ARCHAEOLOGICAL MONITORING OF THE NORTHBOUND MAIN STREET BRIDGE CONSTRUCTION PROJECT

Submitted to

REID CROWTHER & PARTNERS

QUATERNARY CONSULTANTS LIMITED

April 1996

EXECUTIVE SUMMARY

The construction of a new Main Street bridge, immediately east of the existing Bridge of the Old Forts, is part of the Main Street/Norwood Bridges Project. The construction parameters required the excavation of soil on both banks of the Assiniboine River for the construction of abutments which support the river-crossing spans. Due to the potential for impact upon heritage resources, all mechanized excavation was archaeologically monitored. Stratigraphic profiles were recorded and diagnostic artifacts were curated.

The excavations on the north side of the Assiniboine River (DlLg-33) encountered only historic deposits which extend below current water levels. The stratigraphy and recovered artifacts indicate that a major bank-rebuilding operation occurred after 1940. After the bank was rebuilt with fill and stabilized with the placement of overlapped tires as rip-rap, deposits of cinder, clay, and artifacts built up on the new surface. The artifacts appear to derive primarily from restaurants and automotive repair facilities, although other activities are represented in the resources.

The excavations on the south side of the Assiniboine River (DlLg-32) were between the elevated Canadian National Railway track and Main Street. A surface component of recent fill (sand, gravel, and clay) overlay undisturbed riverine sediments. The recent fill continued over the bank as slump layers. Artifacts were only present in the recent fill and date to the twentieth century. No evidence of Homestead, Fur Trade, or Precontact occupations was present within the construction area. The stratigraphic data was extremely variable, consisting of alternating layers of silt and sand of variable thicknesses. No strongly developed relict soils were observed, suggesting that this side of South Point was flood-prone.

TABLE OF CONTENTS

EXECUTIVE SUMMARY						. i
TABLE OF CONTENTS			•			. ii
LIST OF APPENDICES						. v
LIST OF TABLES			٩	è	•	. v
LIST OF FIGURES			•	٠	•	. v
LIST OF PHOTOGRAPHIC PLATES			•			. v
1.0 INTRODUCTION						
1.1 Location and Scope of Project			·	è		. 1
1.2 Study Team						
1.3 Excavation Monitoring Methodology						
1.4 Archaeological Site Designation	3. i	-5	5	ě		7
1.5 Laboratory Procedures						
2.0 NORTH ABUTMENT STRATIGRAPHY						
3.0 NORTH ABUTMENT ARTIFACTS						
3.1 Architectural Objects						
3.1.1 Hardware						
3.1.1.1 Electrical Part			ì.	Ġ	٠.	12
3.1.1.2 Strap						
3.1.1.3 Miscellaneous Hardware						12
3.1.2 Accoutrements						
3.1.2.1 Bathroom Fixtures						
3.1.2.2 Windowpane						
3.2 Science Related Artifacts						
3.3 Medicine						
3.4 Communication						
3.5 Clothing						
3.6 Transportation						
3.7 Housewares						
3.7.1 Bric-a-brac						
3.8 Faunal Remains						
3.9 Containers						
3.9.1 Storage						
3.9.1.1 Glass Containers	٠,٠		12	2	3 12	16

3.9.1.1.1 Condiment and Food Produce Containers	
3.9.1.1.1.1 Sauces and Liquids	17
3.9.1.1.1.2 Foods	19
3.9.1.1.2 Ink Bottles	20
3.9.1.1.3 Milk (or Dairy) Bottles	
3.9.1.1.4 Medicine Bottles	
3.9.1.1.5 Chemical Containers	22
3.9.1.1.6 Cosmetic Containers	24
3.9.1.1.7 Soft Drink Bottles	24
3.9.1.1.8 Beer Bottles	29
3.9.1.1.9 Beverage Bottles	
3.9.1.1.9.1 Winnipeg Bottling Firms	30
3.9.1.1.9.2 Unknown Bottling Firms	31
3.9.1.1.10 Whisky Bottles	31
3.9.1.1.11 Rum Bottles	32
3.9.1.1.12 Liquor Bottles	33
3.9.1.1.13 Unassignable Bottles	36
3.9.2 Cooking	37
3.9.3 Ornamental	37
3.10 Dinnerware	37
3.10.1 Metal Artifacts	37
3.10.2 Plastic Artifacts	38
3.10.3 Glass Artifacts	38
3.10.4 Ceramic Artifacts	
3.10.4.1 White Ceramics	
3.10.4.2 Gold-on-White Ceramics	38
3.10.4.3 Green-on-White Ceramics	38
4.0 NORTH ABUTMENT INTERPRETATION	39
5.0 SOUTH ABUTMENT STRATIGRAPHY	42
6.0 SOUTH ABUTMENT ARTIFACTS	45
6.1 Architectural Objects	
6.1.1 Hardware	
6.1.1.1 Nails	
6.1.2 Accoutrements	
6.2 Communication	
6.3 Clothing	
6.3.1 Bodywear	
6.3.2 Footwear	
6.4 Recreation	
6.4.1 Smoking Equipment	
6.5 Transportation	
Vio ************************************	7/

iv	
6.6 Faunal Remains	47
6.6.1 Butchering Remains	48
6.6.2 Naturally Deposited Faunal Remains	49
6.7 Floral Objects	
6.8 Containers	
6.8.1 Storage	
6.8.1.1 Ceramic Containers	
6.8.1.1.1 Crocks	
6.8.1.1.2 Jars	
6.8.1.1.3 Jugs	
6.8.1.2 Glass Containers	
6.8.1.2.1 Condiment and Food Produce Containers	
6.8.1.2.1.1 Sauces and Liquids	
6.8.1.2.1.2 Foods	
6.8.1.2.2 Medicine Bottles	
6.8.1.2.3 Cosmetic Containers	
6.8.1.2.4 Juice Containers	
6.8.1.2.5 Soft Drink Bottles	경기 생물하다 이번에는 집을 하다가 입어하는 물이 되었다. 이번, 이번, 이번 시간 사람이 되었다고 있다.
그는 사람들이 가장 하나면 하지만 아무리 아내는 아이를 마음을 하지만 하는데 하는데 그는 그를 하는데 그를 그를 하는데 그를 그를 하는데 그를	
6.8.1.2.6 Beer Bottles	
6.8.1.2.7 Beverage Bottles	
6.8.1.2.8 Wine Bottles	
6.8.1.2.9 Gin Bottles	
6.8.1.2.10 Whisky Bottles	
6.8.1.2.11 Liquor Bottles	
6.8.1.2.12 Unassignable Bottles	
6.8.2 Cooking	
6.9 Dinnerware	
6.9.1 Ceramic Artifacts	
6.9.1.1 White Ceramics	
6.9.1.1.1 Manufacturers of White Ceramics	
6.9.1.1.2 Marks on White Ceramics	
6.9.1.2 Gold-on-White Ceramics	
6.9.1.3 Blue-on-White Ceramics	60
6.9.1.4 Green-on-White Ceramics	62
6.9.1.5 Black-on-White Ceramics	62
6.9.1.6 Black and Gold-on-White Ceramics	62
6.9.1.7 Purple-on-White Ceramics	
7.0 SOUTH ABUTMENT INTERPRETATION	64
8.0 RECOMMENDATIONS	66
9.0 BIBLIOGRAPHY	67

LIST OF APPENDICES

APPENDIX A: Heritage Permits
LIST OF TABLES
1: Windowpane from the North Abutment
2: Mammal Recoveries from the North Abutment
3: Brown OXO Bottles
4: Clear Barbecue Sauce Bottles
5: Food Jars
6: Chemical Containers
7: Identified Soft Drink Containers from the North Abutment
8: Information on 7 UP Bottles
9: Information on Coca Cola Bottles
10: Identified Winnipeg Beverage Bottles
11: Rum Bottles from the North Abutment
12: Information on Liquor Bottles
13: Information on Unassignable Bottles
14: Footwear Recoveries from the South Abutment
15: Faunal Recoveries from the South Abutment
16: Natural Faunal Recoveries from the South Abutment
17: Ceramic Storage Containers from the South Abutment
18: Description of Liquor Bottles
19: Description of Unassigned Bottles
20: Plain White Ceramics
21: Other Marks on White Ceramics
22: Blue-on-White Ceramics with Various Patterns
23: Purple-on-White Ceramics with Various Patterns 63
LIST OF FIGURES
1: Location of Project Impacts
2: Limits of Excavations for Abutments
3: Detail of Surface Excavation for North Abutment
4: Location of Caisson Drill Holes
5: Generalized Stratigraphic Sequence at the North Abutment
6. Temporal Chart of Recovered Historic Artifacts - North Abutment 40
7: Frequency of Years Represented by Datable Recoveries
8: Generalized Stratigraphy of South Abutment Excavation Area
9: Temporal Chart of Recovered Historic Artifacts - South Abutment 65
LIST OF PHOTOGRAPHIC PLATES
1: Cinder and Tire Horizons
2: Vertical Excavation Wall at South Abutment
2. , Daniel Zagaranon fran at bount rabutillont

1.0 INTRODUCTION

The development of the new roadway system paralleling Main Street entails the construction of a new bridge across the Assiniboine River. This new structure is located immediately east of the existing Bridge of the Old Forts (Figure 1) and will be connected with the new Norwood Bridge to accommodate northbound traffic. Excavations for the abutments on both sides of the Assiniboine River have the potential for impacting upon heritage resources.

Preparatory to the onset of construction, several archaeological investigations in or near the projected impact area on the south side had occurred. In June 1989, surface inspection of the south bank of the Assiniboine River was undertaken (Quaternary 1989). Artifacts of different historic time periods were recovered from the slumped vertical bank. A subsequent heritage resource impact assessment program on South Point, consisting of four trenches east of Main Street, was conducted in October 1990 (Quaternary 1990). The trenches of this project were located south of the projected impact zone for the south abutment but the stratigraphy indicated that historic archaeological strata may exist under the Fort Garry Curling Club. A series of geo-technical test holes, conducted during December 1993, were monitored. While none of the geo-technical holes were situated within the impact zone, three holes drilled east of the railroad track encountered historic structural debris at elevations equivalent to the surface of the curling club parking lot (Quaternary 1994a:3-4). A final heritage resources impact assessment (HRIA) program prior to construction was undertaken in August 1994. This assessment program, consisting of auger testing beneath the floor of the existing curling club (Quaternary 1994b:30-46), did not recover evidence of undisturbed heritage resources. Monitoring of caisson drilling for the Mayfair Pump Station on the west side of Main Street did not result in the discovery of cultural strata (Quaternary 1995a).

On the north side of the Assiniboine River, construction of the access road from Main Street to The Forks was monitored by an archaeological team in 1989. Excavations for installation of sub-surface services also occurred in this area (Kroker and Goundry 1990a:24-27). Only recent historic artifacts were recovered.

The construction excavation for both abutments was monitored by Quaternary Consultants Ltd. under the terms of Heritage Permits A69-95 and A70-95 (Appendix A).

1.1 Location and Scope of the Project

As depicted on Figure 1, the project was located to the east of the existing bridge across the Assiniboine River. Construction excavation consisted of two types: a general lowering of the elevation in the abutment locations (Figure 2) and auger excavations for the placement of caissons.

The excavation on the north side lowered the generally sloping river bank to a flat surface at an elevation of 226.65 metres above sea level (asl) adjacent to the Assiniboine Riverwalk path (Figure 3). The excavations also entailed a sloping cut of the existing surface from the edge of the access road to the flat area. Further localized excavations, in the form of caisson augering, occurred within

Figure 1: Location of Project Impacts

the flat area. A series of twenty-two holes, 2.1 metres in diameter, were drilled in the abutment area for constructing rockfill caissons to increase the stability of the area. Subsequently, fourteen holes, 1.5 metres in diameter, were augered into bedrock for pouring the abutment foundation concrete caissons (Figure 4).

The excavation on the south side lowered the general elevation from the pre-construction level of 231 metres above sea level (asl) to 225 metres (Figure 2). The Fort Garry Curling Club had been previously demolished and the partial basement infilled. This portion of the site was part of the staging area and will not be impacted until development of the roadbed connecting the new Main Street Bridge with the new Norwood Bridge. Twelve concrete caisson holes were drilled at the base of the general excavation area (Figure 4).

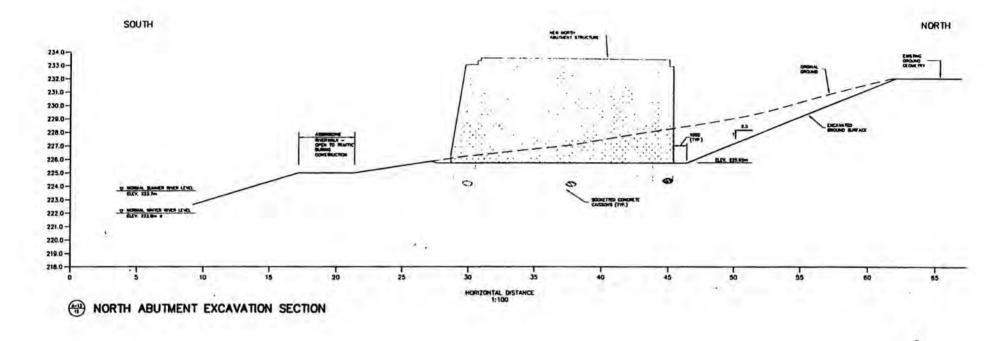
1.2 Study Team

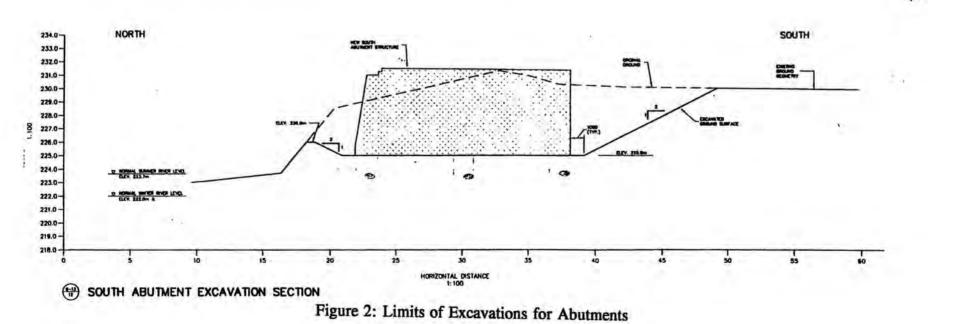
The entire archaeological resources management program was directed by Sid Kroker (Senior Archaeologist). The monitoring of construction excavations were conducted by Sid Kroker and Kate Peach. No mitigative excavations requiring additional staff occurred. Laboratory operations, resulting from artifact recovery, were supervised by Pam Goundry (Research Archaeologist). Computer cataloguing was completed by Pam Goundry. Documentation and analysis has been undertaken by Sid Kroker and Pam Goundry.

1.3 Excavation Monitoring Methodology

The initial excavation for both abutments was undertaken with large backhoes and the soil trucked away from the site. The monitoring consisted of continual visual observation of the face of the excavation with hand-retrieval of artifacts from the historic fill layers. Arrangements had been made with the backhoe operators whereby the monitoring archaeologist could, if necessary, ask the operator for brief (two to five minutes) cessations of excavation for additional examination of the excavation face.

The primary focus for recoveries from the historic fill horizons was diagnostic artifacts, i.e., those which could provide evidence of time period, company of manufacture, and/or function. Accordingly, glass and ceramic containers which often have diagnostic markings were curated. Also, metallic objects which could be identified to function were recovered. However, recovery was selective in that non-diagnostic structural items, such as generic bricks, eavestrough, iron pipes, wire-cut nails, etc. were not generally curated. Collection of quantities of these types of artifacts would not add to the existing knowledge base. It is already known what types of materials were used to construct buildings in the early part of the twentieth century and the collection and curation of fragmented components deriving from the demolition of different buildings from unknown locations would not provide new information while adding considerably to the laboratory processing time and ultimate museum storage space requirements.





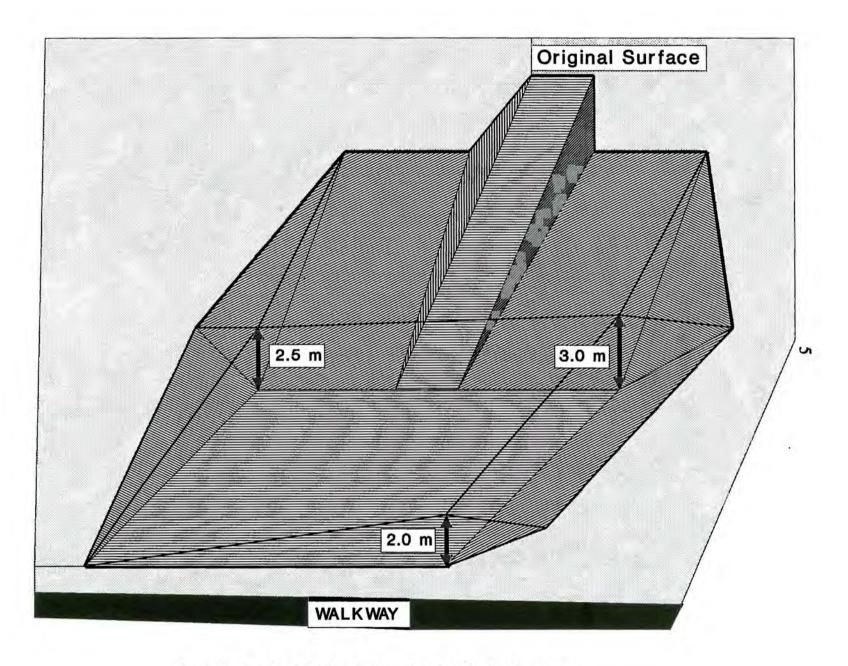


Figure 3: Detail of Surface Excavation for North Abutment

Figure 4: Location of Caisson Drill Holes

When the excavations extended into undisturbed original sediments below the 1890 soil horizon, the monitoring archaeologist watched for buried soil horizons and changes in soil texture which could indicate possible former ground surfaces. The soil profiles were mapped and all instances which suggested potential archaeological horizons were carefully examined. The indicators watched for were 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 fire in the gallery forest lining the banks of the rivers or a cultural event such as a campfire. When evidence of fire was observed, the layer was 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 the presence of lithic tools or flakes resulting from tool manufacture and fragments of earthenware containers.

1.4 Archaeological Site Designation

As mentioned above, each artifact is assigned a Borden designation as part of its catalogue number. The Borden designation, consisting of a four-letter prefix and a numerical suffix, is a Canada-wide system of identifying archaeological sites based upon latitude and longitude. The four letter identifier, DlLg, designates a geographical block between 49° 50' and 50° 00' North latitude and 97° 00' and 97° 10' West longitude. Within each block, archaeological sites are assigned sequential numbers upon discovery.

South Point, the section of land bounded by the Red and Assiniboine Rivers, had been given the Borden designation of DlLg-32 as a result of archaeological discoveries in the 1960s, meaning that it was the location of the thirty-second archaeological site recorded within the geographical block. The Forks area, bounded by Main Street, the Union Station underpass, the railroad berm, Water Avenue, the Red River, and the Assiniboine River, has the Borden designation of DlLg-33. Because each area has, in the past, been the site of more than one archaeological project in a year, a suffix consisting of a year and a sequential project designator has been assigned. For the South Point location of the south abutment, the designator is 95B, resulting in a complete site designation of DlLg-32:95B. For the north abutment, the appropriate designation is DlLg-33:95C.

1.5 Laboratory Procedures

The recovered artifacts were brought to Quaternary laboratory facilities, where they were washed and sorted by material class. After the specimens had dried, all artifacts were identified by the lab personnel. Material of the same type (e.g., white porcelain saucer sherds with a green geometric pattern) within the same excavation unit and level were combined under a single catalogue number. Identification was carried to the limit obtainable by available reference works and staff expertise. Faunal remains were, where possible, identified to element and species.

Each artifact received a catalogue number consisting of the Borden designation for the site—DlLg-32 (south of the Assiniboine River) or DlLg-33 (north of the Assiniboine River), the project suffix,

and a sequential number for permanent identification. All pertinent data associated with the artifact was entered into the computer cataloguing system. The cataloguing system is based upon the Canadian Heritage Inventory Network (CHIN) system (Manitoba Museum of Man and Nature 1986; Kroker and Goundry 1993: Appendix B). The computer cataloguing program is derived from DBASE3® and 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 (Appendix B) will be delivered to the Manitoba Museum of Manitoba which is the repository designated by the City of Winnipeg for artifacts recovered during City projects in the downtown area.

Chapters 2, 3, and 4 will discuss the stratigraphy and historic recoveries from DlLg-33 (north abutment). Chapters 5, 6, and 7 will discuss the stratigraphy and historic recoveries from DlLg-32 (south abutment).

2.0 NORTH ABUTMENT STRATIGRAPHY

The stratigraphic profile of the excavated area for the north abutment is characterized by sequential layers of very recent fill. The vegetation of the area was grass and disturbed ground herbs with a few maple and poplar trees at the eastern periphery. The thin sod layer consisted of a dark loam. The upper layer of fill (Figure 5) consisted of cinder mixed with clay. This stratum ranged in thickness from 0.75 metres at the southwest corner to greater than 3.0 metres at the northeast corner of the excavation area. The majority of the recovered artifacts derived from this stratum. Localized pockets of similar material indicate that riverbank dumping had occurred. One such pocket consisted of an area of approximately 30 square metres of shattered milk bottles with a thickness of 5 to 10 centimetres. Similar pockets contained service station debris or restaurant refuse.

At the interface of the cinder fill stratum and the lower clay fill stratum, a layer of overlapped tires was encountered (Plate 1). This layer had been constructed by placing a small car tire within a larger truck or tractor tire and then overlapping a similar set slightly higher up the river bank. This layer extended across the entire excavation area and continued from the north slope cut to the third series of rock caisson auger holes (Figure 5). It would seem that this layer was constructed to stabilize the riverbank and prevent slope erosion.



Plate 1: Cinder and Tire Horizons

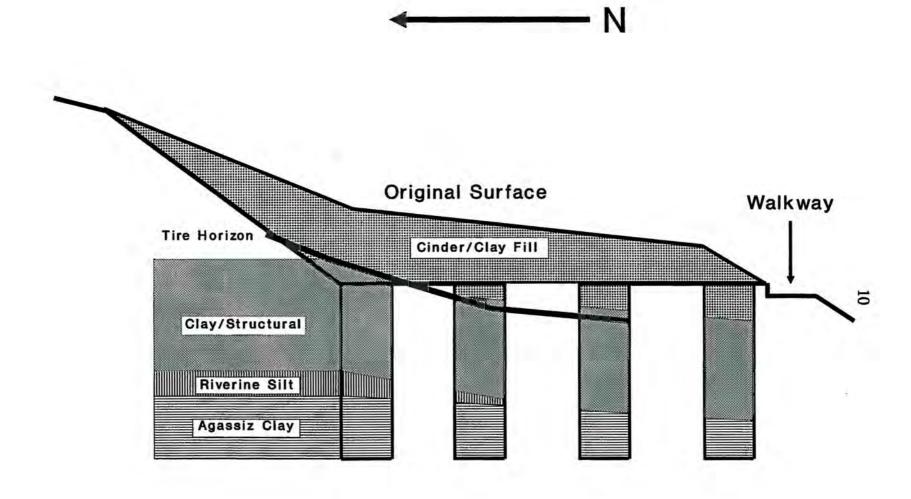


Figure 5: Generalized Stratigraphic Sequence at the North Abutment

The thickest stratum occurred below cinder layer—below the tire horizon in the north part and, in the central part, above and below the tire horizon. This stratum consisted of relocated clay with a considerable quantity of structural elements incorporated in it. The structural material consisted of fragments of concrete, concrete blocks, brick, milled lumber of varying sizes, and twisted fragments of structural steel. The layer varied in thickness but was generally between 3.0 and 4.0 metres thick. At the northern portion of the area, it rested upon undisturbed riverine sediments while at the southern end of the area, it rested upon Lake Agassiz clays.

Riverine sediments were minimally present in the northern portion of the location. A layer, approximately 40 to 60 centimetres thick, of medium brown silty clay was encountered during the caisson drilling at a depth of 3.1 to 3.5 metres below the base of the area excavations. The layer was present intermittently in the second series of caisson holes with a thickness of 5 to 15 centimetres. The basal section of the silty clay layer had strong hematite staining, where it rested directly upon the underlying Lake Agassiz clays. The distinctive grey-blue lacustrine clays deposited when the area was submerged under Glacial Lake Agassiz (until 8500 years ago) were present in all drill holes.

An area of previous impact occurred at the western edge of the excavation area where a telephone cable had been buried at the base of a deep trench and subsequently crossed the Assiniboine River, appearing on the west edge of the excavation for the south abutment. The former trench was filled with mixed clay, structural debris, and some artifacts. It is notable that the earliest identifiable bottles derived from the trench fill.

3.0 NORTH ABUTMENT ARTIFACTS

The historic artifacts, recovered during the monitoring of the mechanized excavation and rock caisson augering, have been analyzed within functional categories based on the Canadian Heritage Inventory Network (CHIN) cataloguing format. All manufacturing equipment or all hardware will be examined together, rather than examining all glass artifacts and then all metal artifacts, as is often the case in reports of historic archaeological recoveries. There were 237 artifacts recovered.

3.1 Architectural Objects

This functional category includes all artifacts which are used for the construction, the maintenance, and the furnishing of structures. These items can be made of many different materials: metal, glass, wood. Due to corrosion and fragmentation, many architectural objects are seldom identifiable to manufacturer or time period. For the purpose of this discussion, the following sub-categories will be used: Hardware and Accourtements.

3.1.1 Hardware

Hardware consists of items which are used for the construction of a structure. Items such as nails, wire, electrical parts, etc. are catalogued in this sub-category.

3.1.1.1 Electrical Part

DlLg-33:95C/18 is a rectangular (76.4 mm x 79.6 mm x 16.6 mm) fuse bracket. It consists of a white ceramic plate with two large circular holes for fuses and two small holes for screws which would attach the bracket to the structure. The text on the front of the bracket reads "TO 30 AMP 125 VOLTS" plus a part number "56543" and the manufacturer's mark "V in a circle".

3.1.1.2 Strap

One large piece of broken steel strap (25.6 mm wide and 5.4 mm thick) was recovered. DlLg-33:95C/22 is a large oval. Measured around the circumference, the specimen is approximately 450 mm long. Perpendicular to the curve of the strap, two oval enlargements (60.0 x 32.0 mm) are present, each having a central oval opening. In addition, five countersunk screw holes are spaced around the circumference.

3.1.1.3 Miscellaneous Hardware

DlLg-33:95C/21 is a complete, threaded pipefitting. The length is 51.3 mm, the internal diameter is 36.5 mm (1½ inch), and the external diameter is 58.9 mm. The outer circumference is augmented with linear, raised ridges to facilitate gripping with a pipe wrench.

3.1.2 Accoutrements

Artifacts ascribed to this category pertain to the finishing touches of a structure. A part of a bathroom fixture and sherds of windowpane were recovered.

3.1.2.1 Bathroom Fixtures

One large, white, porcelain sherd (DlLg-33:95C/19) was delineated as a portion of a bathroom fixture. The hollow, rectangular segment has a series of holes along one edge, possibly for air ventilation.

3.1.2.2 Windowpane

Table 1 outlines the eight pieces of curated windowpane. Only one sherd derives from standard windowpane. The remainder represent stained glass windows. Notably, one of the sherds in DILg-33:95C/207 has been cut into a circular pattern. Three shades of blue are represented:DILg-33:95C/207 is ultramarine; DILg-33:95C/208 is turquoise; and DILg-33:95C/208 is pastel blue with a thin layer of opaque white glass on one side. DILg-33:95C/211 has a layer of yellow glass sandwiched between two layers of rose red glass. DILg-33:95C/212 is nearly totally opaque white glass which may have been used as an accent component in a stained glass window or as a complete window where light, diffuse illumination was required.

CAT. NO.	QTY	COLOUR	COMMENTS
1	1	Aqua	2.2
207	2	Blue	Honeycomb
208	1	Blue	Stippled
209	1	Blue, White	Opaque
210	1	Red	Rippled
211	1	Red, Yellow	Layered, stippled
212	1	White	Opaque
TOTAL	8		

Table 1: Windowpane from the North Abutment

3.2 Science Related Artifacts

Two artifacts were catalogued in this category. DlLg-33:95C/16 is a glass tube (25.8 mm in diameter) with a tapered end and a slight ridge at the wide end. The specimen is 145.9 mm long. The artifact probably is a portion of a battery tester or an antifreeze tester, where a rubber bulb would be attached at the large end of the tube, fitting over and held in place by the raised ridge. A section of small rubber hose would be attached to the small end of the tube, which would be inserted into the medium to be tested.

DILg-33:95C/24 is a cylindrical, metallic tube/resistor with electrical attachments (prongs) at one end. The material shows traces of oxidizing and may be aluminum or zinc-coated tin. Written on the body are four lines of text: "1806684", "1?0965 MED. 12VA. C...", "60C CYCLES", and "MADE IN CANADA". The manufacturer cannot be ascertained and, therefore, the part numbers do not assist in identification beyond noting that this artifact would be a component in a 12 volt circuit. Some early radios and electronic equipment, as well as automotive electrical equipment, operated on 12 volt systems.

3.3 Medicine

This category is represented by a broken, glass syringe (DlLg-33:95C/17). The cylindrical specimen consists of a glass outer tube and an inner glass plunger. Graduations, by fifths of a cc, up to 10 cc are marked on the side of the specimen. The markings are etched into the surface and then filled with red paint. A model number "4588" is on the plunger, while "U.S...." is marked on the outer sleeve.

3.4 Communication

One communication-related artifact was curated—in the sub-category of Telecommunication. DILg-33:95C/2 is the top portion of an aqua, threaded style glass insulator. This style was patented in 1865 and has been used into the 20th century (Kottman 1979:18). There is no embossing on this sherd to denote a manufacturer.

3.5 Clothing

Although representatives of different sub-categories of clothing have been recovered from various projects, only one artifact, a shoe, was recovered during the monitoring of the north abutment portion of the Main Street Bridge project. DlLg-33:95C/12 is the sole, heel, and upper portion of a man's shoe, possibly a size six or seven. The heel has been rebuilt with the addition of a rubber pad, by someone other than a cobbler as evidenced by the ill-fitting nature of the pad which is much bigger than the heel. A mark is embossed on this pad. This consists of a raised circular line with a 'Prince of Wales feathers' mark and an indecipherable name printed above it inside the circle. Shoes are a common recovery throughout this area (Kroker 1989:46; Kroker and Goundry 1990a: 51, 1990b:37, 1993:24; Quaternary 1988:18, 1994c:12-13, 1995b:24-25).

3.6 Transportation

As noted in Chapter 2, several dozens of various sized tires were encountered during the excavations. These ranged from tractor tires to truck tires to automobile tires. In addition, a myriad of fragments of shattered battery cases were present. Other automotive artifacts observed included shock absorbers, parts of bumpers and fenders, as well as shattered headlights. None of these artifacts were sufficiently diagnostic to warrant collection, curation, and analysis.

However, two artifacts, both from vehicles, were catalogued as a representative sample. DlLg-33:95C/20 is a Bakelite distributor cap made by "AUTO-LITE". Additional text consists of the part number "1A01003", "45", "REG. U.S. PAT. OFF.", and "MADE IN U.S.A.". Bakelite is an early form of plastic developed by an American inventor, Leo Baekeland, in 1909 (Mark 1971:Vol. 19:135). DlLg-33:95C/23 is a portion of a hard, rubber battery casing. No identifying marks are present on this specimen.

3.7 Housewares

Housewares is a generalized category covering most items used in the internal operation of a household. One artifact was assigned to this category in the sub-category of Bric-a-brac.

3.7.1 Bric-a-brac

Bric-a-brac is defined as "miscellaneous small articles collected, kept, or displayed for their antiquarian, sentimental, decorative, or other interest" (Stein and Urdang 1967). DILg-33:95C/8 is a portion of a small figurine, an elephant. It is yellowish-brown in colour and measures 73.4 mm in height. The head is missing as are three of the legs. There are no markings on this figurine to denote a manufacturer.

3.8 Faunal Remains

All four of the recovered faunal specimens are the residue from food resources (Table 2). Common names were used to list the identifications. The specimens were identified using standard references: Gilbert (1973), Olsen (1960, 1964), and Schmid (1972). All faunal remains 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, if applicable, of the specimens, i.e., charred, broken, chewed, or gnawed.

TAXON	ELEMENT	QTY	CAT. NO.	COMMENTS
Pig (Sus scrofa)	Femur Humerus	1	11 199	Sub-adult; sawn; cut marks Juvenile; spiral fracture
Cow (Bos taurus)	Innominate Scapula	1	10 198	Adult; sawn Adult; sawn; eroded

Table 2: Mammal Recoveries from the North Abutment

All of the recovered mammal specimens show evidence of butchering activities: sawn or spiral fracture. The two pig (Sus scrofa) elements represent two individuals. The femur derives from an individual which has reached nearly adult size, although the epiphyses have yet to fuse to the diaphysis. The humerus is probably from a suckling pig as the cancellous tissue is quite porous and the size is small.

The two cow (*Bos taurus*) elements are both adult specimens. The sawing indicates that both were processed in the form of moderate to large roasts. Some post-depositional trauma is noted on the scapula. Erosion of the surface of the bone indicates leaching of the calcium carbonate from the surface of the bone by ground water movement.

3.9 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), four of which are applicable to the artifacts recovered from the north abutment of the Main Street Bridge:

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

Within the analytical and computer cataloguing hierarchy, dinnerware is considered as a subcategory of containers. However, for discussion purposes, it is usually treated as a distinct and separate group. In part, this is due to the large quantities usually recovered, as well as the detail of information that can be derived from dinnerware specimens. Accordingly, the dinnerware recoveries are discussed in Section 3.10.

3.9.1 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. Although containers come in a variety of material types, plastic, ceramic, metallic, only containers made of glass were recovered during this project. There were 197 artifacts recovered.

3.9.1.1 Glass Containers

The majority of glass containers, from the north abutment, are complete, with only a few of the specimens being sherds. 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, sealer, jar. Jars are defined as containers which have a generally cylindrical body and a mouth which is greater than 2/3 of the diameter of the widest part of the base or body, while bottles have a constricted mouth and neck. Further identification, to a functional sub-type such as ink bottle, milk bottle, or beer bottle, has been done where possible.

3.9.1.1.1 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 added. 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. The material recovered during this project includes thirty-one catalogue numbers comprising forty-three artifacts identified as Condiment bottles or jars. Some of the recovered specimens could be assigned to specific types of food products.

3.9.1.1.1.1 Sauces and Liquids

This group consists of bottles which contained a variety of products such as flavour enhancing sauces, oils, and other liquids used during food preparation. Twenty-eight artifacts were assigned to this sub-category.

DILg-33:95C/158 is a small, clear, rectangular bottle with a screw cap closure. The paper label indicates that the contents were "PURE VANILLA EXTRACT" produced by "BLUE RIBBON" of "...EDMONTON VANCOUVER...". The size "2 FL. OZ." is embossed on the body, near the shoulder, opposite the paper label. Information embossed on the base indicates that the bottle was manufactured by the Dominion Glass Company of Canada at Redcliff, Alberta in November/December of 1948 from mold number "4818".

DILg-33:95C/159 is a large, rounded rectangular, clear bottle with a rusted iron screw cap still attached. Two decorative raised bars are embossed on opposite sides of the bottle perhaps to provide a gripping surface when pouring. The size "24 FL. OZS." is embossed on the body near the base. Embossed on the base is the company name "WESTERN VINEGARS LIMITED" as well as data indicating that the bottle was manufactured by the Dominion Glass Company in May/June of 1948 at Redcliff, Alberta.

DlLg-33:95C/160 is a brown bottle with a red plastic screw cap. The cap is polygonal with the brand name "OXO" embossed on the top. The bottle is shaped like a barrel with flat front and back sides. Embossed on the base is "OXO" and "RD, 1930". This bottle was manufactured at Wallaceburg in November/December 1948 by the Dominion Glass Company.

Ten cylindrical brown bottles (Table 3), containing the same product, were recovered. They have a screw cap closure and DILg-33:95C/165 has a very corroded iron cap attached. Traces of paper label occur on most of the specimens, and it would appear that the contents were again "OXO". Various portions of descriptions of usages can be discerned on the label fragments as well as "MONTREAL" and "TORONTO". The logo, embossed on the base of the bottles, is that of Owens Illinois Glass Company of Toledo, Ohio which was formed in 1929 (Toulouse 1971:403-406). The corporate mark was used until 1954 and the numerals around the emblem indicate the plant (No. 7 - Alton, Illinois), the year (7 = 1937 or 1947), and mold numbers (3, 5, 7, 9, 10).

CAT. NO. QTY		INFORMATION	
165	1	logo;"7";"7";"9"	
166	2	logo;"7";"7";"3"	
167	1	logo;"7";"7";"5"	Y
168	2	logo;"7";"7";"7"	
169	2	logo;"7";"7";"10"	
170	2	logo;"7";"7";"10"	

Table 3: Brown OXO Bottles

Three clear bottles have the traditional, octagonal shape associated with ketchup, however only two are marked with a manufacturer's name. DlLg-33:95C/202 and 203 are both products of the "HEINZ" company. Both specimens are embossed on the base with "HEINZ", "257", and "MADE IN CANADA". The difference between the two artifacts derives from data pertaining to the date of manufacture of each by Dominion Glass. DlLg-33:95C/202 was produced at Hamilton, Ontario in July/August of 1946, while DlLg-33:95C/203 was produced in Hamilton in May/June of 1948. Both bottles have a screw cap closure although part of the finish is missing on DlLg-33:95C/203. DlLg-33:95C/201 has a similar shape and a screw cap closure. The brand is unknown but the logo of the Consumers Glass Company is embossed on the base and the numeral "1" is embossed, on the body, near the base.

Twelve clear screw cap bottles (Table 4) contained the same product. Two sizes were recovered, the small size measured 152.5 mm in height, while the larger size measured 172.5 mm in height.

CAT. NO. QTY SIZE		SIZE	ZE INFORMATION		
161	1	Large	"PAT. DES. 78426";"G.C.CO.";"2";"3"		
162	1	Small	"PAT. PENDING"; "G.C.CO."; "3"; "2"; logo		
163	1	Small	"PAT. PENDING"; "G.C.CO."; "3"; "5"; logo		
164	3	Small	"PAT. PENDING"; "G.C.CO."; "3"; "6"; logo		
193	1	Small	"PAT. PENDING"; "G.C.CO."; "3"; "2"; logo		
194	1	Large	"PAT. DES. 78426"; "G.C.CO."; "2"; "3"		
195	2	Large	"PAT. DES. 78426"; "G.C.CO."; "3"; "3"		
196	2	Large	"PAT. DES. 78426"; "G.C.CO."; "6"; "3"		

Table 4: Clear Barbecue Sauce Bottles

The bottles are rectangular in cross-section with rounded corners and a slight constriction at midbody. The exterior surface is decorated by four horizontal ribs at the base and a second series at the shoulder. Traces of paper labels enable the determination of the contents as "BARBECUE SAUCE" produced by the "GLAZER CRANDELL CO." of "CHICAGO". The front label lists the ingredients which include salt, vinegar, and other unreadable ingredients. The label on the back suggests uses for the product and notes that one can write for a free cookbook from the company. The manufacturer of the bottle is only attributable, with a high degree of certitude, to those specimens which have the logo of the Anchor Hocking Glass Corporation of Lancaster, Ohio which was formed in 1938 (Toulouse 1971:46-49). The other bottles probably were manufactured by the same firm as the placement of mold and/or plant numbers is identical.

3.9.1.1.1.2 Foods

This group contains jars (Table 5) which were used for foodstuffs such as olives, pickles, etc. Many of these containers were generic styles purchased in bulk from glass manufacturers and customized with the addition of a paper label identifying the product and brand name. Sixteen artifacts were assigned to food types.

CAT. #	QTY	SIZE	COMPANY	DATE	INFORMATION
171	1	16 oz.	Dominion	post-1953	oval; "RD.1932";"4255"
172	1	8 oz.	Dominion	Mar. 1948	round;"7000A"
173	1	16 oz.	Dominion	Sept. 1946	round;stippled base;snap cap
174	1	16 oz.	Dominion	Mar. 1946	round;stippled base;snap cap
175	1	8 oz.	Dominion	May 1948	round; stippled base; "V-434-C"
176	1	8 oz.	Consumers	3	round; lug threads; "5292"
177	1	8 oz.	Consumers	4	round; lugs; stippled base; "6288"
178	1	40 oz.	Dominion	?1942/52	round
179	6	24 oz.	Consumers	-	round; labels; stippled; "6304"
180	1	128 oz.	Dominion	Jan. 1946	round; red, blue, white oval label
200	1	9 oz.	Dominion	Mar. 1948	round;lugs;stippled;"V-346-A"

Table 5: Food Jars

The majority of the specimens in Table 5 are generic jars which are individualized by merchants through the addition of paper labels. Traces of paper labels are present on DlLg-33:95C/180 and DlLg-33:95C/179. The label on DlLg-33:95C/180 is totally illegible save for the letter "A" which begins a word (brand name?, company?, address?, advertising adjective?). The partially torn label on one of the jars in DlLg-33:95C/179 identifies the product as an early type of instant coffee. The white lettering on red paper provides sufficient text to identify the company as "NESTLE" and the product as "SOLUBLE COFFEE EXTRACT". The jars have stippling on the shoulder and on the body, near the base, as well as the base.

All of the jars are cylindrical in shape except for DlLg-33:95C/171 which is a truncated oval in cross-section. The flattened sides are decorated with stepped flat panels resulting in elongate shield sections on the front and back for the application of a paper label which would, if present, identify the product.

Three types of closures are observed. Two containers, DlLg-33:95C/173 and 174, would have been closed with a snap cap fitting over a tapered ridge at the lip. Four containers (DlLg-33:95C/175, 176, 177, 200) would have been closed with a screw cap which sealed on interrupted lug threads. The remaining jars were sealed with screw caps on continuous thread.

3.9.1.1.2. Ink Bottles

Two complete artifacts were assigned to this category. DILg-33:95C/42 is a round, 56.7 mm tall, clear bottle. The shoulder is decorated with a ribbed pattern and the body is divided into four sections by ribbed fan-shaped designs which flow up from the base to the shoulder. This bottle contained "2 OZ." of ink which was "MADE IN U.S.A." from the "PARKER" company. A "B in a circle" mark denotes that this bottle was manufactured by the Brockway Glass Company of Brockway, Pennsylvania (Toulouse 1971:59-62). Although this company has been in existence since 1907, the B in a circle logo was copyrighted in 1928. Additional information is embossed on the base: "59 CC" which equals two ounces; "5" which may be the plant number; and "J-103" which could be a mold number.

DILg-33:95C/181 is a plain, cylindrical, 64.2 mm tall, clear ink bottle. The base is embossed with "RELIANCE INK CO. LTD" in a circumferential circle with "WINNIPEG" occurring horizontally across the base. In addition, the Dominion Glass Company logo also appears on the base as well as a "B" (March/April), a "6" (1946), and a "7". The dot below the logo indicates that this bottle was made at Redcliff, Alberta. Reliance ink bottles have been recovered at nearby sites (Kroker and Goundry 1993:42-43).

3.9.1.1.3 Milk (or Dairy) Bottles

Six clear sherds were designated as portions of milk bottles, four are definitely products of Canadian dairies, while two are unidentifiable. DlLg-33:95C/25 is the lip,neck and upper body portion of a quart-sized, plain, milk bottle. It has "PROPERTY" embossed in a horizontal line at the juncture of the neck and body. DlLg-33:95C/26 is also the lip,neck portion of a quart-sized bottle. It is somewhat more ornate than DlLg-33:95C/25, in that it has an extended circular ring on the neck, 37.7 mm below the lip. Below this ring, ribbing occurs on the remainder of the neck and flows down onto the body. The embossed letters "PROP..." occur in a horizontal line across the ribbing. This ribbing design occurred on products from various dairies in Canada.

DILg-33:95C/27 is a body, base sherd with a Maple leaf embossed on the base, as well as a "D in a diamond", a "1", a "7", and an "F". The bottle was produced by the Dominion Glass Company of Canada in November/December of 1951. The plant of production is unknown. The maple leaf insignia cannot represent the Maple Leaf Dairy of Winnipeg as, according to Chopping (1978:360), this firm was in existence between 1907 and 1915. Therefore, the company cannot be identified at this time.

The remaining three sherds are all body, base sherds embossed with a large "M". Two of the specimens, DlLg-33:95C/28 and 183, have the Dominion Glass logo, while DlLg-33:95C/29 has the Consumers Glass logo. DlLg-33:95C/28 was manufactured in Redcliff in July/August of 1944

and DILg-33:95C/183 was manufactured in Hamilton in July/August of 1949. The identity of the producer using the "M" logo is unknown. It definitely cannot be the Munroe Pure Milk Company (1907) or the Manitoba Creamery Company (1915). A current dairy—Modern Dairy—may possibly be the originator of these specimens. No dating information is present on the base of DILg-33:95C/29.

3.9.1.1.4 Medicine Bottles

Nine catalogue numbers comprising nine complete or incomplete specimens were assigned to the medicine category. To facilitate analysis, the glass artifacts were divided into colour groupings—blue, clear, and white.

In the blue colour grouping, there are two sherds, one complete jar, and one complete bottle. DlLg-33:95C/34 is an oval, body,base sherd manufactured by the Dominion Glass Company from mold number "4208". The shape of the bottle suggests that the contents may have been Milk of Magnesia.

DlLg-33:95C/36 is a complete, squat (50.1 mm), cylindrical jar with a screw cap closure. It was also made by the Dominion Glass Company of Canada from mold number "3083". The contents are unknown, however many of these jars contained creams and unguents.

DILg-33:95C/37 is a complete bottle with a height of 104.3 mm and a diameter of 40.2 mm. The iron screw cap is still attached to this specimen. The bottle was made by Dominion Glass in an automatic machine with a two-piece post bottom mold. In addition, ghost seams are evident on the body. The product name "BROMO-SELTZER" and the intended usage "FOR HEADACHES" is embossed, in small letters, on the body at the base. Although the iron cap is severely corroded, portions of words, in blue ink on a white background, can be discerned: "...EP TIGHTLY CLOS...". DILg-33:95C/35 is a round, body,base sherd manufactured by Dominion Glass from mold number "4809". Embossed on the body, at the base, is the inverted word "SELTZER". This bottle was also a Bromo-seltzer bottle. It is much larger than DILg-33:95C/37 as the basal diameter is at least 80.0 mm. Complete specimens from other sites are embossed with "BROMO-SELTZER" "EMERSON DRUG CO." and "BALTIMORE, MD". This company was first located in Baltimore, Maryland and then later in Toronto, Ontario (Kroker 1989:68).

Year and month code markings are not present on the lateral sides of the Dominion diamond logo on the blue specimens. This indicates that these containers were manufactured between 1928, when the trademark was registered, and 1940, when a dating system was introduced (Miller and Jorgensen 1986:3).

Two complete clear bottles and a clear ampoule were catalogued. DILg-33:95C/40 is a complete, round shouldered panel bottle with a double ring finish (Sydenham 1908:4, 11). The side panels have "WOOD'S" and "TORONTO, ONT." embossed on them while the front recessed panel has "NORWAY PINE SYRUP" embossed on it. It was manufactured by Dominion Glass, in 1945, at the Hamilton plant. The severely corroded, iron screw cap is still attached to this bottle. An

identical bottle, DlLg-33:89B/75, minus the screw cap, was recovered during the Assiniboine Riverfront Quay Project (Kroker and Goundry 1993:48).

DlLg-33:95C/41 is a tall, rectangular bottle with chamfered corners. Embossed, on the base, is the size "XVI OZ.", the mold number "1257", and markings indicating that the bottle was manufactured by Dominion Glass at Point St. Charles in November/December 1963. A portion of the paper label (white lettering on a blue background) is present, indicating that the contents are "RUB...NG AL...", probably rubbing alcohol.

DlLg-33:95C/182 is a small, cylindrical ampoule with a metallic and synthetic seal at the lip. Embossed on the base is "T C W CO.", "10", and "U S A". This serves to identify the manufacturer as the T. C. Wheaton Company of Millville, New Jersey (Toulouse 1971:527-528) and the volume of the ampoule as 10 CC.

Two complete white jars were catalogued as medicine containers. As noted in other reports (Kroker 1989:63; Kroker and Goundry 1993:53; Quaternary 1995b:37-38), these white specimens can contain food products (MacLaren's Imperial Cheese) or cosmetic products (Pond's Cold Cream), as well as medicinal unguents and ointments (dispensed from pharmacies). DlLg-33:95C/39 is a cylindrical jar, 62.7 mm in height and 68.0 mm in diameter. A number, "11", is embossed on the base in a very small font. A severely corroded, iron screw cap is attached to this specimen.

DILg-33:95C/38 is a cylindrical jar, 67.5 mm high by 53.2 mm in diameter. The body is decorated with a raised horizontal ridge at the base and at the sealing point of the spiral thread screw cap closure. The base is embossed with the name of the product "MENTHOLATUM" and "REG. TRADE MARK". The "D in diamond" logo of Dominion Glass is present and the absence of dating indica means that the jar was manufactured prior to 1940.

3.9.1.1.5 Chemical Containers

Nine complete bottles were designated as chemical containers (Table 6). The contents of two bottles were discernible by the shape. DlLg-33:95C/53 is the standard pear-shaped glue container which would have had a rubber dispensing nipple. The rubber nipple would have fitted over a rounded string collar lip. At the base of the shoulder, immediately below the short neck, is embossed "REGISTERED DESIGN". The product was made by Reliance Ink Company Limited of Winnipeg. During the Assiniboine Riverfront Quay Project, a large, complete clear bottle, with portions of a paper label was recovered (Kroker and Goundry 1993:52, Plate 25b). DlLg-33/89B-289 contained mucilage (glue) from the Reliance Ink Company, which in addition to producing inks also produced other products.

DlLg-33:95C/54 is a tapered bottle, rhomboid in cross-section, and decorated with ribbed panelling at the sides. The contents can be assumed to have been shoe polish due to the presence of a fibre-tipped wire applicator embedded in the cork closure. Both the fabric and the cork are stained black. The brand name is not known.

CAT. #	QTY	COLOUR	INFORMATION
52 53 54 55 56 57	1 1 1 1 1	Clear Clear Clear Clear Clear Clear	"NEUTRAGLAS";round;Kimble Glass;"N51-A";"2";30 ML Glue;pear shape; "RELIANCE INK CO. LTD.";Dominion Glass Shoe polish;rhomboid;Dominion Glass;"V-543";"C";"9";"3" "FLY-TOX";round;"13" "ACID LINE";round;two-piece cup;applied lip round;Dominion Glass;"V-733";"3"
58 59 60	1 1 1	Brown Brown Brown	"JAVEL";round;"GILLETT'S";32 OZ;Dominion Glass;"V-836" "JAVEX";round;Dominion Glass;"2" "JAVEX";round;Dominion Glass;"5"

Table 6: Chemical Containers

Only DlLg-33:95C/52 can definitely be identified as an American product, produced by the Kimble Glass Company of Chicago, Illinois (Toulouse 1971:292-293). Kimble is known for "vial making, ampuls [sic], and special glasses for the medical and chemical trade" (Toulouse 1971:292). Neutraglas is a trademark dating from 1941 and the corporate logo, a "K in a trapezoid", dates from 1947. The bottle has a narrow round extract finish.

Two containers have embossed information identifying the products, although producers or manufacturers cannot be determined. DlLg-33:95C/55 contains "FLY-TOX", possibly a liquid which was placed in an atomizing sprayer for killing flies. The bottle is made in a automatic machine and has post bottom mold seams as well as neck and lip seams. It would have been closed with a cork.

DlLg-33:95C/56 would have contained an acid, possibly sulphuric acid for use in automotive batteries. The bottle was blown in a two-piece cup mold and the square ring lip was applied. This indicates manufacture prior to 1920 by an unknown company.

DlLg-33:95C/57 is a large bottle with a pouring spout. The bottle would have been closed with a cork lined glass stopper. The cork is still present. The base is embossed with stippling and horizontal raised bands occur near the base and just below the domed shoulder.

The three brown bottles contained different forms of the cleaning/disinfectant compound known as Javex. DlLg-33:95C/59 and 60, both 198.0 mm tall, are embossed with the name "JAVEX" nine times on the body, shoulder, and base. In addition, the black plastic screw cap (present on both specimens), is embossed with "JAVEX", "REG'D", and "JAVEL CONCENTRATE". These two containers were made by the Dominion Glass Company prior to 1940. DlLg-33:95C/58 is a "32 OZ.", 245.0 mm tall bottle. It is repeatedly embossed with "GILLETT'S JAVEL" on the shoulder and body and is closed with a vertically-ribbed, unembossed, black plastic screw cap. This bottle was made later than DlLg-33:95C/59 and 60, being produced in 1949.

The Dominion Glass Company, after 1939, introduced a system of mold markings which enable determination of the date of manufacture. DlLg-33:95C/59 and 60 were produced prior to introduction of this system. DlLg-33:95C/53 was manufactured at Redcliff in September/October of 1944, while DlLg-33:95C/58 was made at Redcliff in July/August of 1949. DlLg-33:95C/54 was made at the Hamilton plant in May/June of 1949. DlLg-33:95C/57 was made between 1945 and 1955 at an unknown plant.

3.9.1.1.6 Cosmetic Containers

Four artifacts were assigned to this category—a sherd from a white glass jar, two complete blue jars, and one complete clear bottle. DlLg-33:95C/31 is a body, base sherd from a white glass jar. The interior is cylindrical and measures 35.6 mm in diameter. However, a design consisting of a band of seven 30.3 mm long ribs, piled diagonally on top of one another, and extending from the base to the shoulder, gives the outer portion of the jar an oval shape. The word "WOODBURY" is embossed on the base, indicating the contents to be a hand cream. The Dominion Glass logo is also embossed on the base. The jar was made in 1946 at Wallaceburg, Ontario.

DlLg-33:95C/32 and 33 are complete, screw cap, blue jars, although DlLg-33:95C/32 is larger in size than DlLg-33:95C/33, 92.6 mm in height and 88.7 mm in diameter versus 77.8 mm in height and 85.4 mm in diameter. Both jars have a large, embossed "N" with the letters of the product name "NOXEMA" printed within the arms of the "N". DlLg-33:95C/32 also has the Dominion Glass logo as well as the mold number "3". It was manufactured in November/December of 1948. DlLg-33:95C/33 does not have a company logo on it but does have a mold number "6".

The clear specimen (DlLg-33:95C/30) is a "4 FL. OZ.", cylindrical, bottle with a long neck and a constricted lip which would be closed with a screw cap. The bottle is decorated with two ornate bands on each side. These consist of five stippled diamonds, in a vertical lattice, probably used to facilitate gripping of this bottle. The neck also has a pattern of two stippled diamonds end to end on each side. The name of the product "NEWBRO'S QUALITY PRODUCTS FOR THE HAIR AND SCALP" is embossed on one side of the body. In addition a manufacturer symbol, a "T in triangle", denotes that the bottle was made by the Turner Brothers Company of Terre Haute, Indiana which used this symbol from 1915 to 1929 (Toulouse 1971:490-492). A mold number "798" and a "5" are also embossed on the base.

3.9.1.1.7 Soft Drink Bottles

Bottled beverages are ubiquitous in North America since the latter part of the 19th century. They fall into two main categories, alcoholic and non-alcoholic. Often, a bottling firm/brewery would produce both types of products using similar bottles where the particular product was identified by a paper label. Without the presence of this paper label or other identifying mechanisms, many bottles can only be identified to the generalized beverage grouping. In cases where the company produced only a single line of product or where identifying marks are present upon the container, the individual specimen can be attributed to either the soft drink or beer class.

During the monitoring of the excavation for the north abutment on the Main Street Bridge, thirty-four specimens that could be identified as soft drinks were recovered (Table 7). Soft drinks are non-alcoholic, carbonated beverages with a wide variety of flavourings—ginger ales, colas, and fruit-based flavours. Within the soft drink sherds and bottles, several brand names could be identified. The artifacts are listed by brand name, where known, with the name of the producing company in parentheses.

DlLg-33:95C/64 is a clear, ribbed, "NET CONTENTS 6½ OZS.", body,base sherd. The product, Mission Orange, was bottled under license by Blackwoods from the 1940s until 1965 (Stock 1978:20, 24). Decorative elements of the bottle consist of interrupted vertical ribbing at the base and twisted vertical ribbing from the upper body leading into the neck. The name of the licensing company, "MISSION DRY CORP.", is embossed on the base and written on the paper label. The label has white lettering on a black circle on a white square and additional white text, reading "NATURALLY GOOD", occurs on the obverse of the body. The bottle was produced by Dominion Glass in May/June of 1952.

DILg-33:95C/63 is a brown, horizontally ribbed, body, base section of an Orange Crush bottle. The size, "7 FL. OUNCES", is painted on the body. A portion of the identifying logo—with Orange Crush in white on an orange background—is present. On the reverse is a portion of descriptive text "...L/...CTS/...TE/...OR/...ESH/...TE". A similar partial specimen, DlLg-33/88D-2537, recovered during the North Assiniboine Node Assessment (Kroker 1989:75), indicates that the last two words are 'FRESH TASTE'. The bottle was made by Dominion Glass at Redcliff, Alberta. The date of manufacture is indecipherable.

DlLg-33:95C/61 and 62 are both products of the "PEPSI COLA COMPANY OF CANADA LIMITED" which is embossed on the base of DlLg-33:95C/61 but not on DlLg-33:95C/62. The shoulders of both specimens are decorated with vertical bands of embossed cross-hachuring separated by plain bands with "PEPSI COLA" embossed in capital letters. DlLg-33:95C/61, a complete bottle, has a rectangular red-on-white painted logo of the product name on the body and a smaller oval red and white logo on the neck. White text occurs on the opposite side. This includes an oval containing the word "PEPSI", plus traces of white lettering on the body which include the words "MONTREAL QUE.". The bottle was manufactured by Consumers Glass from mold number "4517". In addition, the numbers "14-1949" are embossed on the base suggesting that the bottle was manufactured after 1949, as that year may pertain to a pattern registration. DlLg-33:95C/62, a neck, body, base sherd, is extremely plain in comparison to DlLg-33:95C/61. No traces of the paint labels are present on DlLg-33:95C/62, nor is the basal embossing as comprehensive. Only the Consumers Glass logo and the number "7" occur on the base. One extra decorative feature present on this specimen is stippling on the neck, above the shoulder decorations. Pepsi Cola was first bottled in Winnipeg by Blackwoods, from 1936 to 1940. After 1940, Pepsi Cola bottled its own soft drinks as well as Mountain Dew, Teem, Patio, and Schweppes (Stock 1978:68).

BRAND NAME (Bottler)	QTY	CAT. NO.	DESCRIPTION
MISSION (Blackwoods)	1	64	clear; white and black label
ORANGE CRUSH	1	63	brown; orange and white labels
PEPSI COLA (Pepsi Cola)	1	61	clear; white and red labels
	1	62	clear
7 UP (Blackwoods)	3	67	green; white and red label
A MAN ALTERNATION AND A STATE OF THE ACT OF	1	68	green; white and red label; USA
	1	69	green; white and red label
	1	70	green; white and red label
	1	71	green; white and red label
	1	72	green; white and red label
	1	73	green; white and red label
	1	74	green; white and red label
	1	75	green; white and red label
	1	76	green; white and red label
	1	77	green; white and red label
	1	78	green; white and red label
SUNNYBROOK (Bell Bottling)	3	65	clear; blue and white label
0201794170710 40141410710 20	1	66	clear; blue and white label
COCA COLA	1	79	clear;ribbed
	1	80	clear;ribbed
	1	81	clear;ribbed
	1	82	clear;ribbed
	1	83	clear;ribbed
	1	84	clear;ribbed
	1	85	clear;ribbed
	1	86	clear;ribbed
	1	87	clear;ribbed
	1	88	clear;ribbed
	1	89	clear;ribbed
	1	90	clear;ribbed

Table 7: Identified Soft Drink Containers from the North Abutment

Three complete bottles and eleven sherds (representing nine bottles) are 7 UP, a brand which was originated by the Howdy Orange Company of St. Louis, Missouri around 1924 (Stock 1978:22). Although all are 7 UP bottles, many variations occur within the specimens (Table 8). All of these artifacts are the characteristic green glass with all or portions of the white and red painted logo. Many of the artifacts have portions of the ingredient list: "CARBONATED WATER, SUGAR, CITRIC ACID, SODIUM CITRATE, FLAVOUR DERIVED FROM LEMON AND LIME OILS".

CAT. # SIZE		BOTTLER	MANUFACTURER	VARIETIES
67	7 oz.	unknown	Consumers;"5031"	-
68	7 oz.	Grand Forks Bottling Co.	Owens Illinois; 1951;"G94"	contents
69	7 oz.	7 UP Vancouver Ltd.	Dominion; Jan. 1950; "V-782-A"	contents
70	10 oz.	Blackwoods - Winnipeg	Dominion;Jan. 1957; "3589"	contents
71	7 oz.	Blackwoods - Winnipeg	Dominion;Jan. 1947;"6937"	contents
72	7 oz.	Blackwoods - Yorkton	Dominion;Jan. 1948;"6937-B"	contents
73	7 oz.	Blackwoods - Winnipeg	Dominion; Mar. 1950; "6937"	contents
74	7 oz.	Blackwoods - ?	Dominion; Nov. 1949; "7949-F"	text
75	7 oz.	Blackwoods - Winnipeg	Dominion; May 1945; "6937"	text
76	7 oz.	Blackwoods - Winnipeg	Dominion;Jan. 1948; "6937-B"	contents
77	7 oz.	Blackwoods - Winnipeg	Consumers; "5031"	contents
78	7 oz.	Blackwoods - Winnipeg	Consumers; "5031"	text

Table 8: Information on 7 Up Bottles

Three different bottlers, four different bottling locations, and three different glass manufacturers are represented. Even when the container is produced by the same bottler, variations in text and font occur within short periods of time. This is particularly evident in the Blackwoods Winnipeg bottles where the size of the lettering for the white text changes. In addition, the actual content of the text changes. The earliest specimen, DlLg-33:95C/75, does not have a list of contents. The text reads "A 'FRESH UP' DRINK" and "SIP IT SLOWLY/TASTE EACH SIP". This text also occurs on DlLg-33:95C/78, the Consumers Glass bottle, suggesting that it is the same time frame as the Dominion Glass bottle. The text changes (by January, 1947) to read "THE 'FRESH UP DRINK'" and the list of ingredients. By November of 1949, the text changes with the addition of the word "7-UP" above the other text. Also the size of the lettering is larger for all of the remaining text. This text remains the same until the last bottle in the sequence, DlLg-33:95C/70, in 1957. The Consumers bottle, DlLg-33:95C/77, falls into this latter sequence and the "8" embossed on the base may indicate manufacture in 1948 just as the "6" embossed on DlLg-33:95C/78 may indicate 1946, based upon the text seriation provided by the Dominion Glass bottles.

DlLg-33:95C/68, the American bottle, was produced by Owens Illinois at Plant No. 9. The type of glass appears to be a trademarked variety called "DURAGLASS", introduced in the 1940s (Toulouse 1971:403). A slight variation occurs on the front 7 UP logo where the phrase "REG. U.S. PAT. OFF." is present at the base of the design whereas on the Canadian bottles, of the same time period, the phrase is "TRADE MARK REG.". The final variation occurs on the latest specimen, DlLg-33:95C/70, which does not mention either trademark or patents.

As noted in Table 7, one chipped bottle (DlLg-33:95C/66) and three partial bottles (DlLg-33:95C/65) are all specimens of "SUNNYBROOK", a brand produced by the Bell Bottling Company. This company originated as Boroditsky Brothers Aerated Water Company in 1917 and by 1924 had become the Bell Bottling Company. It produced several soft drinks, including Sunny-Brook, Wynola, Sun Crest, and Keystone, during the 1940s through the 1960s (Stock 1978:35). The bottles are decorated with stippling at the base and shoulder plus diagonal raised ridges on the

neck. The logo, a white sun on a blue background with the name "SUNNY-BROOK" and "T.M. REG" are painted on the front. The white text on the back reads:

"THE EMPIRE SUN NEVER SETS
IMPORTANT
THIS BOTTLE DESIGNED TO
REVEAL THE PURITY OF THE
CONTENTS
SEE WHAT YOU DRINK!
BELL BOTTLING CO. LIMITED
WINNIPEG-MANITOBA
CONTENTS 7½ OZS."

All bottles were manufactured by Consumers Glass from mold number "4704". Additional numerals embossed on the bases are "3", "2", and "1" twice. Based on the assumption obtained from the 7 UP bottles, these could represent the years 1951, 1952, and 1953.

The final twelve specimens listed in Table 7 are all Coca Cola bottles. Because variations also occur on these artifacts, another table (Table 9) has been constructed to outline the available information. All specimens are "MIN. CONTENTS 6 FL. OZS." with the product name "COCA COLA" embossed in large script. Two variations of additional text are observed. Type I reads "THE COCA COLA COMPANY OF CANADA, LIMITED" and "TRADE MARK REGISTERED". Type II reads "TRADE MARK REGISTERED COCA-COLA LTD." and "TRADE MARK REGISTERED". The Type II specimens demonstrate two varieties: IIa with the text in small font and IIb with the text in a larger font. If one examines the dates in Table 9, the last date for Type I is July, 1947 and the first date for Type IIa is November, 1947. Type IIa continues until January, 1948 and in March, 1948 Type IIb occurs.

CAT. NO.	PORTION complete	MANUFACTURER	TYPE	
79		Consumers;1941?	1	
80	complete	Dominion; Jan. 1948; Redcliff	IIa	
81	complete	Dominion; Mar. 1948; Redcliff	IIb	
82	complete	Dominion; Mar. 1949; Point St. Charles	IIb	
83	neck;body;base	Dominion; May 1946; Redcliff	I	
84	neck;body;base	Dominion; May 1947; Redcliff	I	
85	neck;body;base	Dominion; May 1947; Redcliff	I	
86	neck;body;base	Dominion;July 1947;Redcliff	1	
87	neck;body;base	Dominion; Nov. 1947; Redcliff	IIa	
88	neck;body;base	Dominion; July 1948; Point St. Charles	IIb	
89	neck;body;base	Dominion; Nov. 1948; unknown	IIb	
90	neck;body;base	Dominion; Nov. 1947; Redcliff	IIa	

Table 9: Information on Coca Cola Bottles

3.9.1.1.8 Beer Bottles

As has been noted in other reports (Kroker and Goundry 1993:60), it is tempting to ascribe all containers produced by a brewing company to this class. However, this is impossible as most brewing companies, except McDonagh & Shea, appear to have had side-lines of soft drinks. Similarly, firms like Blackwoods Limited, which concentrated on soda waters, are known to have produced some beers (Chopping 1978:105). Most of the products identified to these and other similar firms will be discussed under the general class of Beverage bottles (3.9.1.1.9).

Six artifacts—four complete bottles and two sherds—were assigned to the Beer sub-type. Four of these specimens are products of the McDonagh & Shea Company. John McDonagh and Patrick Shea purchased the Celestin Thomas brewery, in Winnipeg, in 1887. In 1926, McDonagh & Shea became Shea's Winnipeg Brewery, thereby providing a terminal date for the series. The only aqua specimen, DlLg-33:95C/91, a body,base sherd, has portions of the characteristic monogram of McDonagh & Shea, "McD & S". This is identified as Chopping type MWIN BC3-1 (Chopping 1978:135). The remaining McDonagh & Shea bottles are brown. Two complete specimens have a basal embossing of "P. B. & CO." and, based upon variations in the monogram, can be identified as MWIN BC5-4 (DlLg-33:95C/93) and MWIN BC5-5 (DlLg-33:95C/94). The "P. B. & CO." would identify the manufacturer of the bottle, however, Toulouse (1971) does not list this logo. An earlier incomplete specimen, DlLg-33:95C/92, was produced in an automatic bottling machine using a two-piece post mold. The monogram most closely matches MWIN BC8-1 (Chopping 1978:139), although a mold number noted by Chopping on the body is not present on this specimen.

As noted above, the successor to McDonagh & Shea was Shea's Winnipeg Brewery in 1926. DlLg-33:95C/96 is a complete bottle with an eroded paper label which identifies the product as "SHEA'S SELECT". Small text at the base of the label reads "...A'S WI...ARRY M...E...". The markings on the base of the bottle indicate that it was produced by Consumers Glass from mold number "641" in 1947.

Another firm which produced bottles solely for beer was Brewery Products Limited. One complete bottle, DlLg-33:95C/95, was assigned to this company. The base is embossed with "B.P. LTD." and the body, near the base, is embossed with "THIS BOTTLE BELONGING TO BREWERY PRODUCTS LIMITED MAY NOT BE SOLD". Additional markings on the base indicate that the bottle was manufactured by Dominion Glass in 1948. A slight variation in the Dominion Glass markings is the absence of the letter indicator for the month and the use of the numeral "2". This may have been a requirement imposed by Brewery Products. Brewery Products Limited appears to have been a supply company rather than a brewing firm. Chopping (1978:135) notes that a Brewery Product bottle was used to contain Shea's Select Beer, produced by Shea's Winnipeg Brewery. Other breweries would have used the bottles, placing a paper label on them to identify their own brand. Kiewel's Brewery is known to have used the bottles for their White Seal brand of beer.

3.9.1.1.9 Beverage Bottles

As noted earlier, breweries bottled soft drinks, as well as beer, and often used the same type of bottle for both products. Without the paper labels, it is impossible to ascribe a specific product to an archaeologically recovered bottle. Thus, the bottles are assigned to the generalized Beverage class. Within this sub-type, 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.

Seven artifacts (five complete and two incomplete) were recovered. Six of the recovered specimens are attributable to Winnipeg bottling firms, while one could not be assigned to either a manufacturer or a producer.

3.9.1.1.9.1 Winnipeg Bottling Firms

There was an active beverage industry in Winnipeg with several firms vying for the market. Recoveries from the north abutment of the northbound Main Street Bridge Project include bottles representing two of these companies: Blackwoods and Drewry (Table 10).

The two firms (Blackwoods and Drewry) dominated the local market or, at least, their bottles are the most commonly found. Blackwood Brothers, later Blackwoods Limited, is better known as a bottler of soft drinks while E. L. Drewry Limited appears to have concentrated on brewing beer. The passage of the Manitoba Temperance Act in 1916 resulted in both firms, and other 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. In 1923, broad-based restrictions were eliminated by the introduction of the Liquor Control Act.

COMPANY	CHOPPING NO.	DATE	COLOUR	QTY	CAT. NO.
Blackwoods	MWIN BA19-1	1883-1901	Aqua	1	102
Drewry	MWIN BG10-1	1903	Clear	1	97
	MWIN BG13**	1906	Aqua	1	98
	MWIN BG17**	1910	Aqua	1	99
	MWIN BG26-1	1911	Aqua	1	100
	MWIN BG30	1914	Aqua	1	101

Table 10: Identified Winnipeg Beverage Bottles

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).

One complete bottle (DlLg-33:95C/102) with the Blackwood's name and the standard ownership clause—"THIS BOTTLE IS OUR PROPERTY ANYONE USING DESTROYING OR RETAINING IT WILL BE PROSECUTED BLACKWOOD BROS."—was curated. This artifact could be identified to a Chopping type (Table 10). Chopping lists type BA19 and sub-type BA19-1 as clear (Chopping 1978:106). This specimen is identified as sub-type BA19-1 based on the embossed trademark. However, the specimen is aqua and should probably be considered a separate sub-type. A comprehensive revision of Chopping's types is beyond the scope of this project. The text identifies the bottle as deriving from the period of 1883 to 1901.

The Drewry company began in 1877 when E. L. Drewry leased the Redwood Brewery and produced beverages labelled 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 beers and ales, the firm produced several brands of soft drinks (Stock 1978:11-13).

Five Drewry bottles, three complete, one chipped, and one base sherd, were identified by Chopping numbers (Table 10). The last two digits of the year of bottle manufacture are embossed on the base of Drewry bottles and the years represented are 1903, 1906, 1910, 1911, and 1914. Slight variations from the Chopping types were noted on some of the specimens (noted in Table 10 with ***). DlLg-33:95C/98, a complete bottle, differs from Chopping's illustration (1978:199) in that the year date "06" is bounded by a circle rather than a rectangle. Additionally, a faint capital "E" occurs embossed under the numeral. Otherwise, the font of the identifying text is the same, i.e., larger than the small font introduced in 1907. DlLg-33:95C/99 (the chipped bottle) matches Chopping's BG17 except that the specimens he records are yellow while this bottle is a greenish aqua colour. Chopping has an aqua specimen dated 1910 but the illustrated basal markings are quite different (Chopping 1978:121). Again, this specimen is a colour variant of an existing type and probably deserves its own sub-type number. The remaining Drewry specimens match Chopping's illustrations and descriptions.

3.9.1.1.9.2 Unknown Bottling Firms

One artifact, a complete bottle, was recovered and could not definitely be assigned to a specific bottling company. DlLg-33:95C/103 is a generic, brown bottle with a crown closure. It would have had a paper label identifying the contents and the bottling firm. The bottle, embossed with "MADE IN CANADA" and mold number "415", was manufactured by the Dominion Glass Company in November of 1947 at the Wallaceburg, Ontario plant.

3.9.1.1.10 Whisky Bottles

Whisky bottles are often identifiable by the embossing on the sherds or, in some cases, by remnants of paper labels adhering to the artifact. Two complete bottles were assigned to this sub-type. DlLg-33:95C/108 is an oval, brown bottle embossed with the size "25 OZ." and a depressed embossed "SEAGRAM'S" on a raised band at the base. This bottle would have been closed with a screw cap

and was made in a two-piece post mold by Consumers Glass. DILg-33:95C/111 is an oval, olive green bottle made in a two-piece post mold. Embossed on the base are "NB", "6", and "S273". The letters identify the North British Bottle Manufacturing Company of Shettleston (near Glasgow) Scotland. This firm was in operation from 1903 to 1937 and "many of its bottles, filled with Scotch Whiskey, found their way to the United States" (Toulouse 1971:377). The bottle has a mold seam extending to the top of the lip indicating manufacture after 1920, even though it would have been closed with a cork.

3.9.1.1.11 Rum Bottles

Seven complete bottles were assigned to the rum sub-type (Table 11). Most producers use generic bottles, identifying themselves and their product with paper labels. Six of the bottles are assigned to this category based on remnants of paper labels, inasmuch as there are no specific identifying marks on the containers.

CAT. NO.	QTY	BOTTLER	MANUFACTURER
107	1	Bacardi	Owens Illinois
125	1	Corby's	Dominion; Nov. 1945; Hamilton; "8"
126	1	Corby's	Dominion; Nov. 1951; Redcliff; "1"
127	1	Corby's	Consumers;1949?;"2003"
128	1	Corby's	Dominion;? 1948; Wallaceburg; "8"
129	1	Corby's	Dominion; July 194?; Point St. Charles; "9"
130	1	Corby's	Consumers;19??;"2003"

Table 11: Rum Bottles from the North Abutment

DlLg-33:95C/107 is a light green bottle which would have had a cork closure. Considerable text is embossed on the specimen. Inside the basal kick-up is the producer's name "BACARDI CORP. OF AMERICA" "SAN-JUAN, P.R." as well as the logo for Owens Illinois. Other markings indicate that the bottle was manufactured in 1947 (Toulouse 1971:403). Embossed on the shoulder is the phrase "FEDERAL LAW FORBIDS SALE OR RE-USE OF THIS BOTTLE" indicating that the product was licensed for sale in the United States.

The remaining six bottles, all clear and containing "25 OZS.", were identified by paper label fragments. DlLg-33:95C/126 has a decal of an orange and green parrot with a word balloon "SAY CORBY'S!". Red script on the fragment of a white label, on the body, reads "SINCE 18...". A portion of the same parrot decal occurs on DlLg-33:95C/125 and part of the wrapping on the neck is present on DlLg-33:95C/127. Isolated letters, including "...ADA" and "PORT..." appear on the scattered traces of the paper label on DlLg-33:95C/129. The identifying characteristic of all specimens, regardless of the bottle manufacturing firm, is a string collar on the neck, approximately 13.0 mm from the top of the shoulder. All of the bottles have a similar screw cap closure and identical dimensions thus, even the unmarked specimens could readily be attributed to the same firm denoted by the text on the decals.

3.9.1.1.12 Liquor Bottles

This sub-type is a catchall for bottles that held some type of spirits but could not be assigned to whisky, gin, beer, etc. Forty-eight artifacts were catalogued (Table 12). The name of the bottling firm could be identified for four specimens, but the exact type of contents was not discernible. The manufacturer of the bottle was identifiable in most cases.

DILg-33:95C/105 and 106 (one complete and one incomplete) are products of a firm based in "BORDEAUX-FRANCE". The bottles are square in cross-section with a long attenuate neck with a down-tooled finish that takes a cork closure. The text "FEDERAL LAW FORBIDS SALE OR RE-USE OF THIS BOTTLE" indicates the product was destined for the United States market. The only readable portions of the white, red, and green paper label on DILg-33:95C/106 are reiterations of the company name "MARIE BRIZARD & ROGER" which is also embossed on both lateral sides of the bottle. The bottle was made in a two-piece post mold after 1920 as indicated by the mold seam which extends to the top of the lip. No indication of the bottle manufacturer is present although probably it was a French firm. It is assumed that the contents of these two containers would have been brandy.

DILg-33:95C/109 is a complete oval bottle which has a screw cap closure. The company name "FLEISCHMANN'S" is embossed on the panelled lateral sides. Moldings on the front of the bottle indicate that a paper label would have covered the majority of the face, while the U.S.A. caveat is embossed on the shoulder at the rear. Embossings on the base indicate that the bottle was produced by the Owens Illinois Glass Company, in 1949, from mold number "D-247".

DlLg-33:95C/110 is a complete bottle with considerable embossed text and minor fragments of a black and yellow paper label. The body is circular in cross-section with twelve flutes extending from the shoulder to the upper portion of the neck. The lip, demarcated by a horizontal mold seam, is flat and would have taken a cork closure. Embossed on the neck, with one letter per flute, is the brand name "WISER'S DELUXE". The basal embossings consist of "WISER'S DISTILLERY", "BELLEVILLE ONT.", "REG'D APP'D 1924", "4", and the logo of Consumers Glass. Even though the shape is reminiscent of a wine decanter/carafe, it is probable that the bottle, based upon the name, contained a premium brand of liquor.

Eleven complete and two body,base sherds from "12 OZS." oval liquor bottles were recovered. Four specimens are brown and the remaining nine are clear. The brown artifacts were all produced by Dominion Glass, while the clear bottles were produced by both Dominion and Consumers Glass. All specimens would have been closed with a metal screw cap and DlLg-33:95C/112, 119, 120, and 121 still have the iron cap. Traces of lettering on the cap are legible on DlLg-33:95C/120—"PROVINCE OF M..." and "CANADA"—in white lettering on a black background. Variations in the embossed data on the base enable determination of the date and place of manufacture for the Dominion Glass specimens (Table 12) and the mold numbers and production runs for Consumers Glass (Table 12). Occasionally the markings are clear enough to determine the Dominion Glass plant of manufacture: Wallaceburg, Ontario (DlLg-33:95C/113, 114), Hamilton, Ontario (DlLg-33:95C/192), and Redcliff, Alberta (DlLg-33:95C/118).

CAT. #	COLOUR	BOTTLER; MANUFACTURER	COMMENTS
105	Green	Marie Brizard & Roger; -	cork
106	Green	Marie Brizard & Roger; -	paper label
109	Clear	Fleischmann's; Owens Illinois;1949	4/5 quart
110	Clear	Wiser's Distillery; Consumers	paper label
112	Brown	-; Dominion;Nov. 1948;"8"	12 oz.;iron cap
113	Brown	-; Dominion;Nov. 1949;"2"	12 oz.
114	Brown	-; Dominion;? 1945; "4"	12 oz.;body,base
115	Brown	-; Consumers; "2002"; "1"	12 oz.;body,base
116	Clear	-; Dominion;July 1949;"9"	12 oz.
117	Clear	-; Dominion; Sept. 1949; "7"	12 oz.
118	Clear	-; Dominion;Jan. 1950;"3"	12 oz.
119	Clear	-; Consumers; "2002"; "4"	12 oz.;iron cap
120	Clear	-; Consumers; "2002"; "3"	12 oz.;iron cap
121	Clear	-; Consumers; "2002"; "1"	12 oz.;iron cap
122	Clear	-; Consumers; "2002"; "2"	12 oz.
123	Clear	-; Consumers; "2002"; "7"	12 oz.
124	Clear	-; Consumers; "2002"; "8"	12 oz.
131	Clear	-; Dominion; July 1949; "9"	26 oz.
132	Green	-; Dominion;Sept. 1956;"2";"V-1612-D"	26 oz.;base
133	Green	-; Dominion; May 1950; "4"; "V-475-C"	26 oz.
134	Green	-; Dominion;May 1949;"3";V-637"	26 oz.
135	Green	-; Dominion;May 1951; "9";V-475-C"	26 oz.
136	Green	-; Dominion; Jan. 19??; "8"; V-475-D"	26 oz.;iron cap
137	Green	-; Dominion;May 1951;"1";V-475-C"	26 oz.;iron cap
138	Green	-; Dominion; July 1950; "4"; "V-475-C"	26 oz.;iron cap
139	Green	-; Dominion;May 1950; 4 , V-475-C"	26 oz.;iron cap
140	20 x x c c c c c c c c c c c c c c c c c	-; Dominion;Nov. 1951; "3";V-475-D"	26 oz.;iron cap
141	Green	-; Consumers;"2006";"5"	26 oz.;iron cap
	Green		
142	Green	-; Consumers: "2006"; "6"	26 oz.;iron cap
143	Green	-; Consumers; "2006"; "7"	26 oz.;iron cap 25 oz.
144	Brown	-; Dominion;Sept. 1950; "7"; "V-811-A"	Description of the second
145	Brown	-; Dominion;July 1951; "7"; V755B"	25 oz.;paper label
146	Brown	-; Dominion;Mar. 1950;"6";V-755"	25 oz.
147	Brown	-; Dominion;Mar. 1949;"6";V-755"	25 oz.
148	Brown	-; Dominion;Nov. 1948;"1";V-755"	25 oz.;paper label
149	Brown	-; Dominion;?? 19??;*3"	25 oz.;paper label
150	Brown	-; Dominion;?? 19??;"5";"V261A"	25 oz.;paper label
151	Brown	-; Dominion;?? 19??;"1";"V261A"	25 oz.
152	Brown	-; Dominion;?? 19??;"8";"V261B"	25 oz.
153	Brown	-; Dominion;?? 19??;"9";"V261B"	25 oz.
154	Brown	-; Dominion;?? 19??;"9";"V261B"	25 oz.;paper label
155	Brown	-; Dominion;?? 19??;"10";V261B"	25 oz.
156	Brown	-; Dominion;?? 19??;"9";V261E"	25 oz.
157	Brown	-; Consumers;"2003";"3"	25 oz.
191	Brown	-; -;"6";"WY194"	cork
192	Clear	-; Dominion;Jan. 1948;"2"	12 oz.
205	Green	-; Dominion;Mar. 19??;"8"	26 oz.
206	Green	-; Dominion;Nov. 1952;"4";monogram	body,base

Table 12: Information on Liquor Bottles

DlLg-33:95C/131 is a cylindrical bottle with a screw cap closure which was produced by Dominion Glass, in 1949, at Redcliff. The base has a pronounced stippling. Thirteen green specimens produced by Dominion Glass and Consumers Glass are identical in size and configuration, i.e., cylindrical body, bulging neck, and screw cap closure. The only difference between the green bottles and the clear artifact is the addition of an elongate embossed blob on the body near the base of the green bottles. The screw caps that are present are severely corroded. Traces of lettering—"...NC..." and "CAN..."—on DlLg-33:95C/141 suggest that the text is the same as noted on the cap on the smaller 12 ounce oval bottles. The green Dominion bottles were primarily produced at Point St. Charles, Quebec (DlLg-33:95C/132, 133, 134, 135, 137, 139, and 205) with a single specimen manufactured at Wallaceburg (DlLg-33:95C/144).

Fourteen complete or slightly chipped brown bottles were recovered. Two styles are present in these bottles. The first group is embossed with "25 OZ," and has a two-part flattened side finish (Jones and Sullivan 1985). They would have been closed with a cork. This type is represented by five specimens (DlLg-33:95C/144, 145, 146, 147, 148) all of which were produced by Dominion Glass at Wallaceburg. Only DlLg-33:95C/145 and 148 have a trace of a paper label on the neck which does not provide any information as to the brand name or the contents. The second type is embossed with "25 OZS.", has a bulging neck with a string collar below the bulge, and a screw cap closure (DILg-33:95C/149, 150, 151, 152, 153, 154, 155, 156, 157). Except for the string collar, the specimens most closely resemble the green and clear 25 ounce bottles. The mold number on DlLg-33:95C/157 is the same as that on DlLg-33:95C/127 and 130 (clear bottles identified as Corby's Rum). The font of the text identifying the volume is slightly larger on DlLg-33:95C/157 but the identical nature of the bottle itself may bring into question the wholesale identification of all clear bottles as rum bottles. In reality, it may be that this style was a generic liquor container which was customized by various distillers through the addition of paper labels and only the Corby label happened to preserve. Traces of a paper label are found on the bodies of DlLg-33:95C/149 and 154. The brand name can be identified as "MOUNT ROYAL". The remainder of the labels are severely traumatized and only isolated letters can be discerned precluding identification of the type of liquor and the producer.

DlLg-33:95C/191 is a heavy, oval bottle with concave panels at the sides. The two-piece finish consists of a flattened side lip and a rounded string collar. It is closed with a cork. The basal embossings appear to represent mold numbers and/or production runs and are not attributable to a manufacturer.

DlLg-33:95C/206 is a body,base sherd from a large (possibly 26 ounce) bottle. The base is embossed with a monogram of "C.D.L." and the text "PROPERTY OF C.D.G.A. LIMITED" and "RD. 1930". This represents the bottler. Information about the manufacturer, i.e., the Dominion Glass logo, date markings, run number ("4"), and plant denoter (Redcliff) also occurs. Other than the assumption that the C in the initials stands for Canadian, the bottler is unidentified.

3.9.1.1.13 Unassignable 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 could 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; e.g., if the seam extends to the lip of the bottle, it was produced after 1920.

There are eighteen catalogue numbers in this sub-type representing nineteen specimens (Table 13). The sherds vary in colour and in shape.

CAT. #	COLOUR	QTY	SHAPE	PORTION	COMMENTS
43	Aqua	1	cylindrical	body,base	"R391"
44	Clear	1	Wallaceburg oval	complete	Owens Illinois; "6"; "2"
45	Clear	1	cylindrical vial	complete	plastic cap;"2"
46	Clear	1	rectangular	complete	Consumers; "2443"; "7"
47	Clear	1	flattened oval	complete	Consumers; "1935"; "S. CANAD"
48	Brown	1	rectangular	complete	Dominion;1948;"9602";"4"
49	Brown	1	rectangular	complete	Dominion;1946;"9663";"3"
50	Clear	1	oval	complete	Consumers; "3"; stippled
51	Clear	1	oval	complete	Consumers; "4"; stippled
104	Olive	1	cylindrical	body,base	turn-molded
184	Clear	1	cylindrical	base	
185	Brown	1	rectangular	complete	Dominion; "4103A"; "3"
186	Aqua	1	cylindrical	body,base	P
187	Clear	1	oval	body,base	Dominion; Nov. 1944; "5"; melted
188	Green	2	cylindrical	body	paper label
189	Clear	1	oval	body	paper label
190	Clear	1	cylindrical	body	
204	Clear	1	cylindrical	complete	Dominion;Mar. 1948;"2"

Table 13: Information on Unassignable Bottles

Those specimens which are complete all have screw cap closures indicating relatively late manufacture. This is confirmed by the specimens which have date markings on the base. Two specimens appear to be older. DlLg-33:95C/186 is a thick-walled sherd with a strongly developed patina and DlLg-33:95C/104 is turn-molded in a cup mold. Turn-molding was most common from the 1870s through WWI and included wine and liquor bottles (Jones and Sullivan 1985:31). The bottles have various shapes reflecting numerous producers who used bottle design as part of their product identification. DlLg-33:95C/50 and 51 are identical bottles completely covered in stippling except for smooth front and back panels where a paper label would have been applied. The remainder of the bottles are undecorated except for various configurations of panelling and/or chamfering.

3.9.2 Cooking

Two artifacts were assigned to the cooking sub-category. DlLg-33:95C/4 consists of four lip,body, base sherds of a porcelain kitchen-style mixing bowl. The exterior of the sherds have a red glaze which is exfoliating. The depth of the bowl is 98.8 mm and the diameter is calculated to be 221.5 mm (8¾ inches). A partial maker's mark on one of the sherds consists of a green circle with "MADE IN U.S..." printed, in green, below the circle. The mark is too incomplete for identification.

DlLg-33:95C/15 is a complete, 11 inch diameter, blue and white graniteware, pot lid. It has a D-shaped handle and is typical of the enamelled kitchenware portrayed in the Ashdown catalogue (1909:745-747).

3.9.3 Ornamental

The artifacts assigned to this sub-category are primarily used for their decorative features rather than any utilitarian function. One incomplete, clear, glass artifact was tentatively assigned to this category. DlLg-33:95C/9 is an ornate, circular, knob-like specimen with a diameter of 44.2 millimetres. It has twenty-four petals radiating from a central flat spot. A finial may have been attached at this flat spot. The base of the knob flares out as though the knob itself was part of a larger artifact.

3.10 Dinnerware

Even though plates, cups, bowls, etc., are types of containers and technically would be catalogued as a sub-category of the container hierarchy, in terms of general parlance and analytical methods, items used for the serving of food or tableware can be considered as a distinct entity. Accordingly, they have been elevated to a separate section due to the variety encountered and the different types of information that may be derived from these artifacts as opposed to other containers, i.e., bottles, cans, vases, chamber pots. Dinnerware can come in a variety of materials: metal, plastic, glass, and ceramic. Artifacts of all of these materials were recovered.

3.10.1 Metal Artifacts

Two metallic artifacts were curated. DlLg-33:95C/13 is a complete, enamelled, shallow iron bowl with a depth of 30.5 mm (1½ inches) and a diameter of 155.0 mm (6 inches). The interior is white enamel and the exterior is blue enamel. Portions of the bowl are severely affected with corrosion, especially on one side and the base. An indecipherable mark, consisting of illegible dark blue letters, is present on the base. DlLg-33:95C/14 is a complete, white enamelled iron cup. It has a rolled lip and a rounded base with a height of 59.0 mm (2½ inches) and an interior diameter of 87.9 mm (3½ inches). The measurements indicate that it is a tea cup (Ashdown 1909:753).

3.10.2 Plastic Artifacts

DlLg-33:95C/197 consists of two pieces of a pink, plastic, dessert-sized plate. A partial circular maker's mark, on the base, consists of "...EX", "TO...NTO", and "3".

3.10.3 Glass Artifacts

One artifact, DlLg-33:95C/3, is a body, base sherd from a glass tumbler. The base is embossed with "G.L.C.C." and "46". This is identified as a standard beverage glass with the initials representing 'Government Liquor Control Commission'. Similar specimens were recovered from the Sports Federation site (Kroker and Goundry 1990b:68).

3.10.4 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. This is reflected in the use of object types such as bowl?, plate?/saucer?, and bowl?/cup?. Because dinnerware is usually manufactured in sets of the same patterns, the decorative features of a set cross-cut the types of objects. The recoveries are separated into groups based on colour and, within each colour category, decorative design and any information such as manufacturer, jobber, company of use, etc. will be discussed.

3.10.4.1 White Ceramics

The white colour group consists of one sherd. As noted in other reports, white sherds are only fragments of complete objects—there may be patterns with other colours that fit onto these sherds. DlLg-33:95C/5 is the body, base portion of a cup. It has no pattern or maker's mark on it.

3.10.4.2 Gold-on-White Ceramics

One catalogue number (DlLg-33:95C/7), consisting of three sherds from a dinner plate, was curated. These lip,body,base sherds have a scalloped lip with a single gold line painted along the scallop. There are no maker's marks on these sherds.

3.10.4.3 Green-on-White Ceramics

A single lip,body sherd (DlLg-33:95C/6) represents the green-on-white colour category. The sherd has five, thin concentric rings evenly spaced between the lip and the base. A very small portion of solid green colour extends from the body onto the base. This sherd derives from a plate.

4.0 NORTH ABUTMENT INTERPRETATION

The types of recovered artifacts are indicative of a mixture of activities, most of which occurred at several different locations. Storage containers (e.g., bottles, jars, crocks) dominate the assemblage of recovered artifacts. During the field operations, fragments of undiagnostic structural debris (bricks, concrete blocks, structural steel, milled lumber, etc.) were commonplace. However, none of these derived from a building at this location and as such provided no contextual data about the site. Accordingly, none were curated. A similar instance occurred with the multitude of artifacts relating to automotive transport—the tires were installed as a landscape and/or erosion protection feature and the vehicular debris (bumpers, battery fragments, headlight glass, shock absorbers) had been dumped on the riverbank. A portion of the bottle deposits appear to derive from a dairy (Chapter 2). The presence of food bottles, along with numerous quantities of liquor bottles, suggest that a considerable portion of the deposit results from the dumping of garbage by a restaurant with a liquor license.

Many artifacts, particularly bottles and ceramic dinnerware, provide time ranges for their manufacture. These derived dates can provide information relating to the period of deposition at an historic archaeological site. As some artifacts have a similar form for several decades, it is impossible to ascertain when they were manufactured. However, other specimens (e.g., Drewry or Dominion Glass bottles) can be dated to the specific year of manufacture. At this location, only glassware was able to provide specific dates. Deposition of bottles usually occurs soon after the container is emptied, whereas deposition of dinnerware specimens usually occurs a considerable time after the object was manufactured. After manufacture, the plate, for example, is shipped to a wholesaler who ships it to a retail outlet where it is purchased by an individual who uses it until an accident results in damage, at which time it is usually discarded. This time span can range from under a year to several decades.

When examining the time ranges and specific dates derived from glassware, there is a very pronounced cluster in the late 1940s (Figure 6). Only a few artifacts pre-dating the 1940s were recovered. The beverage bottles recovered from the telephone cable trench at the west side of the excavations are the earliest specimens and were produced by McDonagh & Shea, Blackwoods, and Drewry. It would appear that the fill for this trench considerably predates the deposits encountered throughout the rest of the excavations.

The preponderance of the recoveries derive from the fill layers overlying the tire horizon. A small percentage did occur in conjunction with the tires or below the tire horizon but very few diagnostic artifacts occurred within the clay/structural debris zone beneath the tire horizon. Given the strongly defined temporal clustering of the recoveries from this upper fill zone, it would appear that it was deposited after 1944. The specimens from this horizon represent every year for the next decade, up to and including 1953. Only three artifacts, a Dominion Glass liquor bottle (1956), a 7 Up bottle (1957), and the rubbing alcohol bottle (1963), are more recent.

A total of 82 bottles produced dates between 1944 and 1953, with more than one quarter deriving from 1948 (27%). The preceding and following years are also strongly represented (Figure 7).

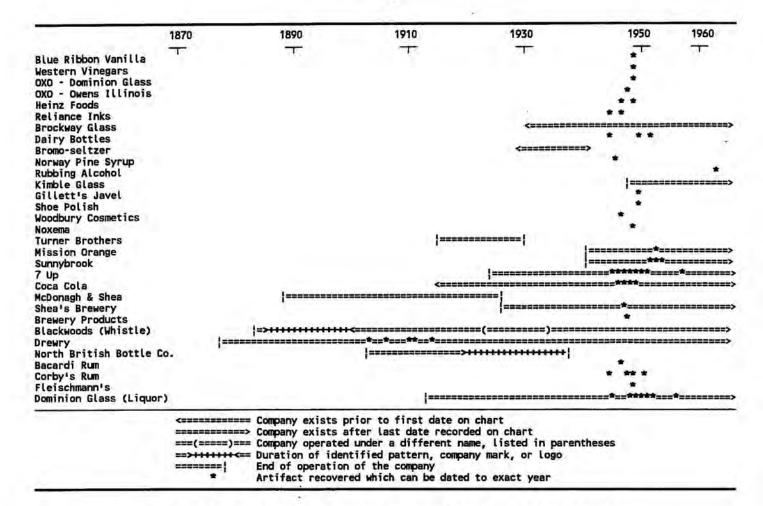


Figure 6: Temporal Chart of Recovered Historic Artifacts - North Abutment

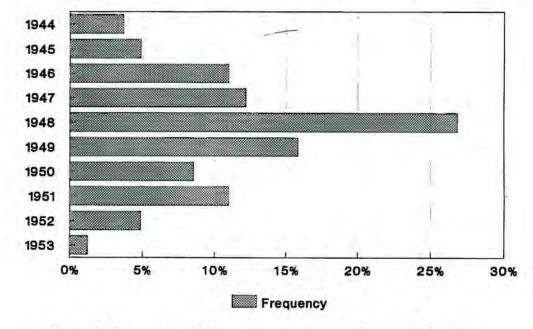


Figure 7: Frequency of Years Represented by Datable Recoveries

In order to reconstruct the sequence of activities that had occurred at the north abutment location, the stratigraphic column must be addressed. The average summer water level of the Assiniboine River is 223 metres above sea level, approximately two metres below the base of the excavation floor and at a level which contained structural debris mixed in clay fill. Undisturbed riverine sediments are present in the northern portion of the location, directly overlying Agassiz clays. It would appear that at one point the actual bank of the Assiniboine River was further north than presently situated. This could have been the historical situation or the result of erosion during the 1950 flood. At some point, the clay/structural layer was deposited at the site. Given the thickness of the layer and the area that it covered (Figure 5), this was a major riverbank reconstruction activity. A layer of interlocked, overlapped tires were placed on the clay/structural layer to provide bank stabilization and to reduce erosion.

The second depositional episode was the placement of the cinder/clay layer which contained the majority of the artifacts. It is not possible to determine how much time elapsed between the placement of the tire horizon and the placement of the cinder layer, or, in fact, if the cinder layer was deposited as a single depositional event. There may have been incremental additions to the layer, perhaps on an annual basis thereby providing the temporal frequencies observed in Figure 7. The more probable interpretation is that the majority of the layer was deposited during the same event, but not necessarily directly after the first deposition event.

The automotive artifacts were observed to be more prevalent in the eastern portion of the excavation area. It is possible that the artifacts derive from the activities of Morley's Service Station which, at 77 Main Street (Kroker and Goundry 1990a:158), had been located at the top of the riverbank. This service station ceased business in 1956 and the area was taken over by HB (later Pryce) Motors. Land modification activities could have resulted in deposition of vehicular debris at the river edge. Other companies, whose products may be part of the riverbank dumping are Standard Brands (1935>) and Western Pure Foods (1937>) at 75 Main Street (Kroker and Goundry 1990a:158). The ubiquitous liquor bottles were widespread throughout the excavation area and did not appear to be the result of a single dump, as did the milk bottles. It would appear that the location was a favourite area for commercial dumping during the latter part of the 1940s and the very early 1950s.

An alternative explanation which would account for the same depositional data but not require the aspect of continuous dumping in an area which may not have been that readily accessible would be the single-event deposition of a former garbage dump. This garbage dump could have developed on the upper bank behind the business which fronted on Main Street. After the rebuilding of the bank with the clay/structural deposits, the garbage dump was bulldozed down the slope as a landscaping measure.

5.0 SOUTH ABUTMENT STRATIGRAPHY

The stratigraphic profile of the excavated area for the south abutment is characterized by recent fill layers overlying undisturbed riverine sediments south of the bank. The slump area at the riverbank edge consists of a series of thin layers of organic-enriched silt interspersed with layers of riverine silt. A few maple and poplar trees, with a varied understorey of herbs and shrubs, were present. An elevated ridge, built as a flood control dyke, was at the top of the bank (Figure 8). Assorted structural debris was present in the ridge and in the upper layers of the slump. Artifacts had been observed within the slump layers during the earliest assessment of the area (Quaternary 1989). At that time, they were assumed to derive from the homestead period and to pre-date the railroad embankment of 1910/11. During the assessment of the Fort Garry Curling Club area (Quaternary 1994b:46), the artifacts and the riverbank stratigraphy were re-examined, with the conclusion that the artifacts probably resulted from riverbank dumping and/or nearby activities during the last quarter of the 19th century or the first decades of the 20th century.

The upper horizons consisted of gravels, sands, and relocated soils. These have been described in previous reports (Quaternary 1989, 1990, 1994b). The area closest to the riverbank contained most of the relocated top soil and clay deposits, while the area formerly occupied by the Fort Garry Curling Club contained a more or less uniform layer of sand and gravel which rested on an intermittent cinder layer over a dark silt A Horizon. This sequence is depicted in the Curling Club assessment report (Quaternary 1994b). The gravel component was not present at the western edge of the excavation (near Main Street). In this area, the profile was more similar to that at the bank edge with relocated soils, interspersed with diffuse cinder layers, resting on a former soil horizon. The upper layers of fill contained most of the recovered artifacts, as well as quantities of non-diagnostic structural debris (bricks, milled lumber, fieldstones). Where obvious dumping had occurred, such as a localized pocket of sawn cow bones, only a representative sample was curated.

The presence of widespread coal cinder deposits would be the result of railroad activity in the immediate vicinity. The elevated track at the east edge of the construction area was built in 1910/11. As the cinder layer rests on top of the extensive dark silt A Horizon, it is assumed that this horizon represents the top soil that would have formed on silts and clays deposited during the 1882 flood. Below this stratum, the stratigraphy becomes quite variable from east to west and from north to south. Some degree of overall uniformity was present, although individual horizons varied considerably in thickness and linear extent. The following generalized profile (Figure 8) is an amalgam of numerous observations recorded across the excavation area. Below the dark silt horizon, the sequence consisted of light brown silts, a thin diffuse A Horizon, and a layer of bedded sands (generally about 0.85 metres below the dark silt A Horizon). Below the bedded sand layer, an alternating pattern of light brown silt and light brown sand layers (Plate 2) continued to the base of the excavations and even into the caisson auger holes (Figure 8). The sand layers ranged from a few centimetres thick to greater than 1.50 metres, with the intervening silt layers ranging from two centimetres to 35 centimetres thick. None of the silt/sand interfaces were marked by relict soil horizons. Some hematite staining of silt layers was present below 3.0 metres in depth. Grey clays and sands deriving from deposition during the Glacial Lake Agassiz period were observed in the caisson holes at elevations of 222.5 metres above sea level.



Plate 2: Vertical Excavation Wall at South Abutment

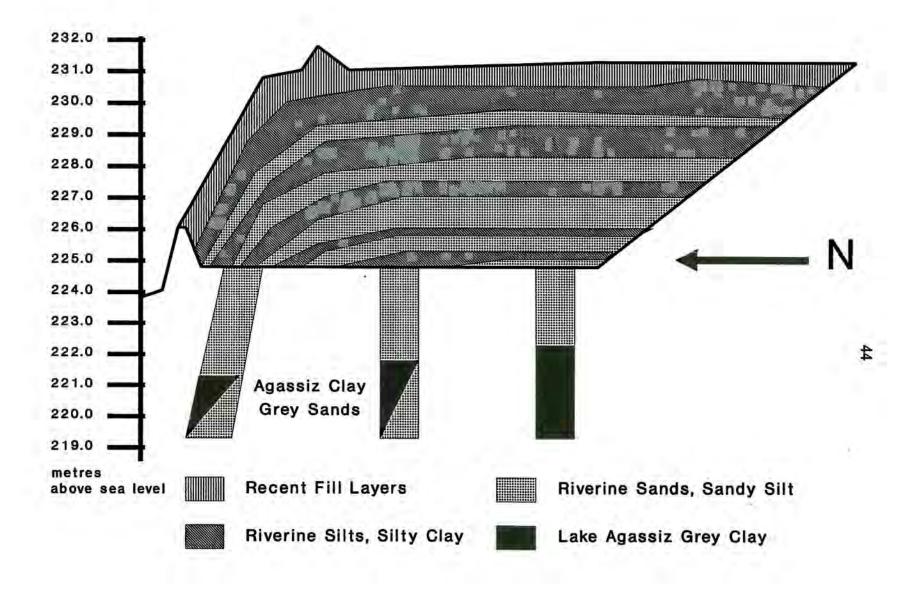


Figure 8: Generalized Stratigraphy of South Abutment Excavation Area

6.0 SOUTH ABUTMENT ARTIFACTS

The historic artifacts, recovered during the monitoring of the mechanized excavation for the south abutment, also have been analyzed within functional categories based on the CHIN cataloguing format. There were 210 artifacts recovered.

6.1 Architectural Objects

As noted in Chapter 3, this functional category includes all artifacts which are used for the construction, the maintenance, and the furnishing of structures, and can be made of many different materials: metal, glass, wood. Artifacts were curated in the sub-categories of Hardware and Accourrements.

6.1.1 Hardware

Hardware consists of items which are used for the construction of a structure. Items such as nails, wire, and electrical parts can be catalogued in this sub-category, although only nails were curated from the south abutment location.

6.1.1.1 Nails

Nails are one of the most common structural artifacts. Two different types of nails, representing different manufacturing techniques were recovered: sheet-cut and wire-cut.

Sheet-cut nails were developed ca. 1790 and were mass produced (Nelson 1968:8). Sheets of iron or steel were rolled to a uniform thickness and then were cut with a taper from top to bottom. The thickness of the nail remains constant from head to point, while the width tapers. The heads, commonly T-shaped or L-shaped, were added to each individual shank. Four sheet-cut nails (DlLg-32:95B/40, 41, 42, 43) were curated. DlLg-32:95B/41 has an L-head, DlLg-32:95B/42 has a T-head, and DlLg-32:95B/40 and 43 both have rose heads.

While sheet-cut nails were produced in Montreal in the early part of the 19th century, they likely became common in The Forks area after 1860, when river steamboats could transport large quantities of American goods (Kroker, Greco et al. 1991:105). The first steam boat to arrive in Winnipeg, via the Red River from Minnesota, was the Anson Northup (Collard 1967:39). Her first regular run began in June of 1860; two years later she was replaced by a larger steamboat. Many different products—nails, hardware, dry goods, crockery, groceries—were brought to Winnipeg, for further distribution, aboard these vessels.

Wire-cut nails were produced about 1850, became prevalent about 1900, and are the common variety found today (Nelson 1968:10). Steel is extruded to form a wire, which is then cut to the appropriate length and the flat, circular head is added by another machine operation. Two round wire-cut nails, DlLg-32:95B/6, were curated.

6.1.2 Accoutrements

Artifacts ascribed to this category pertain to the finishing touches of a structure. A single sherd of windowpane was recovered. DlLg-32:95B/47 is a clear, standard thickness sherd with an embossed daisy pattern on it.

6.2 Communication

Three communication-related artifacts were curated—all in the sub-category of Telecommunication. DlLg-32:95B/44 and 45 are both aqua, glass insulators, both have portions of the base missing, and both are embossed with various information. DlLg-32:95B/44 has "J T 8" on the top and "AMTEL TEL G..." around the body. This probably represent American Telephone and Telegraph. DlLg-32:95B/45 has a "9" on the top and "...D" around the body. Both of these insulators are the threaded style pony insulators, patented in 1865 (Kottman 1979:18).

The third insulator, DlLg-32:95B/46 is a complete, mushroom-shaped, porcelain specimen. It was originally white in colour but has discoloured to a dirty grey/brown over years of use. There are no markings on this artifact to denote a manufacturer.

6.3 Clothing

Representatives of different sub-categories of clothing were recovered from this portion of the project. These were catalogued in the sub-categories of Bodywear and Footwear.

6.3.1 Bodywear

One artifact was assigned to the Bodywear sub-category. DILg-32:95B/82 is a remnant of a felt hat. The hat is a 19 inch circumference which translates to approximately a size 6 hat, probably fitting a small boy. The brim, measured from the hat band stitching seam, is four inches which is a standard brim for many western-style hats. Amory, in the reproduction of the 1902 Sears, Roebuck Catalogue, illustrates fedoras of felted fur which have too narrow a brim as well as stetson- and sombrero-style hats which have a larger brim. The form of the crown cannot be ascertained although it would appear to be domed similar to the J.B. Stetson Big Four (Amory 1969:1013) or the Pine Ridge Scout or the Texan Chief High Crown Sombrero (Amory 1969:1014).

6.3.2 Footwear

Four incomplete portions of shoes were recovered from the south abutment (Table 14). DlLg-32:95B/83 consists of two identical-sized soles, with the uppers, and may actually be a pair of shoes. The other two small fragments are too incomplete to ascertain the size with any certainty.

CAT.#	PORTION	QTY	MATERIAL	CONDITION	COMMENTS
83	Sole;Upper	3	Leather;Iron	Incomplete	Woman
84	Sole	1	Leather	Incomplete	Small man/Woman
85	Upper	1	Leather	Incomplete	Woman/Child

Table 14: Footwear Recoveries from the South Abutment

6.4 Recreation

The recreation category can include items such as smoking equipment, games, musical instruments, and toys. Three artifacts were catalogued in this category—all smoking pipes.

6.4.1 Smoking Equipment

Four artifacts are portions of kaolin (white clay) pipes. Clay pipes are a fairly common find in archaeological sites in North America and have been recovered from the Fort Gibraltar I site at The Forks (Kroker et al. 1990, 1991, 1992). DILg-32:95B/2 consists of part of the stem and bowl. It has no markings on it, but the bowl is decorated with a ribbed pattern. DILg-32:95B/39 and 124 are the stem portions of pipes. Neither has any markings.

DILg-32:95B/1 is part of the stem, the spur, and the bowl of a pipe. It has an "F" stamped sideways on one side of the spur and an "I" stamped sideways on the other side. Not enough of the bowl remains to note any decoration. The "F" and the "I" marks represent the Ford company of Stepney, London, England. This company, headed by a succession of Ford men—John, Jessie, and Thomas—was first registered in 1810 and had a monopoly to supply clay pipes to the Hudson's Bay Company from 1831 until at least 1870, although they were exporting pipes until 1909. Examples of Ford clay pipes have been found in Canada, the United States, and Australia (Walker 1971:23).

6.5 Transportation

One artifact, in the sub-category of vehicle, was catalogued. DlLg-32:95B/48 is the bottom portion of a metal license plate. It has yellow printing, which consists of "MANITOBA 61", on a green background. A similar artifact, DlLg-33/89B-1, was recovered during the Assiniboine Riverfront Quay Project (Kroker and Goundry 1993:25, Plate 9b).

6.6 Faunal Remains

The recovered faunal specimens are either the residue from food resources or naturally deposited faunal remains.

6.6.1 Butchering Remains

Forty-four specimens were identified as butchering remains (Table 15). As noted in Chapter 3, the specimens were identified using standard references. Any evidence of butchering techniques was recorded and the condition of the specimens was listed.

TAXON	ELEMENT	QTY	CAT. #	COMMENTS
Bird				
Large	Vertebra	1.	87	complete
Turkey (Meleagris gallopava)	Femur	1	88	complete
Fish		137		
Catfish (Ictalurus sp.)	Cleithrum	1	86	broken
Mammal		TE.		
Large	Vertebra	1	109	juvenile
	Vertebra	5	111	sawn
	Rib	8	112	sawn;cut marks
	Scapula	2	110	sawn;cut
Medium/Large	Rib	1	108	spiral fracture
	Long Bone	1	106	spiral fracture
	Metapodial	1	107	charred
Cow (Bos taurus)	Maxilla, tooth	1	103	spiral fracture
227 (232,100,00)	Axis	1	100	sawn; cut marks
	Innominate	1	99	sawn; cut marks
	Femur	3	104	sawn; cut marks
	Tibia	4	105	sawn; spiral fracture
	Tibia	1	96	complete; juvenile; cut mark
	Humerus	1.	98	juvenile;sawn;cut marks
	Astragalus	1	101	complete
	Calcaneus	1	102	less epiphysis
	Phalanx	1	94	complete
	Tarsus	1	95	complete
	Metatarsus	1	97	complete less epiphysis
Pig (Sus scrofa)	Scapula	1	91	carnivore chewing
	Radius	1	89	complete; juvenile; cut
	Tibia	1	90	epiphysis; juvenile
Sheep/Goat (Ovis?/Capra?)	Mandible, tooth	1	92	broken
The state of the s	Mandible, tooth	1	93	chipped

Table 15: Faunal Recoveries from the South Abutment

The element identified as large bird and the turkey (*Meleagris gallopava*) bone may be from the same bird. Both elements are complete and neither show any indication of butchering or any post-butchering trauma.

Only one element of fish, a cleithrum from a catfish (*Ictalurus sp.*), was recovered. This genus is common in the Red and Assiniboine River systems.

Most of the thirty-six recovered mammal specimens show evidence of butchering activities: sawing, cut marks, and/or spiral fracture. The seventeen cow (*Bos taurus*) elements encompass two age grades—juvenile and adult. Some of the nineteen undesignated large mammal and medium/large mammal may be bovine elements. Only DlLg-32:95B/107, a broken metapodial, showed evidence of post-butchering trauma, i.e., charring.

The three pig (Sus scrofa) elements consist of two juvenile specimens. DlLg-32:95B/89 is complete but missing both epiphysis, while DlLg-32:95B/90 is the distal epiphysis of a tibia. DlLg-32:95B/89 has been chewed, probably by a dog.

DlLg-32:95B/92, a broken specimen, and DlLg-32:95B/93 a nearly complete mandible with teeth, were identified to sheep (*Ovis aries*) or goat (*Capra hircus*). Similarities of most elements between these two species rarely permit specific identifications. Neither element showed any indication of butchering techniques.

6.6.2 Naturally Deposited Faunal Remains

A small pocket of naturally deposited fish remains was curated. These fifty-seven specimens (Table 16) occurred in a clump and were not associated with any relict soil horizons or changes in sediment texture. They may be the result of stranding of fish at the end of a high water episode or the residue of a carnivore's meals.

TAXON	ELEMENT	QTY	CAT. #	COMMENTS
Fish	7.50		70.11	
Ictalurus sp. (Catfish)	Vertebra	22	113	complete
	Rib	8	114	broken
	Angular	1	115	broken
	Quadrate	2	116	broken
	Cleithrum	4	117	broken
	Hyomandibular	1	118	broken
	Dentary	1	119	broken
	Operculum	2	120	broken
	Unidentifiable	15	121	broken
Stizostedion sp. (Walleye/Sauger)	Dentary	1	122	broken

Table 16: Natural Faunal Recoveries from the South Abutment

6.7 Floral Objects

Seven pieces of charcoal, DlLg-32:95B/123, were recovered from the east half of the south abutment. All of the specimens derive from Angiospermae (deciduous trees) as opposed to Gymnospermae (coniferous trees). This charcoal was probably deposited during a high water episode and could derive from natural fires considerably downstream.

6.8 Containers

As noted earlier, this category includes all artifacts, or portions of artifacts, which are used to contain products. The category contains several sub-categories, three of which are applicable to the artifacts recovered from the south abutment:

- a. Storage the purpose of the container is to hold material, e.g., bottles, jars, tin cans, boxes;
- b. Cooking containers used in the preparation of food, e.g., pots and pans; and
- c. Dinnerware the artifact is used in the serving or eating of food.

6.8.1 Storage

Storage containers are the most common artifacts. Most products are sold or stored in a container of some type. Although containers are made from a variety of materials, only ceramic and glass containers were recovered during this project. A total of 42 artifacts were curated.

6.8.1.1 Ceramic Containers

The recovered ceramic containers, from the south abutment, consist of 6 sherds. Table 17 delineates these crocks, jars, and jugs.

OBJECT TYPE	CAT, NO.	MATERIAL	COLOUR	QTY
Crock	37	Stoneware	Brown; Grey; Blue; White	2
Jar	34 35	Porcelain	White	1
Jug	38	Stoneware	Grey; Yellow	2

Table 17: Ceramic Storage Containers from the South Abutment

6.8.1.1.1 Crocks

Two stoneware crock sherds were curated. DlLg-32:95B/37 consists of the body, base portions of a grey crock. A three-lined pattern occurs on the body, 22.6 mm up from the base. This is a thin, white line between two thin light blue lines. The pattern measures 21.5 mm in width with the lines evenly spaced. There are no marks on either sherd to indicate a manufacturer.

6.8.1.1.2 Jars

The ceramic jars consist of one porcelain lip, body sherd and a complete porcelain lid. DlLg-32:95B/34 is a straight-walled lip, body portion of a white jar. It has a slight bulge for a collar, 18.4 mm down from the lip, but is otherwise undecorated. DlLg-32:95B/35 is a complete white lid. It measures 28.1 mm in height, 75.6 mm in diameter, and has a 17.1 mm collar which has a small flange at the bottom which would fit into a jar. The lid is very crazed with one large piece spalled off the top. This may have been a lid for some type of apothecary jar.

6.8.1.1.3 Jugs

Two sherds (DlLg-32:95B/38) were designated as portions of a stoneware jug. DlLg-32:95B/38 is the lip and neck portion with a small bit of handle of a grey jug. This specimen has no marks to indicate a manufacturer.

6.8.1.2 Glass Containers

The majority of glass containers, from the south abutment, are complete, with only a few of the specimens being sherds. 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, sealer, jar. Further identification, to a functional sub-type such as ink bottle, milk bottle, or beer bottle, has been done where possible.

6.8.1.2.1 Condiment and Food Produce Containers

As noted in Chapter 3, representatives of this class are often difficult to identify as many producers used unmarked bottles to which paper labels were added. 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. The material recovered during this project includes three catalogue numbers comprising three artifacts identified as Condiment bottles or jars. Some of the recovered specimens could be assigned to specific types of food products.

6.8.1.2.1.1 Sauces and Liquids

This group consists of bottles which contained a variety of products such as flavour enhancing sauces, oils, and other liquids used during food preparation. Two artifacts were assigned to this sub-category.

DILg-32:95B/60 is a complete, brown, cylindrical bottle produced in an automatic bottling machine after 1920. The down tooled lip has a horizontal mold seam and a ghost seam is visible on the body. This bottle would have been closed with a cork or a cork wrapped glass stopper. The name of the contents "FLUID BEEF CORDIAL" is embossed vertically on the body. No marks indicate the manufacturer.

DlLg-32:95B/69 is an incomplete, light green bottle missing the upper neck and finish. The cylindrical body is octagonal in cross-section and the base is slightly concave. The presence of bubbles in the glass suggest early manufacture, although no markings can provide indications of the source. The blurred letters "TH..." occur on the body, near the base.

6.8.1.2.1.2 Foods

This group contains jars which were used for foodstuffs such as olives, pickles, etc. Many of these containers were generic styles purchased in bulk from glass manufacturers and customized with the addition of a paper label identifying the product and brand name.

One specimen, DlLg-32:95B/64, is a complete, clear, cylindrical jar with a screw cap closure. The size "CONTENTS 4 LBS" is embossed on the shoulder. An embossed mark consisting of "DP in a diamond" occurs on the base. The Dyson Company was located in Winnipeg, Manitoba and produced several varieties of food products including pickles. Speculatively, this mark could stand for Dyson's products or Dyson's pickles, although none of the Dyson bottles illustrated by Chopping (1978) have this mark on the base.

6.8.1.2.2 Medicine Bottles

Six catalogue numbers comprising six complete specimens were assigned to the medicine category. The only aqua specimen, DlLg-32:95B/49, is a rectangular, panelled bottle with an applied Perry Davis finish which would have been closed with a cork. The company "DAVIS" and the brand name "VEGETABLE PAIN KILLER" are embossed on the front and side panels. A mold number "1" occurs on the base. This was a common patent medicine and bottles have been found during other projects (Kroker and Goundry 1993:48; Quaternary 1996:41).

Four complete bottles are brown in colour. DlLg-32:95B/51 is a small, cylindrical bottle with a prescription lip. The brand name "BROWNATONE" and the producer "KENTON PHARM, CO." of "COVINGTON, KY" are embossed vertically on the body. A maker's mark, consisting of a dot inside an elongate diamond, plus the mold number "11" appear on the base. Tentatively, this could identify the Diamond Glass Company of Royersford, Pennsylvania as the manufacturer (Toulouse 1971:550-552). DlLg-32:95B/53 is a small, oval bottle with an iron screw cap. The product name "KI-MOIDS" and the producer "SCOTT AND BOW ... " are embossed on the front side. The basal mark of an "O in a square" identifies the Owens Bottle Company which existed from 1911 to 1929 (Toulouse 1971:393-397). DlLg-32:95B/57 is an oval bottle with flat sides. The entire surface except for the front and back body is decorated with vertical raised ribs. Embossed on the base, is "RD. 1936", a mold number "5840", and a "D in a diamond" plus other markings which indicate the bottle was manufactured by Dominion Glass in May/June of 1951. While no text identifies the contents, many baby boomers will recognize this as a Buckley's Cough Mixture bottle. The final brown bottle, DlLg-32:95B/52, is square in cross-section and has an iron screw cap. Markings on the base include the Dominion Glass logo, the numeral "2", and the text "MADE IN CANADA". Contents or producer are unknown, but the shape and width of mouth suggest that it contained pills.

DILg-32:95B/59 has a slight amethyst tint indicating manufacture prior to 1914. Early clear glass was made with manganese which causes the glass to turn to an amethyst colour after prolonged exposure to sunlight. The use of manganese in glass manufacture ceased in 1914, as Germany controlled the majority of the world's resources. Thus, an amethyst bottle can readily be dated prior to 1914. This specimen has a widely flaring prescription lip which was applied with a lipping tool. The bottle is oval in cross section with flattened raised sides, almost like a strapped flask (Jones and Sullivan 1985:105). The company "WYETH & BRO." and their head office "PHILADA" is embossed on the front. This firm is known as a drug manufacturer (Toulouse 1971:548). This bottle, standing 195.0 mm high, is larger than a similar specimen (DlLg-32:94B/166) recovered during the C.N. Overpass Reconstruction Project (Quaternary 1995b:44).

6.8.1.2.3 Cosmetic Containers

Two complete artifacts were assigned to this category—both clear bottles. DlLg-32:95B/50 is an elongated oval shape in cross-section and square in vertical section. The Perry Davis finish would be closed with a cork, a fragment of which is inside the bottle. The basal mark, a monogram composed of "CL", identifies the Carr-Lowrey Glass Company of Baltimore, Maryland. This mark was used from 1920 until 1963 (Toulouse 1971:134-137). However, the presence of a horizonal seam below the lip suggests manufacture during the early part of this period. DlLg-32:95B/63 has a cylindrical body with flattened sides. The mold seam terminates partway up the neck suggesting manufacture prior to 1920. The absence of any type of finish at the top of the straight neck suggests that the bottle was blown in mold and the upper end of the neck was over blown using the "burst-off" technique (Jones and Sullivan 1985:41).

6.8.1.2.4 Juice Containers

DlLg-32:95B/54 is a complete, clear, squat bottle. It measures 131.6 mm in height and has a crown closure. The word "WELCH'S" is embossed twice on the body. This is a miniature, possibly grape juice, bottle. An "F" is embossed on the base, identifying manufacture by the Fairmount Glass Works of Indianapolis, Indiana between 1930 and 1945 (Toulouse 1971:200-202). These bottles are a common find in this area (Kroker and Goundry 1993:54, Plate 26a; Quaternary 1995b:48).

6.8.1.2.5 Soft Drink Bottles

Often, bottling firms produce both beer and soft drinks in generic bottles, relying on paper labels to identify the product. In some cases, the company produces only a single line of product and/or there are identifying marks on the container, permitting assignment of the artifact to either the soft drink or beer group. During the monitoring of the excavation for the south abutment, three recovered specimens were identified as soft drink containers.

DlLg-32:95B/65 is a body sherd from a clear bottle. A portion of the brand name "COCA CO.." is painted on the side in white script. The size, "CONTENTS 10 FL...", is embossed directly below. DlLg-32:95B/66 consists of two body sherds from a clear bottle. The bottle is decorated with an open latticework pattern around the shoulder. The identifying information is painted on the body in blue and white lettering. The name "WHISTLE" occurs on the shoulder as well as being

incorporated into the brand name label. The label also includes the wording "THIRSTY JUST" and "GUARANTEED REFRESH...". The ingredients, "CONTAINING GENUINE FRUIT FLAVOR, PURE/CANE SUGAR, FRUIT ACID, CERTIFIED .../COLOUR, AND CARBONATED WA...", are listed on the back in white text. The Whistle Bottling Company was formed in 1923 to take over the business of Blackwoods Beverages. Eleven years later, the name was changed back to Blackwoods Beverages Ltd. The soft drink that prompted the company name change, Whistle, was bottled until 1937 by Blackwoods and into the early 1960s by Dan's Beverages (Stock 1978:48, 55).

6.8.1.2.6 Beer Bottles

While it is tempting to ascribe all containers produced by a brewing company to this class, most brewing companies appear to have had side-lines of soft drinks. Similarly, firms like Blackwoods Limited, which concentrated on soda waters, are known to have produced some beers (Chopping 1978:105). One Winnipeg firm, McDonagh & Shea, and an eastern company, Brewery Products Limited, appear to have produced bottles solely for beer.

One clear, body, base sherd, DlLg-32:95B/67, was ascribed to Brewery Products Limited. The base is embossed with "B.P. LTD." and the body, near the base, is embossed with "THIS BOTTLE BELONGING TO BREWERY PRODUCTS LIMITED MAY NOT BE SOLD". Additional markings on the base indicate that the bottle was manufactured by Consumers Glass.

6.8.1.2.7 Beverage Bottles

Due to the use of generic bottles for both soft drinks and beer, it is often impossible to ascribe a specific product to an archaeologically recovered bottle. Thus, the bottles are assigned to the generalized Beverage class. Within this sub-type, 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.

Two complete beverage bottles were recovered—both are attributable to Winnipeg bottling firms. DlLg-32:95B/55 is an aqua bottle which can be identified to Chopping type MWIN BA20-1. It has the Blackwood's name and the standard ownership clause—"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 BLACKWOOD'S LIMITED". The history of Blackwoods has been outlined in Chapter 3.

DlLg-32:95B/56 is a clear bottle produced by the "E. L. DREWRY" company of "WINNIPEG". The base of this bottle, produced in an automatic machine, has an "11 in a diamond" indicating manufacture in 1911 and identifying it as Chopping type MWIN BG26 (1978:125). In addition to the producers name, the standard ownership clause is embossed on the body. The history of the Drewry company has also been outlined in Chapter 3.

6.8.1.2.8 Wine Bottles

Early wine bottles had an identifying feature known as a kick-up. The kick-up is a raised section of the base which originated as a sediment trap, and is currently retained as a tradition. During the manufacture of bottles with a kick-up, a downward pointing dome of glass occurs at the top of the kick-up—this element is known as a mamelon. DILg-32:95B/79 consists of three sherds of green glass: a body sherd, a body, base sherd with the beginning of the kick-up, and the central portion of a kick-up with a large mamelon. There are no marks on this bottle to indicate a producer or manufacturer.

6.8.1.2.9 Gin Bottles

One body sherd, DlLg-32:95B/71, is from an olive case gin bottle. Case gin bottles were distinguishable by their square tapered shape and decorative vertical ribbing. The shape of the bottle was a function of ocean shipment of the product; square bottles could be packed with more to a box and were less likely to break, due to rough handling, than were round bottles. The bottles were manufactured 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).

6.8.1.2.10 Whisky Bottles

Whisky bottles are often identifiable by the embossing on the sherds or, in some cases, by remnants of paper labels adhering to the artifact. DlLg-32:95B/73 is a clear, body, base sherd embossed with "...ER'S/...LMARNOCK WHISKY", a mold number "1182", and the letter "S". More complete specimens of this product, Walker's Kilmarnock Whisky, were recovered during the Assiniboine Riverfront Quay Project (Kroker and Goundry 1993:74). The "S" on the base probably identifies the Sherdley Plant at St. Helen's, Lancastershire. This plant, formerly Cannington, Shaw and Company became part of United Glass Limited in 1937 (Toulouse 1971:514).

6.8.1.2.11 Liquor Bottles

This sub-type is a catchall for bottles that held some type of spirits but could not be assigned to whisky, gin, beer, etc. Seven single specimens of liquor bottles were catalogued (Table 18).

The only brown specimen, DlLg-32:95B/58, is blown in a two-piece post mold with an applied stopper finish. The mold number, "29A", appears to match a mold number used by Dominion Glass. Miller and Jorgensen (1986:16, 30) list mold number 29 at the Montreal plant as a 10 ounce book shape flask and at the Toronto and Hamilton plants as a 10 ounce book flask corby. The "A" suffix to the mold number may indicate some variation from the original standard. Similar sized brown flasks are ubiquitous in the area (Kroker and Goundry 1993:75; Quaternary 1995b:60-61).

CAT. #	COLOUR	PORTION	MARKINGS	COMMENTS
58	Brown	complete	29A	book flask; applied lip
62	Clear	complete	logo;B;4;3;12 OZS.	Dominion; Mar. 1944; Wallaceburg
68	Clear	body;base	UGB;B404;C;14	United Glass; Charlton
76	Green	lip;shoulder	97.5000000000	applied lip
77	Olive	body;base	· ·	external kick-up
78	Green	body;base	2	2
80	Clear	lip;shoulder	-	string collar;screw cap

Table 18: Description of Liquor Bottles

The clear specimens consist of one complete bottle and two sherds. DlLg-32:95B/62 is oval in cross-section and has a rectangular, vertical cross-section. The complete bottle is closed with a screw cap. DlLg-32:95B/68 is imported from England as the maker's mark identifies the manufacturer as United Glass Limited. United Glass began in 1913 and the Charlton plant was built in 1920. This plant was closed in 1966. Further research in British glass directories may be able to ascertain the year or decade of manufacture. DlLg-32:95B/80 is the upper portion of a large (26 ounce?) bottle with a screw cap closure. The specimen has a round string collar, 15.0 mm above the base of the neck. This is identical to specimens recovered from the north abutment which were identified through attached decals as containing Corby's Rum, e.g., DlLg-32:95C/125.

The olive specimen is unusual in that there is a high kick-up (35.5 mm) on the base which is not replicated in the interior of the bottle. Excess glass fills the entire kick-up providing a very massive base to this artifact.

The two green artifacts are undiagnostic. The mold number "2", on the slightly concave base of DlLg-32:95B/78, does not identify any firm. Mold seams indicate this round bottle was produced in a two-piece post mold. DlLg-32:95B/76 is the upper portion of an oval bottle blown in mold with an applied flattened side finish.

6.8.1.2.12 Unassignable 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 could 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; e.g., if the seam extends to the lip of the bottle, it was produced after 1920.

There are six catalogue numbers in this sub-type representing six specimens. Table 19 outlines the information for these artifacts.

CAT. NO.	COLOUR	QTY	PORTION	MARKINGS	COMMENTS
5	Brown	1	body,base	7;G?	square
61	Clear	1	complete	100	string collar
70	Clear	1	complete	3 × 1	applied lip
72	Olive	1	body,base	W;P	oval
74	Aqua	1	body,base	B S;333	oval
75	Clear	1	body,base	804A	rectangular

Table 19: Description of Unassigned Bottles

DILg-32:95B/5 appears to have been made in a two-piece post mold. A slight degree of stippling occurs at the perimeter of the base. The mark, on the base, resembles a slightly stylized, non-serif capital G. This closely resembles the mark of Glenshaw Glass Company of Pennsylvania which adopted a similar mark in 1932. The differences are that the Glenshaw mark, illustrated by Toulouse (1971:211), is surrounded by a square and that the mark on the specimen is the mirror image of the illustrated mark. Thus, it may not be a product of Glenshaw which, by 1952, had "a general line of ware...made in flint, emerald green, Georgia green, and amber" (Toulouse 1971:212-213).

The olive artifact, DlLg-32:95B/72, is marked with a "W" and a "P". A 'W' has been used by United Glass Limited of England to identify the Portobello (originally Wood's Bottle Works) plant in Scotland (Toulouse 1971:524-527). United Glass took over the original firm in 1937 retaining the W as part of their identifying marks, although usually in conjunction with 'UGB'. The "P" may also be a Portobello identifier. However, it could also indicate the Pierce Glass Company of Pennsylvania (Toulouse 1971:412), with the 'W' as a mold identifier. In conclusion, this specimen, albeit marked, cannot be firmly identified even to country of origin.

The aqua specimen, DlLg-32:95B/74, is a portion of a shoofly flask with an untraceable mold mark on the base. Given the variable thickness of the glass, the specimen was probably blown in mold. The mark "B S", on the side, near the base, cannot be identified to any known company (Toulouse 1971).

DlLg-32:95B/75 is the body, base portion of a rectangular, panelled bottle with chamfered corners. The mold number, "804A", is not listed as a mark used by Dominion Glass (Miller and Jorgensen 1986) and cannot be traced further.

DILg-32:95B/70 is a severely cracked, complete, clear bottle. It is rectangular with chamfered corners and a down-tooled applied lip at the end of a long neck. This style of bottle is illustrated as a flat castor oil in the Sydenham Catalogue (1908:18).

The final specimen, DlLg-32:95B/61, is a complete, clear, cylindrical bottle with a long tapered neck, a string collar, and a crown closure. It differs from most beverage bottles, which have a

crown closure, in general configuration (i.e., no definite shoulder) and the presence of the string collar, 23.5 mm below the lip. The presence of the crown closure suggests that the contents were used all at one time or that the bottle would have to be resealed with a different type of closure such as a cork. For this reason, it was not placed in the Beverage category.

6.8.2 Cooking

Two artifacts were assigned to the Cooking sub-category. DlLg-32:95B/36 consists of two sherds of a yellow and green mixing bowl. This porcelain bowl has a yellow background with green mottling on the interior as well as the exterior. This type of decoration was achieved by 'sponging' the colour onto the stoneware (DePasquale et al. 1983:157). The complete bowl would have been fairly deep as the depth measures 153.8 mm. The diameter is unmeasurable but would have exceeded 250.0 millimetres. A complete bowl, passed down to one of the authors from a grandmother, is identical to these sherds, but shallower.

DlLg-32:95B/81 is a complete, crushed, copper pot. The diameter would have been approximately 145.0 mm, while the vertical height is 144.0 millimetres. The lip is a double thickness of copper with a rolled lid rest consisting of an iron wire core, 15.4 mm below the lip. It has a heavy, brass lug rivetted on either side on which a handle would have fit. These copper cooking pots were introduced during the Fur Trade and appear to have been replaced by enamelled ware equivalents by the 20th century (cf. Ashdown 1909).

6.9 Dinnerware

Plates, cups, bowls, etc., are types of containers and technically are catalogued as a sub-category within the container category. For purposes of analysis, dinnerware can be considered as a distinct entity. Accordingly, it is described in a separate section. While these artifacts can be composed of different materials, only ceramic dinnerware was recovered from the south abutment location.

6.9.1 Ceramic Artifacts

Ceramic dinnerware includes place settings—plates, small bowls, cups and saucers—and serving pieces—platters, large bowls, creamers. Because dinnerware is usually manufactured in sets of the same patterns, the decorative features of a set cross-cut the types of objects. The recoveries are separated into groups based on colour and, within each colour category, decorative design and any information such as manufacturer, jobber, company of use, etc. will be discussed.

6.9.1.1 White Ceramics

The white colour group consists of thirteen catalogue numbers comprising sixteen sherds. As noted in other reports these white sherds are only fragments of complete objects—there may be patterns with other colours that fit onto these sherds.

Of the thirteen catalogue numbers in white ceramics, eight (consisting of eleven sherds) have no maker's marks, no indications of a pattern, or any other marks (Table 20). None of these sherds appear to go together.

CAT. NO.	OBJECT	QTY	PORTION	COMMENTS
24	Plate	4	lip,body,base	heavily crazed
27	Cup	1	lip,body,base	thick walled
28	Cup	1	lip,body	smaller than DlLg-32:95B/27
29	Bowl	1	body,base	soup-size
30	Bowl	1	lip,body	L-shaped lip
31	Bowl	1	body	fluted
32	Bowl	1	lip,body	fluted;crazed
33	Bowl?	1	body	large

Table 20: Plain White Ceramics

The remaining five catalogue numbers, totalling five sherds, could be divided into two groups. The first group consists of one sherd that has an identifiable manufacturer's mark on it (Section 6.9.1.1.1). The second group have some form of marking, either a pattern or a portion of an unidentifiable mark (Section 6.9.1.1.2).

6.9.1.1.1 Manufacturers of White Ceramics

DlLg-32:95B/7 is a complete, plain white porcelain creamer. It measures 65.5 mm in height, has no handle, and is typical of the type used in restaurants or on trains. The base has a green, circular logo consisting of a lion in the centre of the company name "GLOBE POTTERY CO. LTD." and the location of the pottery, "SHELTON". The words "ENGLAND" and "VITRIFIED" are printed, in green, below the logo. The Globe Pottery company began in 1914, on Waterloo Road, in Cobridge, Staffordshire (Godden 1964:275-276). This particular mark was used ca. 1930 to 1940 with first the place Cobridge, and then, after 1934, the location of Shelton (Godden 1964:276). In addition, the same mark, with the Shelton site, was also used from 1947 until 1954. At that time the words "CO. LTD." were no longer included with the company name. A mold number "60" is stamped, on the base, just outside the maker's mark.

6.9.1.1.2 Marks on White Ceramics

Two sherds are decorated with an embossed pattern (Table 21). Three sherds have some form of marking on them (Table 21). DlLg-32:95B/22 has a small portion of the wheat pattern on it. Many firms, in England, Canada, and France, manufactured the Wheat pattern (Collard 1967:281-290; Sussman 1985). The wheat on this sherd has two rows of kernels which does narrow the manufacturer down somewhat but it could still have been made by any one of a number of companies. The portion of the pattern present on the sherd resembles one component of the William Taylor design (Sussman 1985:38), however, inasmuch as the pattern is not exactly replicated around

the circumference of a plate, variations in leaf placement could mean that this specimen was made by a least three other firms.

DILg-32:95B/23 is a large portion of a plate with a two row wheat pattern on it. The mark on the base consists of the black Royal Arms mark with "ADAM DAN...G IMPORTER" printed, in black, around it. An indecipherable name is stamped into the base appearing to read "AGMRA...". This marking is not listed in available porcelain references and may indicate the potter or pattern designer. The pattern resembles three illustrated by Sussman (1985): J. & G. Meakin; Mellor, Taylor & Company; and William Taylor.

CAT. #	OBJECT	QTY	COMMENTS
22	Saucer	1	Wheat pattern
23	Plate	1	Wheat pattern; Royal Arms; "ADAM DANG IMPORTE"
25	Bowl	1	Royal Arms lion; "ROYAL IRONSTONE"
26	Bowl?	1	"& S";"WINN"

Table 21: Other Marks on White Ceramics

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. The term 'Royal Ironstone China' was also used by various pottery firms in various countries and specimens with these general phrases often cannot be assigned to specific companies. DlLg-32:95B/25 falls into this group.

DlLg-32:95B/26 has only a small portion of what may be a jobber firm in Winnipeg that sold this pottery. Often the name of the jobber who sold the dishes was also printed on the sherd. Two such companies in Winnipeg were the Robinson & Company and the Gowans Kent & Company. The name on this sherd does not appear to be either one of these firms.

6.9.1.2 Gold-on-White Ceramics

DlLg-32:95B/19 is a single lip, body sherd from a cup. The background colour is an off-white tending towards cream colour, occasionally designated as creamware. The external body is fluted and the pattern consists of vines of gold flowers and leaves on the exterior surface of the sherd. The pattern extends 25.3 mm down from the lip and appears to be only on the upper portion of the cup, although the majority of the cup is missing.

6.9.1.3 Blue-on-White Ceramics

The blue-on-white colour category consists of seven catalogue numbers representing seven sherds (Table 22). DlLg-32:95B/12 and 13 are both portions of a plate with remnants of the Blue Willow pattern on them. DlLg-32:95B/12 has a scalloped lip with the typical geometric designs of Blue Willow flowing down onto the body. DlLg-32:95B/13, the body,base sherd, has two islands with

pagodas and trees on them that are also typical of the Blue Willow pattern. Both sherds are made of coarse paste and have identical thicknesses (5.5 mm) and may be from the same plate. There is no indication of a maker's mark on DlLg-32:95B/13. DlLg-32:95B/125 is a lip,body sherd possibly from a bowl. The interior surface has the Blue Willow geometric designs, while the exterior surface has the roof of a pagoda on it. The Blue Willow pattern has been made by many firms in many countries for a long period of time and it is impossible to ascribe these pieces to any one firm. A verse, taught to one of the authors by a grandmother, describes the pattern on Blue Willow:

Two little birds flying high
A little vessel sailing by
A bridge with three and not with four
A weeping willow hanging o'er
An apple tree with apples on
A great long fence to end my song.

CAT. NO.	OBJECT	QTY	PORTION	COMMENTS
10	Cup	1	body	18th century scene; geometric
11	Plate?/Saucer?	1	body	Oriental man
12	Plate	1	lip,body	Blue Willow
13	Plate	1	body,base	Blue Willow
14	Plate	1	lip,body	lines; geometric diamonds
15	Plate	1	lip,body	band; chicken tracks
125	Bowl?	1	lip,body	Blue Willow

Table 22: Blue-on-White Ceramics with Various Patterns

The remaining four sherds in this colour group have different patterns. DlLg-32:95B/10, a cup sherd, has a panelled body on the exterior surface which is covered with a scene. This scene consists of a town setting with a bridge and two figures, in 18th century clothing, beside it with a row of multi-storied buildings in the background. The interior of this sherd is decorated with a wide band of geometric diamonds, curlicues, and waves.

DILg-32:95B/11 has the upper torso and head of an Oriental figure, possibly Chinese or Persian, on a stippled blue background with reeds and tree branches around him.

DlLg-32:95B/14 is a thick sherd with a 36.3 mm wide pattern that extends from the lip to the junction of the body and the base on the interior surface. This pattern consists of two thin blue lines just below the lip. A vine-like band of blue triangular leaves is just below the lines followed by a large band of geometric diamonds bisected by a row of larger diamonds with stylized flowers and leaves inside it.

DILg-32:95B/15 has a 5.8 mm blue band that follows the lip and extends onto the body. The band has closely-spaced darker, left to right, oriented lines in it. An 18.4 mm wide, incised row of what resemble chicken tracks extends from the lip, covers the blue band, and continues onto the body.

6.9.1.4 Green-on-White Ceramics

In the green-on-white colour category, there are three catalogue numbers consisting of three sherds. DILg-32:95B/4 is a lip,body sherd from a plate. The pattern consists of a 9.2 mm wide band of closely-spaced vertical lines, which is bisected by a sausage-like chain, just below the lip. Hanging from the bottom scalloped edge of this band are alternating bell-shaped thistle flowers and a lobed linear leaf.

DILg-32:95B/3 and 17 are the lip,body portions of cups and may actually be from the same specimen. DILg-32:95B/17 measures 41.1 mm in length and 55.8 mm in width and has enough of the body present to ascertain that it has an exterior panelled shape. The exterior pattern consists of a smudged floral design with only two leaves and a possible stalk of berries identifiable. This pattern alternates with a roughly-painted, solid, inverted triangle, falling from the lip, which is bordered by a design which may have been intended to be an inverted plume. The interior of DILg-32:95B/17 has a faded pattern which appears to be a flower with a stalk of leaves extending horizontally out from it. DILg-32:95B/3 is a smaller sherd, measuring 16.3 mm in length by 41.4 mm in width, than DILg-32:95B/17. The body is also panelled and it has the roughly-painted inverted triangle with the plume, and a small portion of a berry beside it. The thickness of the lips of both sherds, 2.7 mm, is identical, the paste is identical, and the pattern is very close, although the green colour on DILg-32:95B/3 is slightly darker than that on DILg-32:95B/17. This may be just a matter of a slight paint tint problem during decorating, a colour change during the firing process, or differential fading over time.

6.9.1.5 Black-on-White Ceramics

In some instances, colour variation is such that artifacts catalogued as black-on-white might actually be a dark indigo shade of blue. Numerous shades of various colours are used in ceramic decoration and there is a propensity for individual eyesight to see differing zones of demarcation for each primary colour. One sherd has a black (possibly indigo) pattern on it. DlLg-32:95B/20 is the body, base portion of a plate with feathery black fronds flowing over the base and the body. A very tiny remnant of a maker's mark is on the base of this sherd but it cannot be deciphered.

6.9.1.6 Black and Gold-on-White Ceramics

DlLg-32:95B/16 is an ornately decorated lip, body sherd from a larger bowl, probably a rectangular or square serving dish. The lip and short neck (15.2 mm) would be horizontally oriented and merge with the body at an oblique angle (130°). The pattern on the interior surface consists of a band of black flowers and possibly small stars on the flat lip and neck. Below this band, on the body, there is a band of black stippling bounded at the base by a thick, black, wavy line and a thinner parallel black line. Further down on the body, there is a small portion of what might be the tip of the same tree that occurs on the external side. The external side is the more ornate of the two. An 8.2 mm

wide band of alternating upright and inverted triangles occurs at the junction of the lip and the body. The inverted triangles are black with oblique lines across them and a black dot in the centre, while the upright triangles have a white background with a black inverted ankh-like symbol in them. The external body has the upper portion of a crane and part of a cherry blossom tree on it. Both these black external patterns are overlain with a yellow colour that gives them an iridescent sheen. The yellow colour only appears on a very small crescent-moon shape on the lip of the interior pattern.

6.9.1.7 Purple-on-White Ceramics

Four sherds have a purple-on-white pattern on them (Table 23). DlLg-32:95B/8 and 9 are part of the same set, albeit different pieces. DlLg-32:95B/8, the cup, has a 1.0 mm wide band of honeycomb like white-on-purple circles around the body on the exterior and at exactly the same location on the interior. DlLg-32:95B/9 is the matching saucer with the identical band of decoration falling from the lip onto the body.

DlLg-32:95B/18 has a 32.8 mm wide band of a pattern on the exterior surface. This consists of an upper edge band, which is badly exfoliated, but matches an identical upper band on the interior of the cup, and includes a background of purple lines with a sausage-like chain in the centre of it. The exterior band also has a central pattern of large purple flowers and fronds on a white background. Below the floral pattern there is a Greek key band which completes the exterior pattern. The interior pattern consists solely of the smaller upper purple lines with the sausage-like chain bisecting it.

CAT. NO.	OBJECT	QTY	PORTION	COMMENTS
8	Cup	1	body	bands
9	Saucer	1	lip,body	band
18	Cup	1	lip,body	geometric bands;floral
21	Bowl	1	lip,body	bands;floral

Table 23: Purple-on-White Ceramics with Various Patterns

DlLg-32:95B/21 is a very thick, 10.7 mm, lip,body sherd from a bowl. The two-part pattern consists of a 12.0 mm wide band of vertical purple lines with a sausage-like chain running horizontally in the middle of the band. This pattern seems to cross-cut the different coloured sherds recovered from this project—it appears as a smaller band in the green-on-white section as well as an even smaller pattern on DlLg-32:95B/18 in this colour grouping. In addition to this band on DlLg-32:95B/21, there are also large poppy-like purple flowers beneath the band. This sherd, which measures 41.8 mm in length and 43.3 mm in width, is only the very upper portion of the bowl body and lip. This was probably a large serving dish or basin.

7.0 SOUTH ABUTMENT INTERPRETATION

The types of recovered artifacts are indicative of a mixture of activities, some of which probably occurred at the site, while others are probably the result of garbage dumping along the riverbank or the railroad embankment. During the field operations, fragments of undiagnostic structural debris (bricks, concrete blocks, structural steel, milled lumber, etc.) were commonplace. However, none of these seem to have derived from a building at this location, but rather were part of the fill brought into the area to build the dyke along the upper bank of the Assiniboine River. Structural debris from the demolition of the Fort Garry Curling Club, which had taken place earlier, had been removed from the site and had not become incorporated with the soils. A prior disturbance had taken place adjacent to the east side of the existing bridge where a telephone cable was present at the base of a deep trench. In contrast with the situation on the north side of the Assiniboine River, no artifacts were present in the trench fill.

No evidence of former buildings, in the form of foundations or in-filled basements, was observed. Archival data, consisting of two maps dating to 1848 and 1836/63 (Warkentin and Ruggles, 1970:191, 193), indicated that dwellings had existed on South Point between the floods of 1826 and 1882 (Quaternary 1994b:30). The lack of evidence within the excavation area can indicate that either (a) the buildings were not located within the construction area, suggesting problems with correlating data from the archival maps and current landforms, or (b) the buildings, which had been eradicated by one or more of the recorded floods (1852, 1861, 1882), did not have sub-surface components.

Many artifacts, particularly bottles and ceramic dinnerware, provide time ranges for their manufacture. Some specimens (e.g., Drewry or Dominion Glass bottles) can be dated to the specific year of manufacture, while others can provide a duration of specific logos or styles. These derived dates can provide data about the periods of deposition at historic archaeological sites. At this location, only glassware was able to provide specific dates. Deposition of bottles usually occurs soon after the container is emptied, whereas deposition of dinnerware specimens often occurs when the artifact is broken. This could be as much as several decades after the object was manufactured.

When examining the time ranges and specific dates derived from glassware, there does not seem to be any pronounced cluster (Figure 9). Only twelve artifacts were able to provide temporal ranges, most of a considerable span. Four artifacts yielded specific dates: a Drewry bottle (1911), two Dominion Glass bottles (1944, 1951), and a license plate (1961). It would appear that only one artifact could possibly pre-date the construction of the railroad embankment—however, the clay pipe could have been on a tobacconist's shelves for several years after the end of the Ford's exporting to Canada. While these pipes tend to be identified as representative of the Fur Trade period, they "held out well into the twentieth century, generally in industrial centres but also in rural areas" (Walker 1977:262).

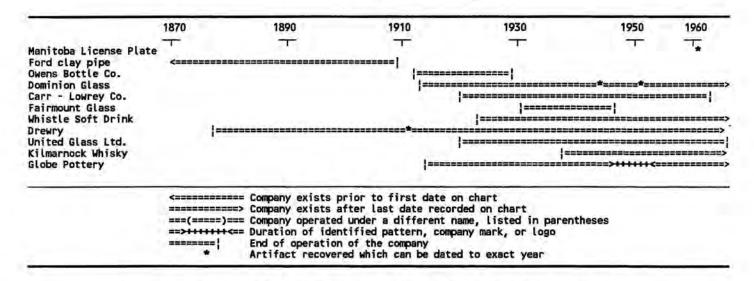


Figure 9: Temporal Chart of Recovered Historic Artifacts - South Abutment

All of the recoveries derive from the upper fill layers or the riverbank slump layers and are not necessarily indicative of activities that occurred at the location. The absence of residences on this small portion of land bounded by the railroad track and Main Street could have resulted in the area being used as an unofficial park by residents of the Mayfair community. In addition, an unoccupied area, especially adjacent to a riverbank, inevitably becomes a garbage dumping site. It is unlikely that many of the recovered artifacts derive from activities that actually occurred on the site.

8.0 RECOMMENDATIONS

The excavations for the construction of the new northbound Main Street Bridge (across the Assiniboine River) consisted of relatively localized operations—mechanized excavations for abutments on each side of the river, as well as augering for placement of caissons. All excavation was monitored under Heritage Permits issued by Manitoba Culture, Heritage and Citizenship.

The archaeological monitoring program resulted in the recording of soil stratigraphy and the recovery of artifacts which provided information on past activities in the construction areas. On both sides of the river, artifactual evidence was limited to the recent past. However, archival data and other archaeological projects in the immediate vicinity have provided evidence of earlier activities. Archival data indicates that the former south wall of Upper Fort Garry would have been directly across Main Street and the route of the linkage between the new Main Street Bridge and the existing street. Archaeological monitoring of construction activities in the former Hudson's Bay Company parking lot (Kroker and Goundry 1990a:25-26) encountered evidence of garbage disposal activities, some of which probably related to the operation of the adjacent Hudson's Bay Company Liquor Store (1869 - 1883). The archaeological assessment of South Point (Quaternary 1990) and the archaeological monitoring and mitigation programs already undertaken in conjunction with the entire Main/Norwood project have provided evidence that pre-railroad archaeological resources are present in the immediate vicinity. Recent dumping activity was documented during the monitoring of excavations relating to the C.N. Overpass Reconstruction (Quaternary 1995b) and the construction of the north abutment of the northbound Norwood Bridge (Quaternary n.d.). Evidence of Homestead period activity was recorded (Quaternary 1995b:95) and archaeological resources predating the Fur Trade era were recovered through mitigative operations (Quaternary 1995b:126-173; n.d.)

Due to the high probability of encountering archaeological evidence of Recent, Fur Trade, and/or Precontact, it is recommended that construction of the road linking the new bridge to other components of the project (Main Street, the northbound Norwood Bridge) be archaeologically monitored.

9.0 BIBLIOGRAPHY

Amory, Cleveland

1969 1902 Edition of the Sears, Roebuck Catalogue. Bounty Books, Crown Publishers, Inc., New York.

Ashdown Hardware Company

1909 Ashdown Catalogue. Ashdown Hardware Co., Winnipeg.

Chopping, George C.

1978 Bottles of the Canadian Prairies. Self-published: George C. Chopping, Spy Hill, Saskatchewan.

Collard, Elizabeth

1967 Nineteenth-Century Pottery and Porcelain in Canada. McGill University Press, Montreal.

DePasquale, Dan, Gail DePasquale and Larry Peterson

1983 Red Wing Stoneware. Collector Books, Paducah, Kentucky.

Gilbert, B. Miles

1973 Mammalian Osteo-Archaeology: North America. Missouri Archaeological Society, Columbia, Missouri.

Godden, Geoffrey A.

1964 Encyclopaedia of British Pottery and Porcelain Marks. Herbert Jenkins Ltd., London.

Jones, Olive R. and Catherine Sullivan, et al.

1985 The Parks Canada Glass Glossary. Environment Canada, Parks Canada, National Historic Parks and Sites Branch.

Klamkin, Marian

1971 The Collector's Book of Bottles. Dodd, Mead & Co., New York.

Kottman, Arthur

1979 Insulators - Colorful Supports for Wires. In *The Encyclopedia of Collectibles. Inkwell to Lace*. Andrea Dinoto (Ed.). Time-Life Books Inc., Alexandria, Virginia.

Kroker, Sid

1989 North Assiniboine Node Archaeological Impact Assessment. The Forks Renewal Corporation, Winnipeg.

Kroker, Sid and Pamela Goundry

1990a Archaeological Monitoring of the Stage I Construction Program. The Forks Renewal Corporation, Winnipeg.

1990b Archaeological Resources at the Manitoba Sports Federation Building Site (200 Main Street). Quaternary Consultants Ltd., Winnipeg.

1993 Archaeological Monitoring and Mitigation of the Assiniboine Riverfront Quay. The Forks Renewal Corporation, Winnipeg.

Kroker, Sid, Barry B. Greco, Arda Melikian and David K. Riddle

1990 The Forks (1989) Pilot Public Archaeology Project: Research Report Excavations at 21K (Fort Gibraltar I). Canadian Parks Service, The Forks Renewal Corporation, and Manitoba Culture, Heritage and Recreation, Historic Resources Branch, Winnipeg.

Kroker, Sid, Barry B. Greco and Kate Peach

1992 1991 Investigations at Fort Gibraltar I: The Forks Public Archaeology Project. The Forks Public Archaeological Association, Inc., Winnipeg.

Kroker, Sid, Barry B. Greco and Sharon Thomson

1991 1990 Investigations at Fort Gibraltar I: The Forks Public Archaeology Project. Canadian Parks Service, The Forks Renewal Corporation, and Manitoba Culture, Heritage and Recreation, Historic Resources Branch, Winnipeg.

Manitoba Museum of Man and Nature

1986 Guides and Manuals for Processing Archaeological Materials. E. L. Syms (Ed.). Winnipeg.

Mark, Herman

1971 Plastics. In: Collier's Encyclopedia, W.D. Halsey (Ed.). Volume 19:135. Crowell-Collier Educational Corporation.

Miller, George L. and Elizabeth A. Jorgensen

1986 Some Notes on Bottle Mould Numbers from the Dominion Glass Company and its Predecessors. Environment Canada, Parks Canada, National Historic Parks and Sites Branch.

Nelson, Lee H.

1968 Nail Chronology as an Aid to Dating Old Buildings. American Association for State and Local History, History News, Volume 24, No. 11, Technical Leaflet 48.

Olsen, Stanley J.

- 1960 Post-Cranial Skeletal Characters of Bison and Bos. Harvard University, Peabody Museum, Papers of the Peabody Museum of Archaeology and Ethnology, Volume XXXV, No. 4.
- 1964 Mammal Remains from Archaeological Sites: Part I, Southeastern and Southwestern United States. Harvard University, Peabody Museum, Papers of the Peabody Museum of Archaeology and Ethnology, Volume LVI, No. 1.

Quaternary Consultants Ltd.

- 1988 Tourist Hotel Site Heritage Resource Impact Assessment. On file with Winnipeg Core Area Initiative and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1989 Preliminary Archaeological Investigations for the Proposed Norwood/Main Street Bridge Project. On file with Reid Crowther & Partners; City of Winnipeg; Manitoba Department of Culture, Heritage and Recreation, Historic Resources Branch, Winnipeg.
- 1990 Archaeological Assessment of Impact Zones on South Point for the Proposed Norwood/Main Street Bridge Project. On file with Reid Crowther & Partners; City of Winnipeg; Manitoba Department of Culture, Heritage and Recreation, Historic Resources Branch, Winnipeg.
- 1994a Archaeological Monitoring of Geo-Technical Investigations on South Point. On file with HBT Agra Limited; Reid Crowther & Partners; Manitoba Department of Culture, Heritage and Citizenship, Historic Resources Branch.

- 1994b 1994 Archaeological Investigations in Conjunction with the Main/Norwood Project. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1994c Archaeological Monitoring of Services Installations for the Manitoba Children's Museum at The Forks. On file with The Forks Renewal Corporation; Manitoba Children's Museum; Winnipeg Hydro; and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.
- 1995a Archaeological Monitoring of Pumphouse Relocation Component: Main/Norwood Bridge Project. On file with Reid Crowther & Partners and Manitoba Department of Culture, Heritage and Citizenship, Historic Resources Branch.
- 1995b Archaeological Monitoring and Mitigation of the C.N. Rail Overpass Reconstruction Mile 0.40, Rivers Subdivision P.D. No. 94-32. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch.
- 1996 Heritage Resources Impact Assessment of the Portage East Site. On file with Spirit of Manitoba, Inc. and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch.
- n.d. Archaeological Monitoring and Mitigation of the Northbound Norwood Bridge Construction Project. In preparation.

Schmid, Elisabeth

1972 Atlas of Animal Bones: For Prehistorians, Archaeologists, and Quaternary Geologists. Elsevier Publishing Company, Amsterdam.

Stein, Jess and Lawrence Urdang (Eds.)

1967 The Random House Dictionary of the English Language. The Unabridged Edition. Random House, New York.

Stock, R.E.

1978 A History of Carbonated Beverages in Winnipeg. Rion Enterprises. Winnipeg.

Sussman, Lynne

1985 The Wheat Pattern; An Illustrated Survey. Environment Canada, Parks Canada, National History Parks and Sites Branch, Architecture and History, Studies in Archaeology.

Sydenham Glass Co. Limited

1908 Illustrated Bottle Catalogue and Price List. Sydenham Glass Co. Limited, Wallaceburg.

Toulouse, Julian Harrison

1971 Bottle Makers and Their Marks. Thomas Nelson Inc., New York.

Walker, Iain C.

1971 Nineteenth-Century Clay Tobacco Pipes in Canada. Ontario Archaeology, No. 16:19-35.

1977 Clay Tobacco-Pipes, With Particular Reference to the Bristol Industry. Department of Indian and Northern Affairs, Parks Canada, National Historic Parks and Site Branch, *History and Archaeology*, 11.

Warkentin, John and Richard L. Ruggles

1970 Historical Atlas of Manitoba 1612 - 1969. Manitoba Historical Society, Winnipeg.

APPENDIX A HERITAGE PERMITS



Heritage	Permit No.	A69-95			FORM 11
PURSUANT to	Section/Subsection	53	of The Heritage Reso	urces Act:	
Name: Address:	Winnipeg MB R				
	(1	nereinafter refer	red to as "the Permittee"),	
is hereby gran	nted permission to:				
Monitor co project at their impo	D1Lg-32, to record	ies relating i the presend	to the south abutme e or absence of her	nt for the Norwood itage resources an	bridge d assess
during the per	riod:	-8-			
August 9,	1995 to March 31, 1	1996			
This permit is	issued subject to the fo	llowing condition	ns:		
(1) That the	information provided in August		for this permit dated the	8th 995 , is true in substan	day
			ions of The Heritage Resor CUSTODY AND OWNERSHI		
pursuant			written report or reports which shall be satisfactory to		
	March 31, 1996				

- (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:

- All surface collections, excavations, etc. are to be carried out using the provenience system established for use at The Forks;
- All heritage objects (artifacts) recovered from The Forks are to be catalogued according to the CHIN system with the relevant Borden designation D1Lg-32/95B;
- c. All heritage objects recovered are to be deposited with the Manitoba Museum of Man and Nature by March 31, 1996, for permanent curation and storage, unless appropriate loan requirements are arranged with the Curator of Archaeology prior to that date;
- d. 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;
- e. All computer systems and programs employed in archaeological research should be compatible with the computer system established for The Forks;
- f. Appropriate arrangements and funds should be made available for the conservation of perishable heritage objects collected from the Portage East Site;
- g. In the event that any human remains are encountered during the excavations, all activity in that particular locus will cease immediately, and the Historic Resources Branch notified immediately so that appropriate action can be determined and taken;
- h. The Permittee will be on-site supervising all aspects of the field work;
- The Permittee shall be responsible for the conduct of the laboratory analysis of recovered heritage objects and information to be included in the permit report;
- j. The report identified in #3 above shall conform at a minimum to "The Contents and Format of a Heritage Resource Impact Assessment" (copy attached); and
- k. 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.

8280h

Dated at the City of Winnipeg, in Manitoba , this	8th	day of _	August	19 <u>95</u> .
	11/	1 Carp	e, Heritage and Citizen	



Heritage Permit No.		A70-95			FORM 11	
PUR	SUANT to Section	on/ Subsection _	53	of The Heritage Res	ources Act:	
	Name: Address:	Quaternary 130 Fort St Winnipeg ME				
		ATTENTION	Mr. Sid Kr	oker		
			(hereinafter ref	erred to as "the Permittee	"),	
is he	ereby granted pe	rmission to:				
pro the	ject at D1Lg- ir importance	-33, to recor	d the prese	g to the north abutm nce or absence of he	ent for the Norwood brid	lge sess
000	ust 16 to Oct					
	permit is issued				14th	100
(1)	That the inform	ation provided in August	n the applicatio	n for this permit dated the	19 95, is true in substance an	day
(2)		the latter of the control of the second of t		visions of The Heritage Res	ources Act and any regulations	0.8070.0
(3)	That the Permit	tee shall provide permit, the form	to the Minister	a written report or reports	with respect to the Permittee's to the Minister and which shall t	
	December :	31, 1995				
(4)	That this permi	t is not transfera	able;		المستون المستوال	
(5)	This permit ma				Minister, there has been a brea	

(6) Special Conditions:

- a. All surface collections, excavations, etc. are to be carried out using the provenience system established for use at The Forks and this project will be designated 95C;
- b. All heritage objects (artifacts) recovered from The Forks are to be catalogued according to the CHIN system and the relevant Borden designation will be DILg-33/95C;
- c. All heritage objects from The Forks are to be deposited with the Manitoba Museum of Man and Nature by March 31, 1996, for permanent curation and storage, unless appropriate loan requirements are arranged with the Curator of Archaeology prior to that date;
- d. 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;
- e. All computer systems and programs employed in archaeological research should be compatible with the computer system established for The Forks;
- f. Appropriate arrangements and funds should be made available for the conservation of perishable heritage objects collected from The Forks;
- g. In the event that any human remains are encountered during the excavations, all activity in that particular locus will cease immediately, and the Historic Resources Branch notified immediately so that appropriate action can be determined and taken;
- h. The Permittee will be on-site supervising all aspects of the field work, including the removal of the railroad overburden during site preparation, at least 75% of the time, but when the Permittee must be absent, a qualified designate acceptable to Historic Resources Branch (copy of vita to be filed prior to commencement of field work) shall be present;
- The Permittee shall be responsible for the conduct of the laboratory analysis of recovered heritage objects and information to be included in the permit report;
- j. The report identified in #3 above shall conform at a minimum to "The Contents and Format of a Heritage Resource Impact Assessment" (copy attached);
- k. 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.

8280h

Dated at the City of Winnipeg, in Manitoba, this	15th	day of	August	19 <u>95</u> .
		1.0		
	1	199	e, Heritage and Citizen	ahla
	fr	- Willister of Culture	s, Heritage and Chizen	sup

APPENDIX B CATALOGUE OF RECOVERED ARTIFACTS

Site: DLLG-33:95C MAIN STREET BRIDGE Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
6	į	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
2	1.	INSULATOR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
B	1.	SHERD TUMBLER	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
el e	4	SHERD BOWL	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950825
i)	1	SHERD	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950825
	1	SHERD PLATE	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950825
	3	SHERD PLATE	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950825
	1	FIGURINE ELEPHANT	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950825
	1	SHERD LID	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
0	1	INNOMINATE BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT	19950825
1	1	FEMUR SUS SCROFA	BONE INDUSTRIAL	NORTH ABUTMENT	19950825
2	i.	SHOE	LEATHER; IRON; RUBBER INDUSTRIAL	NORTH ABUTMENT	19950825
3	1	BOHL	IRDN INDUSTRIAL	NORTH ABUTMENT	19950825
4	1	SHERD Cuf	18LIN 18LIN	NUMTH HOUSENT	19900625
ā	Ì	POT	INDUSTRIAL	NORTH ABUTMENT	19950825
6	1	TEST TUBE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
7	1	SYRINGE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
8	1	ELECTRICAL PART	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950825
9	1	BATHROOM FIXTURE	PORCELAIN INDUSTRIAL	NORTH ABUTMENT	19950825
)	1	DISTRIBUTOR CAP	BAKELITE INDUSTRIAL	NORTH ABUTMENT	19950825
i	1	PIPE FITTING	IRON INDUSTRIAL	NORTH ABUTMENT	19950825
2	1	STRAP	STEEL INDUSTRIAL	NORTH ABUTMENT	19950825
3	í	BATTERY WET CELL	BAKELITE INDUSTRIAL	NORTH ABUTMENT	19950825
4	1	TUBE	ALUMINUM INDUSTRIAL	NORTH ABUTMENT	19950825
5	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825

Site: DLLG-33:95C MAIN STREET BRIDGE Area: RED RIVER

Client: REID CROWTHER _____ Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
26	i	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
27	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
28	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
29	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
30	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
31	1	SHERD JAR	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
32	i	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
33	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
34	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
35	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
36	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
37	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
38	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
39	1	JAR JAR	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
40	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
41	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
42	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
43	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
44	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
45	1	BOTTLE BOTTLE	GLASS; PLASTIC INDUSTRIAL	NORTH ABUTHENT	19950825
46	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
47	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
48	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
49	ì	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
50	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
51	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
52	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
53	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
54	1	BOTTLE BOTTLE	GLASS: CORK INDUSTRIAL	NORTH ABUTHENT	19950825
55	1.	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
6	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
57	£	BOTTLE BOTTLE	GLASS; CORK INDUSTRIAL	NORTH ABUTMENT	19950825
58	1	BOTTLE BOTTLE	GLASS; PLASTIC INDUSTRIAL	NORTH ABUTMENT	19950825
59	1	BOTTLE BOTTLE	GLASS; PLASTIC INDUSTRIAL	NORTH ABUTMENT	19950825
50	1	BOTTLE BOTTLE	GLASS; PLASTIC INDUSTRIAL	NORTH ABUTMENT	19950825
51	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
2	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
3	i	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
14	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
5	3	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
6	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
57	3	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
8	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
9	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
(¢	1.	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
1	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
2	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
3	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
74	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
75	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
6	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
7	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
8	i	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
9	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
0	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
I	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
2	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
3	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
4	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
5	i	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
6	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
7	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
9	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
9	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
0	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
1	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
2	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
3	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
4	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
5	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
6	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
7	1	BCTTLE BOTTLE	GLÁSS INDUSTRIAL	NORTH ABUTMENT	19950825
8	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
9	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
00	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
101	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
102	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
103	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
104	1.	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
105	1	BOTTLE BOTTLE	GLASS; CDRK INDUSTRIAL	NORTH ABUTMENT	19950825
106	1.	SHERD BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
107	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
108	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
109	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
110	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
111	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
12	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
113	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
114	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
115	i	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
116	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
117	Í	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
118	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
19	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
20	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
121	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19350825
22	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
123	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
24	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
125	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Dat
126	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
27	t	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTHENT	19950825
28	i.	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
29	t	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
30	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
31	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
32	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
33	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
34	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
35	į.	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
36	į	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
37	Į.	BOTTLE BOTTLE	GLASS: IRON INDUSTRIAL	NORTH ABUTMENT	19950825
38	Ì	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
39	t	BOTTLE BOTTLE	GLASS; IRDN INDUSTRIAL	NORTH ABUTMENT	19950625
40	ľ	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
41	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
42	t	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTMENT	19950825
43	ţ	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
44	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
45	i	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
46	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
47	i	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
48	i	SHERD BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
49	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
50	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
51	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
52	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
53	1.	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
54	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTHENT	19950825
55	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
56	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
57	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
58	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
59	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	NORTH ABUTHENT	19950825
60	1	BOTTLE BOTTLE	GLASS; PLASTIC INDUSTRIAL	NORTH ABUTMENT	19950825
61	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
62	1,	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
63	1	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
64	3	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
65	1	BOTTLE BOTTLE	GLASS; IRON; PAPER INDUSTRIAL	NORTH ABUTHENT	19950825
66	2	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTHENT	19950825
67	1.	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
68	2	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
69	2	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTHENT	19950825
70	2	BOTTLE BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTHENT	19950825
71	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
72	Í	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
73	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
74	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
75	1.	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
176	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTMENT	19950825
177	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
178	1	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTHENT	19950825
179	6	JAR JAR	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
180	1	JAR JAR	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT	19950825
181	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 20	19950829
182	1	AMPULE	GLASS; ALUMINUM INDUSTRIAL	NORTH ABUTMENT HOLE 20	19950829
183	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 10	19950902
184	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 10	19950902
185	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 11	19950912
186	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 11	19950912
187	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 11	19950912
188	2	SHERD BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTMENT HOLE 11	19950912
189	1	SHERD BOTTLE	GLASS; PAPER INDUSTRIAL	NORTH ABUTHENT HOLE 11	19950912
190	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 11	19950912
191	1	BOTTLE BOTTLE	GLASS; CORK INDUSTRIAL	NORTH ABUTHENT HOLE 22	19950830
192	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 22	19950830
193	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 22	19950830
194	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 22	19950830
195	2	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 22	19950830
196	2	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 22	19950830
197	2	SHERD PLATE	PLASTIC INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
198	1	SCAPULA BOS TAURUS	BONE INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
199	1	HUMERUS SUS SCROFA	BONE Industrial	NORTH ABUTMENT HOLE 21	19950829
200	Ĺ	JAR JAR	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 21	19950829

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
201	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 21	19950829
202	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 21	19950829
203	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
204	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
205	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 21	19950829
206	1	SHERD BOTTLE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
207	2	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
208	1	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
209	1	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 21	19950829
210	1	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
211	1	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTMENT HOLE 21	19950829
212	1	WINDOWPANE	GLASS INDUSTRIAL	NORTH ABUTHENT HOLE 21	19950829

Site: DLLG-32:95B MAIN BRIDGE SOUTH POIN Area: RED RIVER

Client: REID CROWTHER Acc. No.: _____

Cat.	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
i	1	PIPE	KAOLIN INDUSTRIAL	SOUTH ABUTMENT	19950811
2	1	PIPE	KAOLIN INDUSTRIAL	SOUTH ABUTMENT	19950811
	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
	2	NAIL ROUND	IRON Industrial	SOUTH ABUTMENT	19950811
	1	PITCHER	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
0	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
1	1	SHERD PLATE?/SAUCER?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
2	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
3	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
4	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
5	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
6	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
7	1	SHERD	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
В	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
9	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
0	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
1	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
2	1	SHERD SAUCER	PORCELAIN Industrial	SOUTH ABUTMENT	19950811
3	1	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
4	4	SHERD PLATE	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
5	1.	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811

Site: DLLG-32:95B MAIN BRIDGE SOUTH POIN Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
26	-1	SHERD BOWL?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
27	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
28	1	SHERD CUP	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
29	1.	SHERD BONL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
30	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
31	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
32	1	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
33	1	SHERD BOWL?	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
34	1	SHERD JAR?	PORCELAIN INDUSTRIAL	SOUTH ABUTMENT	19950811
35	1	LID JAR	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
36	2	SHERD BOWL	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
37	2	SHERD CROCK	STONEWARE INDUSTRIAL	SOUTH ABUTHENT	19950811
38	2	SHERD JUG	STONEWARE INDUSTRIAL	SOUTH ABUTMENT	19950811
39	1	PIPE	KAOLIN INDUSTRIAL	SOUTH ABUTHENT	19950811
40	1	NAIL SQUARE	IRON INDUSTRIAL	SOUTH ABUTHENT	19950811
41	1	NAIL SQUARE	IRON INDUSTRIAL	SOUTH ABUTMENT	19950811
42	1	NAIL SQUARE	IRON INDUSTRIAL	SOUTH ABUTHENT	19950811
43	1	NAIL SQUARE	IRON INDUSTRIAL	SOUTH ABUTHENT	19950811
44	1	INSULATOR	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
45	1	INSULATOR	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
46	1.	INSULATOR	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950811
47	1.	WINDOWPANE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
48	1	LICENSE PLATE	TIN Industrial	SOUTH ABUTHENT	19950811
49	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
50	1.	BOTTLE	GLASS; CORK INDUSTRIAL	SOUTH ABUTHENT	19950811

Site: DLLG-32:95B MAIN BRIDGE SOUTH POIN Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
51	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
52	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	SOUTH ABUTHENT	19950811
53	1	BOTTLE BOTTLE	GLASS; IRON INDUSTRIAL	SOUTH ABUTHENT	19950811
54	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
55	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
16	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
17	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
8	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
19	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
60	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
1	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
2	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
3	1	BOTTLE BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
4	1	JAR JAR	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
5	1	SHERD BOTTLE	SLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
6	2	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
7	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
8	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
9	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
0	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
1	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
2	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
3	1	SHERD BOTTLE	6LASS INDUSTRIAL	SOUTH ABUTHENT	19950811
4	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
75	1.	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811

Site: DLLG-32:95B MAIN BRIDGE SOUTH POIN Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
76	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTMENT	19950811
77	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
78	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
79	3	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
80	1	SHERD BOTTLE	GLASS INDUSTRIAL	SOUTH ABUTHENT	19950811
81	1	POT	COPPER INDUSTRIAL	SOUTH ABUTHENT	19950811
82	1	HAT	FELT INDUSTRIAL	SOUTH ABUTHENT	19950811
83	3	SHOE	LEATHER; IRON INDUSTRIAL	SOUTH ABUTHENT	19950811
84	1	SHOE	LEATHER INDUSTRIAL	SOUTH ABUTHENT	19950811
85	1	SHOE	LEATHER INDUSTRIAL	SOUTH ABUTHENT	19950811
86	1	CLEITHRUM ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19950811
87	1	VERTEBRA AVES	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
88	1	FEMUR MELEAGRIS GALLOPAVO	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
89	1.	RADIUS SUS SCROFA	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
90	1	TIBIA SUS SCROFA	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
91	1	SCAPULA SUS SCROFA	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
92	1	MAXILLA; TOOTH OVIS?; CAPRA?	BONE; TOOTH INDUSTRIAL	SOUTH ABUTHENT	19950811
93	1	MANDIBLE; TOOTH OVIS?; CAPRA?	BONE; TOOTH INDUSTRIAL	SOUTH ABUTHENT	19950811
94	1	PHALANX BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
95	1	TARSUS BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
96	1	TIBIA BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
97	1	METATARSUS BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
98	1	HUMERUS BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
99	4	INNOMINATE BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19950811
100	1	AXIS BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811

Site: DLLG-32:958 MAIN BRIDGE SOUTH POIN Area: RED RIVER

Client: REID CROWTHER Acc. No.:

Cat. 0	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Sate
101	1	ASTRAGALUS BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
102	1	CALCANEUS BOS TAURUS	BOME 1MBUSTRIAL	SOUTH ABUTHENT	19950811
103	1	MAXILLA; TOOTH BOS TAURUS	BONE; TOOTH	SOUTH ABUTHENT	19950811
104	3	FENUR BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
05	4	TIBIA BOS TAURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
06	1	LONG BONE MANMALIA	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
107	1	METAPODIAL MANMALIA	BONE INDUSTRIAL	SOUTH ABUTMENT	19950811
.08	1	RIB MAMMALIA	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
109	1	VERTEBRA MANMALIA	BONE 1NDUSTRIAL	SOUTH ABUTHENT	19950811
10	2	SCAPULA NAMNALIA	BONE INDUSTRIAL	SOUTH ABUTMENT	19950811
11	5	VERTEBRA MAMMALIA	BONE INDUSTRIAL	SOUTH ABUTHENT	19950811
12	8	RIB MANMALIA	BOME INDUSTRIAL	SOUTH ABUTHENT	19950811
113	22	VERTEBRA ICTALURUS	BOME INDUSTRIAL	SOUTH ABUTHENT	19950814
14	8	RIB ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTMENT	19950814
15	1	ANGULAR ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950814
116	2	QUADRATE ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950814
17	•	CLEITHRUM ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950814
18	1	HYOMANDIBULAR ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950814
19	1	DENTARY ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950814
20	2	OPERCULUM ICTALURUS	BONE INDUSTRIAL	SOUTH ABUTHENT	19950814
21	15	UNIDENTIFIABLE ICTALURUS	BOME INDUSTRIAL	SOUTH ABUTHENT	19950814
22	1	DENTARY STIZOSTEDION	BONE INDUSTRIAL	SOUTH ABUTHENT	19950814
23	7	CHARCOAL ANGIOSPERMAE	CHARCOAL INDUSTRIAL	SOUTH ABUTHENT	19950814
24	1	PIPE	KAOLIN INDUSTRIAL	SOUTH ABUTMENT	19950814
25	1	SHERD BOML?	PORCELAIN INDUSTRIAL	SOUTH ABUTHENT	19950814