportional to the weight of the residue.

4.3.2 Naturally Deposited Fauna

Naturally deposited fauna consists of two catalogue numbers. DILg-69:03/183 is a partial skeleton of a small rodent: a skull and parts of the front legs. The specimen weighs 0.1 grams. This represents a mouse or shrew which died during hibernation in a tunnel that coincided with the cultural horizon.

DILg-69:03/182 is a fragment of the shell of a Planorbidae, a family of freshwater snail. It would have been deposited along with sediment during a high water episode, becoming mixed with the cultural horizon during the occupation. It weighs 0.1 grams.

4.4 Floral Remains

In some situations, floral material is recovered. Usually this is charcoal which, under optimum conditions, may be identified to species. The charcoal usually derives from wood which was burned in campfires and often comes from locally available trees. Sometimes, specific trees are used for specific purposes. Hardwood trees, such as oak, would produce greater heat for the firing of ceramic vessels, whereas campfire wood would not be as specific and could consist of whatever was easily procurable.

Four small fragments of charcoal were recovered. DILg-69:03/181 weighs 0.1 grams. They appear to represent locally available deciduous species.

4.5 Summary

The evidence suggests a small campsite that extended to the west. The portion of the campsite encountered by the trench would be on the periphery of the occupation area. Given the depth, the age of the campsite could be around 300 years. The presence of earthenware ceramics indicates that European goods, especially iron and brass containers had yet to arrive at this location. Due to the durability of the trader-introduced metal containers, it did not take very long after the onset of the Fur Trade before aboriginal women ceased manufacturing earthenware vessels. Thus, the site would pre-date the late 1700s. The elevation is higher than that recorded for the immediately adjacent Peace Meeting horizon (Quaternary 1990a, 1990b, 1990c, 1999a, 2000a, 2000b, 2001, 2003a, 2003b), which has been radiocarbon dated to 700 years ago. The cultural identity of the occupants of the site cannot be ascertained.

5.0 DISCUSSION

The degree of impact on the site below the historic levels is minimal. The trench for electrical installation is shallow and narrow. The three pile holes are small diameter. The most effect occurred with the upper historic layers which would have developed during the past 120 years. Prior to the institution of city or private garbage pick-up, individual residences would have had their own garbage midden which would have been occasionally hauled away. Some of the debris from these middens would have found its way into depressions on the lot or been churned into the soil during landscaping or gardening. Since the 1960s, mechanized land modification has occurred at the location, resulting in relocation of artifacts across the area. Thus, artifacts cannot be readily tied to the former inhabitants of residences that had existed in this location. In addition, fill for basements of demolished houses may have been trucked in from elsewhere. Therefore, only generalized statements about the usage and frequency of products represented by recovered historical artifacts can be made.

In general, glass containers provide a reasonable chronological sequencing of events as bottles tend to be discarded when empty, as opposed to dinnerware which is only discarded when broken. The use of company maker's marks and other characteristics can result in a defined timeframe during which the product was used. Of note in this regard, are bottles produced by Drewry Brewery which are embossed with the year of manufacture. A single bottle representing 1904 was recovered. The Pelissier & Sons bottle was produced during 1911 - 1914. Other glass containers extend the chronological period into the middle of the 20th century. Dinnerware artifacts could have been deposited as early as 1870 - 1882 (Charles Meakin) but, given that plates often last for decades before being broken and discarded, the time of deposition cannot be ascertained.

Minimal representation of most categories of historic artifacts was recovered. It is not possible to develop a re-construction of past events at the residences that formerly occupied the parking lot area, due to previous land modification activities and the earlier surface removal during this project.

The traces of the Pre-Contact occupation site appear to post-date the 700 year ago Peace Meeting cultural horizon which is extensive to the south and east of this location. It probably represents a campsite of a small group of people at the beginning of the Fur Trade era. As such, it is an era which is under-represented in archaeological research. Accordingly, if further development which entails sub-surface components is anticipated for this area, especially the western portion, **it is recommended that a pre-impact assessment be undertaken and/or construction monitoring be implemented.**

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APPENDIX A
HERITAGE PERMIT



Heritage Permit No. A26-03

Pursuant to Section/Subsection 53 of *The Heritage Resources Act*:

Name: Quaternary Consultants Ltd.
Address: 130 Fort Street
Winnipeg MB R3C 1C7

ATTENTION: Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

monitor trenching and other excavation of the lands to become a parking lot, which are situated between Pioneer and Water Avenues immediately east of the CNR Main Line, designated site DILg-69 and located at The Forks in the City of Winnipeg, in order to record soil stratigraphy and the presence or absence of archaeological materials, and to recover diagnostic artifacts;

during the period:

June 18 – 25, 2003.

This permit is issued subject to the following conditions:

- (1) That the information provided in the application for this permit dated the 19th day of June 2003, is true in substance and in fact;
- (2) That the permittee shall comply with all the provisions of *The Heritage Resources Act* and any regulations or orders thereunder; **Please note attachment re custody and ownership of heritage objects.**
- (3) That the Permittee shall provide to the Minister a written report or reports with respect to the Permittee's activities pursuant to this permit, the form and content of which shall be satisfactory to the Minister and which shall be provided on the following dates:
September 30, 2003;
- (4) That this permit is not transferable;
- (5) This permit may be revoked by the Minister where, in the opinion of the Minister, there has been a breach of any of the terms or conditions herein or of any provision of *The Heritage Resources Act* or any regulations thereunder;



(6) Special Conditions:

- a. All heritage objects are to be deposited with the Manitoba Museum by September 30, 2003, for permanent curation and storage, unless appropriate loan requirements are arranged with the Curator of Archaeology prior to that date;
- b. A complete set of archaeological field records, catalogue sheets, laboratory analysis records, photographs, reports, etc. are to be deposited with the Manitoba Museum of Man and Nature upon completion of the archaeological research, or sooner if required, and any subsequent revisions or additions to these records are to be filed as soon as possible thereafter;
- c. Neither the Government of Manitoba nor the party issuing this permit be liable for any damages resulting from any activities carried out pursuant to this permit, and the Permittee specifically agrees, in consideration for receiving this permit, to indemnify and hold harmless the Minister and the Government of Manitoba, the Minister and any employees and officials of the Government, against any and all action, liens, demands, loss, liability, cost, damage and expense including, without limitation, reasonable legal fees, which the Government, Minister or any employee or official of the Government may suffer or incur by reason of any of the activities pursuant to or related to this permit.

Dated at the City of Winnipeg, in Manitoba, this 20th day of June 2003.

for Donna Dul
Minister of Culture, Heritage and Tourism