ARCHAEOLOGICAL MONITORING OF THE YORK AVENUE UNDERPASS RECONSTRUCTION PROJECT

Submitted to

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EXECUTIVE SUMMARY

The construction of the new railway trestle and the road underpass on York Avenue, connecting Main Street with Pioneer Boulevard, required considerable excavation. In addition to the roadbed excavations, the installation of subsurface services (water, sewer, land drainage, and hydro ductlines) had potential for impact upon heritage resources. Due to this potential impact, the mechanized excavations were archaeologically monitored. It was advantageous that the services installations occurred early in the project enabling determination of sensitive subsurface areas. During the monitoring of the excavation of vertical shafts, the archaeologists were able to record the stratigraphic profiles and anticipate the depth and location of sensitive zones which would be impacted in later components of the project.

During the excavations through the upper layers of railroad-related fill deposits, historic diagnostic artifacts were curated. Due to the varied mechanisms of deposition and relocation, these artifacts can only provide a broad picture of some of the activities undertaken by the general population of Winnipeg.

Two minor occurrences of pre-European encampments were recorded at the eastern end of York Avenue. These cultural strata were thin and sparse in terms of artifact concentration indicating that they occurred on the periphery of the encampments which had been identified during The Forks Access Project. Artifacts were curated from these cultural horizons and are dated at approximately 600 years ago.

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1.0 INTRODUCTION

The construction project at York Avenue was complex. It involved the building of a new railroad trestle, the installation of sub-surface services (land drainage sewer, waste water sewer, watermain, and Hydro ductlines), and the building of a new road which connects Main Street with Pioneer Boulevard (Figure 1). All components required excavation into undisturbed soil. Prior impact had occurred adjacent to the railroad embankment on the east side with the installation of a water main along the railroad access road. The Main Street/York Avenue intersection had been previously impacted by the installation of sub-surface services.

In addition to the actual road and services work, considerable landscaping of the C.N.R. mainline embankment occurred. The embankment was built in 1910/11 and added to over the years as the number of tracks increased.

Prior to this project, five archaeological investigations in or near the projected impact areas have occurred:

- In the summer of 1988, assessment trenches were excavated along the future alignment of Pioneer Boulevard indicating the presence of archaeological resources near the York Avenue/Pioneer Boulevard intersection (Quaternary 1988).
- In August of 1988, test trenches and auger drill holes were excavated along the proposed alignment of York Avenue to the Provencher Bridge. This investigation provided evidence of several cultural horizons east of the York/Pioneer intersection (Quaternary 1989).
- In July 1989, assessment trenches were excavated along the proposed York Avenue extension right-of-way (Quaternary 1990a:8-11). Recent strata and artifacts post-dating the railroad era (post A.D. 1888) were observed overlying buried soil layers which did not contain archaeological resources.
- The excavations for the construction of the Earl's Restaurant at the northeast corner of the Main Street/York Avenue intersection were monitored in the spring of 1994 (Quaternary 1994a). The upper layers contained evidence of former buildings at the location. The lower riverine sediments (silt and clay layers) contained no archaeological resources.
- During the summer of 1997, a heritage resource impact assessment program was conducted for The Forks Access Project (Quaternary n.d.). This was followed by construction monitoring and mitigation during the fall of 1997 and the spring of 1998.

The construction excavations for this project were monitored by Quaternary Consultants Ltd. under the terms of Heritage Permit A58-97 (Appendix A). The construction involved different companies for the different components and occurred from the fall of 1997 to the fall of 1998.

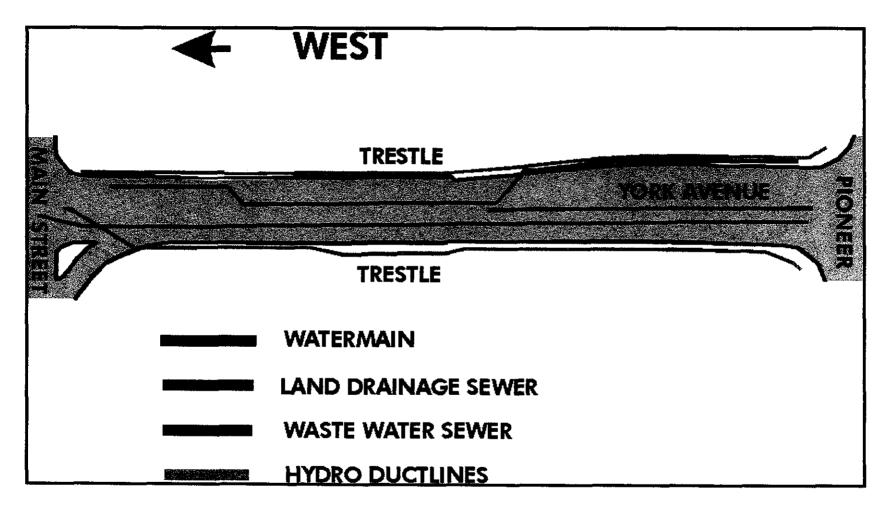


Figure 1: Location of Project Impacts

1.1 Location and Scope of the Project

As depicted in Figure 1, the project was located to the east of Main Street—replacing the railroad trestle and rebuilding the existing road and extending it to link with Pioneer Boulevard. There were two distinct components: the installation of the four sub-surface services and the excavations for the construction of the road. All sub-surface installations extended from Main Street to the intersection with Pioneer Boulevard where services had been previously installed during The Forks Access Project (Quaternary n.d.).

The services installations were at varying depths below grade, with the land drainage sewer being the deepest at an average of 5.5 metres depth. Three of the services were installed by horizontal boring between vertical shafts with only the Hydro ductline installations being open-cut. The continuous trenches for the Hydro installation occurred on both the north and south sides of York Avenue.

1.2 Study Team

The entire archaeological resources management program was directed by Sid Kroker (Senior Archaeologist). The monitoring of construction excavations was conducted by Sid Kroker, Iosef Moravetz, and Carla Parslow.

Computer cataloguing of the recovered artifacts was completed by Pam Goundry. Analysis of all recovered specimens was completed by Pam Goundry and Sid Kroker. Documentation and interpretation has been undertaken by Sid Kroker and Pam Goundry.

1.3 Excavation Monitoring Methodology

The excavation for the project was implemented with large backhoes and the soil was hauled away from the site. Archaeological 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 cessations of excavation for additional examination of the excavation face.

For deeper excavation, such as the vertical shafts for the land drainage sewer, a large-diameter truckmounted auger was used to complete the excavation after the first 3.5 to 4.0 metres had been removed by the backhoe and a cylindrical can had been inserted into the hole. In these cases, the soil extracted by the auger was examined as it was pulled from the hole, approximately 20 cm at a time. Problems of observation arose when the excavations entered into the water table (about 4.5 metres below surface) as the extracted soil was like a thick soup.

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, 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 years of Winnipeg. 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.

When the excavations extended into undisturbed original sediments below the 1888 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. Indicators of archaeological horizons are charcoal layers, ash lenses, and/or reddish stained soil. The colour change is usually indicative of oxidation of the iron particles in Red River silt by heat—the more intense the heat, the redder the soil. These features can denote 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, flakes resulting from tool manufacture, and/or fragments of earthenware containers.

1.4 Archaeological Site Designation

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 (Borden 1954). 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. The York Avenue location falls within the site boundaries of DlLg-33 and was the first project on that location in 1998, thus resulting in a complete site designation of DlLg-33:98A.

1.5 Laboratory Procedures

All of the recovered artifacts were brought to Quaternary Consultants laboratory facilities where they were washed, sorted by material class, and identified by lab personnel. The Pre-Contact material from York Avenue came from two different loci, while historic fill material was collected from across the site. Material of the same type (e.g., white porcelain sherds, unidentifiable fish bone) within the location were combined under a single catalogue number. Identification was carried to the limit obtainable by available reference works and staff expertise. Each artifact received a catalogue

number consisting of the Borden designation for the site—DILg-33:98A—plus a sequential number for permanent identification. All pertinent data associated with the artifact was entered into the computer cataloguing system which is based upon the Canadian Heritage Inventory Network (CHIN) system (Manitoba Museum of Man and Nature 1986; Kroker and Goundry 1993:Appendix B). The processed artifacts were prepared for storage by inserting the specimens and the catalogue card into standard plastic storage bags, then stapling the bags closed. At the end of the project, all recovered artifacts will be delivered to the Manitoba Museum of Man and Nature. This institution is the repository designated by the City of Winnipeg for archaeological artifacts recovered during construction projects undertaken on behalf of the City of Winnipeg.

2.0 STRATIGRAPHY

While a considerable number of vertical shafts were excavated at different locations along the three axes for the installation of the sub-surface services, the soil layering was relatively similar from north to south. Figure 2 is a composite reconstruction of the soil horizons recorded from the different excavations. Data from the vertical shafts for the watermain and the waste water sewer were used as the baseline as these excavations were the most accessible for observing and recording the face of the excavation while working within the sewer cages. The insertion of the cylindrical cans into the excavations for the land drainage sewer precluded observation of the soil profiles when the excavation was completed.

To some degree, Figure 2 is simplified. Thin horizons, e.g., a 2 cm thick sand lens bounded on the top and bottom by thick silty clay layers, are too small to be portrayed on the graph. To provide an illustration of the actual stratigraphic columns, the following profiles are presented (Tables 1 and 2).

DEPTHS (cm)	ELEVATION (M asl)	DESCRIPTION	COMMENTS
SURFACE	231.00		
0 - 45	230.55	Asphalt, cobblestones, gravel	
45 - 62	230.38	Clay fill	
62 - 81	230.19	A Horizon	1888 original soil
81 - 139	229.61	blackish brown silt (B Horizons)	, j
139 - 153	229.47	medium brown silty clay	
153 - 155	229.45	relict soil horizon	
155 - 177	229.23	medium brown silty clay	
177 - 179	229.21	relict soil horizon, decomposed bone	periphery of cultural zone
197 - 207	228.93	medium brown silty clay	
207 - 220	228.80	medium brown sandy silt	
220 - 278	228.22	brown clay	
278 - 284	228.16	medium brown sandy silt	
284 - 287	228.13	brown clay	
287 - 290	228.10	medium brown sandy silt	
290 - 303	227.97	brown clay	
303 - 305	227.95	grey brown clay	
305 - 327	227.73	brown clay	
327 - 339	227.61	medium brown sandy silt	
339 - 344	227.56	brown silty clay	base of excavation

Table 1: Stratigraphic Profile on East Side of Embankment

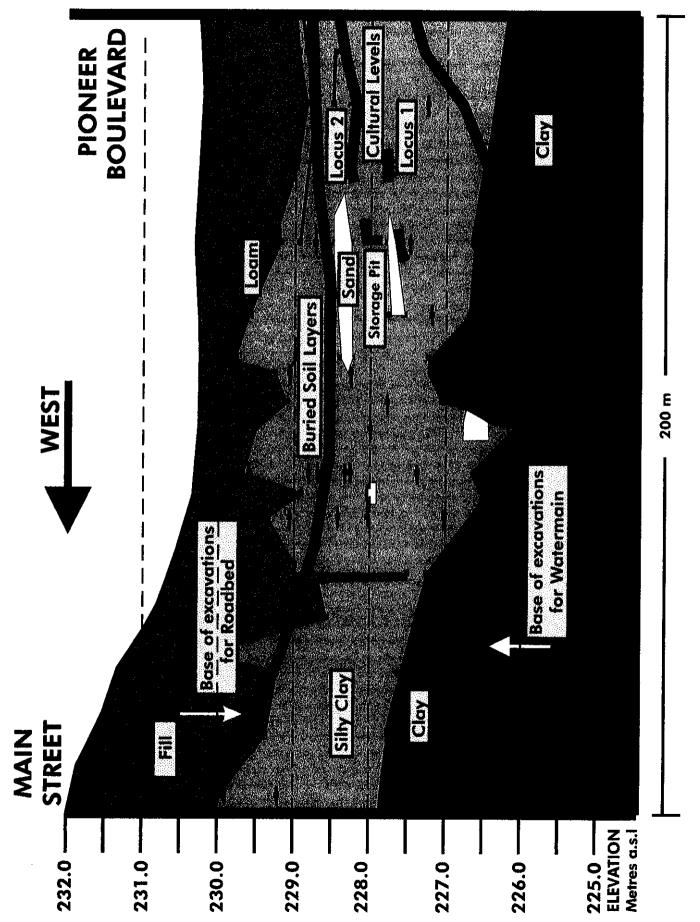
DEPTHS (cm)	ELEVATION (M asl)	DESCRIPTION	COMMENTS
SURFACE 0 - 45	230.20 229.75	Asphalt/cobblestones	
45 - 60	229.60	Gravel	
62 - 140	228.80	Clay fill	
140 - 150	228.70	Manure	
150 - 170	228.50	A Horizon, blocky dark brown silty clay	1888 original soil
170 - 209	228.11	medium brown silty clay	
209 - 212	228.08	relict soil horizon, cultural horizon	Horizon B
212 - 293	227.27	medium brown silty clay	
293 - 295	227.25	relict soil horizon	
295 - 340	226.80	medium brown silty clay	base of excavation

Table 2: Stratigraphic Profile 23 Metres West of Pioneer Boulevard

These two stratigraphic columns illustrate the complexity of the soil layering on the east side of the railroad embankment. Multiple layers of different textured and different coloured sediments are present at all locations, as illustrated by Table 3 from the east side of Main Street. The soils at this location have a distinctly greyish black discolouration due to the downward percolation of coal dust from the adjacent rail track as well as horizontal movement of hydrocarbon contamination from the Earl's Restaurant location on the northeast corner of York Avenue (Quaternary 1994a:6).

SURFACE 232.00 0 - 140 230.60 140 - 186 230.14 Disturbed brown silty clay 186 - 190 230.10 Black clay 190 - 192 230.08 A Horizon 192 - 193 230.07 grey silty clay 193 - 196 230.04 A Horizon 196 - 202 229.98 grey silty clay 202 - 240 229.60 grey black silty clay 240 - 249 229.51 grey clay	DEPTHS (cm)	ELEVATION (M asl)	DESCRIPTION	COMMENTS
249 - 250 229.50 A Horizon 250 - 284 229.16 grey clay base of excavation	0 - 140 140 - 186 186 - 190 190 - 192 192 - 193 193 - 196 196 - 202 202 - 240 240 - 249 249 - 250	230.60 230.14 230.10 230.08 230.07 230.04 229.98 229.60 229.51 229.50	Disturbed brown silty clay Black clay A Horizon grey silty clay A Horizon grey silty clay grey black silty clay grey clay A Horizon	

Table 3: Stratigraphic Profile at East Side of Main Street



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Figure 2: Stratigraphic Profile of Impact Zone

The soil profiles indicate a history of sequential flooding and sediment deposition, with some instances of soil formation during the periods between floods. Little evidence of the historically recorded floods (1825, 1852, 1861, and 1881) is present. Some of the upper buried soil horizons (Figure 2) would result from soil formation upon flood-deposited sediments of the historic floods, although the disjunctiveness of the strata and lack of diagnostic artifacts precludes correlation of specific horizons with specific floods. The original soil zone, prior to the railroad activities which began in 1888, indicates that the land rose towards the west (from 228.50 metres above sea level to 230.19 metres at the embankment).

Working backwards from the 1888 A Horizon at Pioneer Boulevard, only 39 cm (and one distinct soil stratum) separate the upper soil layer from the cultural layer designated as Horizon B (Table 2). At the embankment (Table 1), the separation is 96 cm and consists of four distinct layers including one buried soil horizon. The cultural layer, Horizon B, was designated during The Forks Access Project (Quaternary n.d.) and appears to correlate with the cultural layer excavated during the St. Mary Archaeological Recovery Project (Quaternary 1990b). A radiocarbon date of 580 ± 70 years ago (BGS 1460) was obtained on bone samples from this layer. This shows that the rate of accretion of sediments is extremely variable across a riverine floodplain—9.5 cm/century at Pioneer Boulevard and 23.4 cm/century at the embankment. Similar calculations at Main Street (Table 3) cannot be undertaken as the date of the uppermost A Horizon cannot be determined due to considerable soil removal and subsequent fill deposition over the past century.

3.0 ARTIFACTS FROM YORK AVENUE

Two hundred and six artifacts were recovered during the monitoring of the York Avenue project. Of these, 146 are historic specimens, while the remainder are Pre-Contact artifacts.

3.1 Historic Artifacts

The 146 historic artifacts all derived from fill deposits overlying the 1888 soil horizon. In most cases, the artifact bearing stratum was covered by a layer of cobblestones which formed the internal roadways and loading platforms adjacent to the diagonal spur lines in this portion of the East Yard.

3.1.1 Architectural Objects

Eleven artifacts were catalogued in the Architectural Object category-seven in the Hardware subcategory and four in the Accoutrement subcategory.

3.1.1.1 Hardware

The seven artifacts in this subcategory consist of four nails, one door knob, one pipe fitting, and one piece of mica insulation material. DILg-33:98A/21 is four, square, sheet-cut nails. All appear to be complete although two of the specimens are very rusty. They vary in length-64.5, 66.7, 80.1, and 100.5 mm-and two definitely have T-heads.

As noted in previous reports (Kroker and Goundry 1993:14-15; Quaternary 1994b:8, 1995:16-17), 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 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. 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 (McLeod 1983:148) when river steamboats could transport large quantities of American goods to this area (Kroker *et al.* 1991:105).

DlLg-33:98A/23 is a complete, white, porcelain door knob which measures 57.3 mm in diameter with a thickness of 29.4 mm. The spindle portion of the knob is completely missing. Door knobs are not a unique find in this area (Kroker and Goundry 1993:15; Quaternary 1994a:15, 1995:17).

DlLg-33:98A/25 is an iron section of threaded pipe measuring 26.4 mm long. The internal diameter is 32.1 mm (1%'') and the threaded external diameter is 41.6 mm (1%''). One end has a bevelled cut while the other is perpendicular to the axis of the pipe fitting.

A rectangular sheet of mica, DlLg-33:98A/28, was recovered largely intact with only a portion of one corner missing. The dimensions are 97.7 x 65.0 mm (3% x 2%) with a thickness of 0.6 mm.

This size matches one listed in the 1909 J.H. Ashdown Hardware Company catalogue (Ashdown 1909:904). The listed item has a price of \$5.25 per pound. Mica, as a non-conductor, was used extensively for insulating electrical components such as fuse boxes and switches.

3.1.1.2 Accoutrements

All four artifacts in this subcategory are windowpane sherds. DILg-33:98A/18 and 19 are single, plain red and blue sherds respectively. These specimens are standard thickness glass and may be from stained glass windows. The remaining two specimens, DILg-33:98A/20, are clear windowpane sherds that have an etched design. This design consists of patterns of daisies, in the middle of pinwheels, alternating with square patterns of chrysanthemum-like flowers. These pieces may have come from a window in a door.

3.1.2 Lighting Equipment

Three artifacts were catalogued in this category. DlLg-33:98A/24 is a single black carbon core measuring 66.0 mm in length and 11.2 mm in diameter. The specimen has obviously been snapped and the original length would have been greater. These artifacts, composed of compressed carbon, were the central core in dry cell batteries.

DlLg-33:98A/48 consists of two sherds of white glass which have been catalouged as portions of a globe or shade for a light fixture. Both pieces have a thickness of 1.5 mm and both have a pronounced curvature.

3.1.3 Manufacturing Equipment

This category refers to tools, implements, or parts of machinery which are used to manufacture other artifacts. The recovered specimen, DlLg-33:98A/22, is a rectangular iron object. It is flat and has been made by stamping sheet iron to produce irregular rectangular cutouts and different sized circular holes for screw or pin attachment to the main body of the machine. The overall dimensions are 64.8 mm by 56.3 mm by 1.6 mm. No parts number or company name is present.

3.1.4 Clothing

One specimen, DlLg-33:98A/36, is the sole and heel of a shoe. It is a narrow fitting adult-sized shoe, possibly a woman's size six or seven. Shoes are a common find in this area (Kroker 1989:46; Kroker and Goundry 1990a:51, 1990b:37, 1993:24; Quaternary 1994b:12, 1994c:12-13, 1995:24). This shoe is for the right foot and the heel is worn down on the inside edge.

3.1.5 Housewares

Housewares is a generalized term that covers most items used in the internal operation of a household. Two artifacts were catalouged here. DlLg-33:98A/26 is a very rusty pair of scissors. One blade is broken below the pivot fulcrum. Both fingerholds are complete, albeit severely corroded.

This specimen is relatively small, having an overall length of 150.3 mm (nearly 6 inches). The general configuration of DlLg-33:98A/26 resembles the style described as Ladies Scissors (Amory 1969:486; Ashdown 1909:1067).

DILg-33:98A/27 is the outer side of a folding pocket knife. The extant portion measures 84.3 mm in length, 13.8 mm in width, and 5.4 mm in thickness. The proximal end has a brass cap and the distal end is square cut. The inside is lined with a thin brass sheet riveted to the bone handle. The specimen appears to have had only a single blade inasmuch as there is no large pin for the attachment of a second blade at the proximal end. The manufacturers name, which is often stamped into the blade, is not present. Numerous styles by many manufacturers were prevalent around the turn of the century (Ashdown 1909:1003-1042).

3.1.6 Faunal Remains

All thirteen of the recovered faunal remains are the residue from food resources (Table 4). The specimens were examined and identified as specifically as possible using some of the standard references: Gilbert (1973), Olsen (1960, 1964), and Schmid (1972). The body part, age of individual, species, evidence of butchering techniques (e.g., cutting or sawing) and the condition of the specimen (charred, broken, chewed, gnawed) was recorded.

As noted in Table 4, most of the recovered mammal specimens show evidence of butchering activities, either spiral fracture or sawing. The seven cow (*Bos taurus*) elements are all adult. Three specimens of pig (*Sus scrofa*), one juvenile and two adult, were recovered. Three small fragments, DlLg-33:98A/35, could not be identified to species.

TAXON	ELEMENT	CAT. #	AGE	QTY	WT	COMMENTS
Cow (Bos taurus)	Vertebra	33	Adult	1	62.3	Sawn
	Rib	32	Adult	2	125.0	Sawn
	Long bone	34	Adult	4	360.3	Sawn
Pig (Sus scrofa)	Humerus	29	Adult	1	33.1	Spiral fracture
	Tibia	30	Juvenile	1	81.0	Sawn
	Innominate	31	Adult	1	63.5	Sawn
Large Mammal	Undetermined	35	Adult	3	20.7	-
TOTAL FOOD	REMAINS	13	745.9			

Table 4: Mammal Recoveries from	n York Avenue
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3.1.7 Containers

One hundred and fifteen artifacts were catalogued in the Container category. This category includes all artifacts, or portions of artifacts, which are used to contain products. 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), only three of which are applicable to the artifacts recovered during this project:

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

3.1.7.1 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: box, jar, sealer, can, bottle. Thirteen catalogue numbers, three bottles and twenty-one sherds, are made of either ceramic or glass.

3.1.7.1.1 Ceramic Containers

Only one sherd of a stoneware bottle was curated. DlLg-33:98A/49 is a body sherd with a brown exterior and grey interior. The colour and curvature are reminiscent of large, commercial-sized ink bottles. However, the specimen is too incomplete to make a definite identification.

3.1.7.1.2 Glass Containers

The remaining twenty-three container artifacts were divided into functional sub-types for analysis. Indications of the method of manufacture, which provide information about technology and the time period, are often present on these artifacts.

3.1.7.1.2.1 Condiment and Food Produce Containers

DILg-33:98A/42 is three sherds from a clear, cylindrical jar. The overall height is 105.5 mm with an approximate diameter of 80.0 mm. The sharp shoulder grades into a very short neck culminating in a relatively wide mouth, approximately 56.0 mm. The lip is a thickened horizontal ribbon which would have been closed with a metal snap cap.

3.1.7.1.2.2 Medicine Bottles

A complete, clear bottle, DlLg-33:98A/37, with a cork closure in place, was curated. This rectangular specimen has panels on all four sides, a rounded string collar on the neck, and a lip which is a prescription style with an internal slope to prevent dripping (Stevens 1967:138). The base is embossed with a mold number "202T" which is superimposed upon largely obliterated markings (either letters or the top of a crown). The mold seam continues up the neck past the collar and is

obliterated in the upper portion by the lipping tool which applied the lip, suggesting manufacture between 1910 and 1920.

3.1.7.1.2.3 Beer Bottles

DlLg-33:98A/43 is a body portion of a large (1 quart?) aqua bottle. Embossed on the sherd are the letters "...DWEISE..." and "...S. PATENT N^o 6376...". Obviously, this sherd derives from a bottle of Budweiser beer which would have been imported from the United States.

3.1.7.1.2.4 Beverage Bottles

Many breweries bottled soft drinks as well as beer and very often used the same bottles for both products, identifying them with paper labels on the bottles. Without a paper label, it is usually impossible to ascribe a specific product to an archaeologically recovered bottle and therefore, the recovered bottle is assigned to the Beverage class. Two catalogue numbers (one complete bottle and six sherds) were identified as beverage bottles.

The complete bottle, DILg-33:98A/17, is clear with a small chip in the lip. It has the company name, "PELISSIER & SONS", printed horizontally on the shoulder while 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 PELISSIER AND SONS", is printed vertically on the opposite side from the company name. The lower part of the bottle, near the base, has the name of the company printed on it again, plus the placename "WINNIPEG" which is printed upside down. The base has the beaver logo, facing right, with the words "TRADE" and "MARK" printed around it. In addition, the mold number "326" is printed below "MARK".

Chopping (1978:141) illustrates an identical base with the same mold number and lists it as type MWIN BR6. However, Chopping does state that this type is an amethyst specimen whereas DlLg-33:98A/17 is definitely clear.

The history of the Pelissier Brewery has been outlined in other reports (Quaternary 1995:56; 1996a:49). Briefly, the company, under various names—Pelissier & Sons, Home Brewery, Pelissiers Limited, Kiewel-Pelissier—began in 1911, on Furby Street in Winnipeg. At some point, the company moved to already existing premises at 409-421 Mulvey Avenue East. This site was also the home of other breweries at various times in their history, most notably Blackwood's, E.L. Drewry, and Labatts (Peterson and Sweeney 1998:27). The Pelissier firm was still at the Mulvey location until at least 1977.

The six sherds, DlLg-33:98A/39, are all from a brown bottle from the E.L. Drewry brewery. In addition to the standard ownership clause on the body, the name "...DREWRY" and place "WINNI..." are printed on the shoulder. The word "...ITED", in smaller font, occurs below the Drewry name. Most bottles used by Drewry are clear and Chopping (1978:125-126) only illustrates

brown bottles with the ownership clause for two years, 1913 (MWIN BG29) and 1917 (MWIN BG33). As DILg-33:98A/39 is lacking the base, it cannot be assigned to either of these types.

The Drewry company began in 1877 when E.L. Drewry leased the Redwood Brewery and produced beverages labeled with his name. In 1904, the company 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). E.L. Drewry Limited was also located, at some period in its history, at 409-421 Mulvey Avenue East (Peterson and Sweeney 1998:27).

3.1.7.1.2.5 Wine Bottles

DlLg-33:98A/40 is two sherds from a green wine bottle. The sherds, consisting of the lip, neck, and upper portion of the body, do not have a mold seam indicating that the container was turn-molded (Jones and Sullivan 1985:30-31). The finish is a standard champagne sloped top with a flattened string rim which was applied with a lipping tool (Jones and Sullivan 1985:88, 96). This type of molding began prior to the 1870s and was used as late as the 1920s, especially for wine, champagne, and other liquor bottles.

3.1.7.1.2.6 Liquor Bottles

This sub-type is a catchall for bottles that held some type of spirits but could not be assigned to whisky, gin, etc. DlLg-33:98A/38 is a single, complete, clear bottle. This Shoofly flask has an applied lip which truncates the mold seam partway up the neck. No embossings are present to identify the manufacturer or the contents.

3.1.7.1.2.7 Unassigned Bottles

Artifacts in this grouping have some identifying characteristics such as shape or manufacturer's marks. However, the data is insufficient to permit identification of the function of the container; sealer versus milk bottle or medicine bottle versus condiment bottle. None of the specimens have marks which would permit identification of a manufacturer. Occasionally, the style of manufacture of the neck and lip of bottles suggests the possible contents of the container. Also, the type of closure and evidence of manufacturing technique can provide approximate dates. For example, the length of the mold seam can indicate a general age—if the seam extends to the lip of the bottle, it was produced after 1920.

Eight sherds were designated as Unassigned bottles. Table 5 details the quantity, colour, shape, and any other information that could be gleaned from these specimens.

DlLg-33:98A/41 derives from a large bottle and has a thick braced flat string collar as the lip. The size suggests that this may have been a carboy. DlLg-33:98A/44 has slight indication that it was manufactured in a Ricketts mold which is a three-piece mold consisting of a cup-like body mold and two matching shoulder-neck halves. This type of mold was used from 1821 to the early 20th century (Jones and Sullivan 1985:29-30). DlLg-33:98A/45 is the basal portion of a rectangular panelled

bottle. DILg-33:98A/46 consists of two aqua sherds, one of which has a similar colour and thickness to DILg-33:98A/43, the Budweiser bottle.

CAT. #	TYPE	QTY	COLOUR	SHAPE	FINISH	MARKS	COMMENTS
41 44 45 46	sherd sherd sherd sherd	1 1 1 2	green olive aqua aqua	cylindrical cylindrical rectangular cylindrical	applied missing missing missing	- - -	carboy? Ricketts mold medicinal? -
47	sherd	3	green	cylindrical	missing	-	-

Table 5: Unassigned Bottles from York Avenue

3.1.7.2 Ornamental

DlLg-33:98A/70 is a small, thin body sherd from a white ceramic artifact. It measures 30.0 mm in height and 1.9 mm in thickness with a width that ranges from 39.4 mm at a maximum to 17.6 mm at a minimum. The orientation of this piece is somewhat confusing as is the definite identification. It has been catalogued here because of the decoration which occurs at what may be the lip, or possibly along what may be a very smooth break line. The decoration consists of a raised, applied looping cross-hatched pattern, 6.4 mm wide, which has been added on to the piece. The actual object identification has been left as unknown as it is unclear whether this might be a cup, an eggcup, a small bowl, or possibly something entirely different such as the body of a doll.

3.1.8 Dinnerware

Dinnerware, which consists of plates, cups, bowls, etc., is a type of container and technically is a sub-category within the container hierarchy. The number of recoveries and the distinct information that is gleaned from these specimens is conducive to describing them in a separate section. Dinnerware items can be composed of different materials. The ninety specimens recovered from York Avenue are all ceramic.

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.

3.1.8.1 White Ceramics

The white colour group consists of 17 catalogue numbers comprising 71 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 them.

3.1.8.1.1 Plain White Ceramics

Of the 17 catalogue numbers in the white ceramics, seven (consisting of thirteen sherds) have no maker's marks, no indications of a pattern or decoration, or any other marks (Table 6). None of these sherds appear to go together.

Only two catalogue numbers merit further attention. DlLg-33:98A/60 is an incomplete, squareshaped lid from a teapot. The two sherds fit together and form a complete small steam hole. The knob of the teapot lid is missing but a slightly raised base where the knob would have sat is still present. DlLg-33:98A/67, two curved body sherds, could be part of the teapot itself. The paste, colour, and thickness of these sherds is identical to those in DlLg-33:98A/60.

CAT. #	OBJECT	QTY	PORTION	COMMENTS
16	Plate	1	body;base	-
60	Teapot	2	lid	steam hole, knob missing
61	Cup	4	lip;body	different cups
63	Bowl	1	base	thin shallow flat base
64	Bowl	1	base	thick shallow flat base
66	Plate?/Saucer?	2	lip;body	heavily crazed
67	Teapot	2	body	may go with DlLg-33:98A/60

Table 6: Plain White Ceramics from York Avenue

The remaining ten catalogue numbers, totalling fifty-eight sherds, could be divided into two groups—those which have maker's marks on them and those which have no maker's mark but have some form of decoration or another mark on them.

3.1.8.1.2 Manufacturers of White Ceramics

Information printed, usually, but not always, on the base of ceramic vessels can provide the country of origin of the piece, the pottery firm, the pattern name, and the year of manufacture. Two catalogue numbers could definitely be assigned to manufacturers, while two other catalogue numbers could not be definitely assigned to a specific pottery firm.

A) ENGLAND

DlLg-33:98A/50 consists of five body, base sherds from a dinner-sized plate. A black maker's mark with the Royal Arms mark, "IRON....INA", "J&G MEAKIN", "HANLEY", and "ENGLAND" is printed on the base. This company began producing pottery in Hanley, Staffordshire in 1851 and this particular mark has been used since circa 1890 (Godden 1964:427).

DlLg-33:98A/51 is a single basal sherd with a portion of a black mark it. This consists of a crown over a shield in a circle with part of the name, "...BISHOP", in a banner below it. This particular mark was used by the Powell & Bishop company of Hanley, Staffordshire from 1876 to 1878. This company was formerly Livesley Powell & Co. and subsequently became Powell, Bishop & Stonier (Godden 1964:509-510).

B) UNIDENTIFIABLE

The remaining two catalogue numbers with maker's marks could not be assigned to a specific company. DILg-33:98A/53 is ten lip,body,base sherds possibly from a bowl. The base has a portion of the black Royal Arms mark with "...ONE CHINA" printed above it. Many companies, in several countries, used variations of this mark and these sherds cannot be assigned to any one specific firm.

The final catalogue number, DlLg-33:98A/65, has nine lip,body,base sherds from a saucer. A portion of a black Royal Arms mark occurs on the base of one sherd. Printed above the mark, are the words "STONE CHINA" and the letters "T.P.C. CO.". The only pottery firm with initials similar to these, but not identical, is Trenton Potteries of Trenton, New Jersey (Kovel 1986). However, it does not appear that Trenton Potteries used the Royal Arms mark. The initials on this specimen may stand for a jobber firm rather than the actual manufacturer of the piece.

3.1.8.1.3 Decoration or Marks on White Ceramics

Thirty-four sherds (six catalogue numbers) have some form of decoration or marks on them (Table 7). The blue potter's mark on DlLg-33:98A/15 resembles the % symbol.

CAT. #	OBJECT	QTY	PORTION	DECORATION
15	Plate	1	base	blue potters mark
55	Saucer	7	lip;body	ribbed
57	Bowl	5	lip;body	panelled
58	Pitcher	1	body	wheat and hops pattern
59	Bowl	11	lid	grape vines
62	Bowl	9	body	ribbed

Table 7: Decoration or Marks on White Ceramics - York Avenue

DlLg-33:98A/58 is a thick-walled sherd with a curvature that is reminiscent of a large pitcher, possibly the water pitcher from a washstand or toilet set or a dinnerware set. The embossed pattern is a head of wheat with leaves and what is possibly a cluster of hops at the base of the stalk. This design is very similar to the Wheat and Hops pattern made by Alfred Meakin Limited (Sussman 1985:42). The Wheat and Hops pattern was made by various other companies including Jacob Furnival and Company, Clementson Brothers, Robert Cochran and Company, St. Johns Stone

Chinaware Company, as well as various other Meakin firms. DlLg-33:98A/58 has no maker's marks to indicate which firm would have manufactured it.

DlLg-33:98A/59 is eleven lid sherds from an oval-shaped bowl. The top surface is molded in ribs which flow outward from the centre where there would have been a knob, which is now missing. The pattern consists of bunches of grapes in a circular formation around the centre knob and a single grape vine with a bunch of grapes alternating with a leaf around the edge of the lid on the upper surface.

3.1.8.2 Blue-on-White Ceramics

Four ceramic sherds were assigned to this sub-category. Table 8 outlines the data obtained from these sherds.

CAT. #	OBJECT	QTY	PORTION	COLOUR	PATTERN	MARKS
12 13 14	Cup Plate Saucer	1 1 1	lip;body lip;body lip;body;base	white;blue white;blue white;blue	band;lines band;lines band;lines	Canadian Northern - T.& R. Boote
54	Bowl	1	lip;body	white;blue	hummingbird;vine	-

Table 8: Blue-on-White Ceramic Dinnerware from York Avenue

DILg-33:98A/12, 13, and 14 are all dinnerware sherds that have a blue band at the lip with a thinner blue line below the band and a second blue line further down on the body. The pattern occurs on the exterior surface of the cup and the interior surface of the plate and saucer sherds. This blue line pattern has been recovered during other projects in the vicinity (Kroker and Goundry 1990a:97-98, 1993:93-94; Quaternary 1996b:74).

DILg-33:98A/12, the cup sherd, has a circular blue logo with "CANADIAN NORTHERN" printed inside it, between the two thin blue lines on the body (Plate 1). This is the mark of the Canadian Northern Railway Company. The Canadian Northern Railway began as the result of a merger of two smaller Manitoba railway branch lines (Regehr 1985:277). The beginning and end dates for this railway company vary according to different references. Tucker (1985:276) states that the Canadian Northern Railway was founded by William MacKenzie and Donald Mann in 1895, while Regehr (1985:277) says that incorporation of this company took place in 1899. Tucker (1985:276) notes that the Canadian Northern Railway was absorbed (along with four other railways) into the Canadian National Railways system between 1917 and 1923. Regehr (1985:277) writes that Canadian Northern Railways ended as an independent company with nationalization in 1918. Guinn (1980:1) points out that Canadian Northern Railway was in existence prior to amalgamation of the railroads in 1921. The saucer sherd, DILg-33:98A/14, has the crown over a shield mark of T. & R. Boote Ltd., a Waterloo Pottery firm from Burslem, Staffordshire. This firm existed from 1842 until 1906 with printed marks, such as the one on this piece, being used from 1890 until 1906 (Godden 1964:84).

Since T. & R. Boote used this particular mark from 1890 until 1906, and the Canadian Northern Railway began in either 1895 or 1899, depending on which author is used, the time frame for the manufacture of these particular dishes can be delimited from 1895 to 1906. Although manufactured during that period, they may have continued to be used post-1906, by the Canadian Northern Railway, at least up until 1918 to 1923.

It is also known that other firms manufactured this pattern for the railway. Ceramic artifacts recovered during previous projects bore maker's marks showing that both the Guérin-Pouyat-Élite Ltd. and the Theodore Haviland Company of Limoges, France produced this pattern from 1901 to the present and from 1920 to 1936 respectively (Kroker and Goundry 1990a:99). In many cases, the logo for Canadian Northern did not appear on those specimens, therefore, this pattern could also have been used by successive railway systems or restaurants or the general public.

DILg-33:98A/54 is a single, thick, lip,body sherd from a bowl. The lip is L-shaped and although the sherd was originally white, it is crazed and has darkened to a grey tone. The pattern consists of a vine along the upper edge of the L-shaped lip with a portion (one wing, the head, and the beak) of a hummingbird, flying towards a leaf, on the exterior surface of the body. There is no maker's mark or pattern name on this sherd.

3.1.8.3 Brown-on-White Ceramics

DlLg-33:98A/56 is eleven sherds that can be reconstructed to make a complete small bowl, 51.2 mm in height with a diameter of approximately 124.8 mm. The exterior is ribbed and it has a brown pattern on one side that appears to be apple blossoms with a smaller identical pattern on the opposite side. The glaze is moderately to severely crazed on this piece. There is no maker's mark.

3.1.8.4 Cream Ceramics

DlLg-33:98A/68 and 69 are both basal sherds from different cream-coloured bowls. DlLg-33:98A/68 has indications that a ribbing pattern extends from the base upward on the body. The small body portion still remaining on DlLg-33:98A/69 is plain. Neither sherd has a maker's mark.

3.1.8.5 Red and Green-on-White Ceramics

DlLg-33:98A/52 is a single plate sherd with a green line encased in a box formed by a thin red line which is bisected by a green circular logo (Plate 1). The logo has a maple leaf in a four-cornered box inside a dotted circle which in turn is inside a double outlined circle. The words "CANADIAN NORTHERN" are printed, in green, inside the double line. This logo may have been used either at the same time or at a different time than the blue Canadian Northern logo on DlLg-33:98A/12.

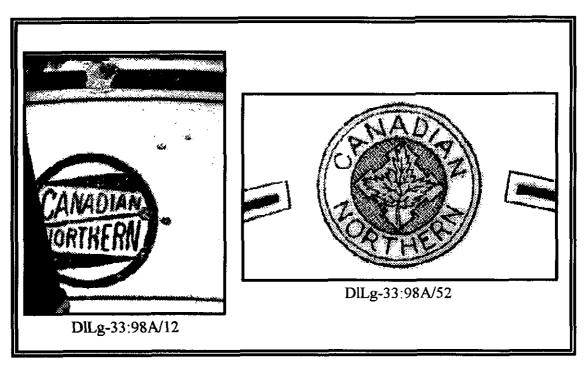


Plate 1: Canadian Northern Railway Logos

3.2 Pre-Contact Artifacts

The sixty artifacts curated as Pre-Contact material, i.e., predating the arrival of European traders to this area, originated from two different locations and depths. Locus 1 material came from 23W (23 metres west of the Pioneer/York intersection) and 209 cm DBS (depth below surface), while Locus 2 material came from 12W and 183 DBS.

3.2.1 Locus 1

Twelve artifacts—one body sherd, one piece of fire-cracked rock, and 10 fish bones—were recovered from this location.

3.2.1.1 Ceramic Artifacts

DILg-33:98A/1 is a single, thin (3.5 mm), body sherd with medium to fine grit tempering. The exterior surface of this sherd has a cord-wrapped paddle finish. The presence of a ceramic sherd in the horizon indicates that this locus can be assigned to the Late Woodland cultural period (A.D. 800 - 1750). This time span includes both Blackduck and Selkirk pottery types. The two types are distinguished by different styles of decoration on the rim portion of a vessel. As similar styles of manufacture were used in both types, this undecorated body sherd cannot be assigned to either one.

3.2.1.2 Lithic Artifacts

DlLg-33:98A/2 is a single piece of fire-cracked rock. This small, $43.1 \ge 29.0 \ge 17.8 \text{ mm}$, granite specimen weighs 22.5 grams. Granitic cobbles can be shaped into hammerstones and other massive tools. However, the granular nature of the stone precludes fine flaking to yield sharp cutting edges and cutting implements were not generally made from it.

Fire-cracked rocks were, in some instances, used as boiling stones for cooking soups or stews in a hide, basket, or ceramic container. Coarse-grained granitic rocks decompose into small granular fragments when exposed to extreme temperature variations and, therefore, granite is not usually the optimum choice for use as a boiling stone. It is likely that these stones would have been used around a hearth to contain the fire.

3.2.1.3 Faunal Recoveries

The ten pieces of bone, all fish remains, are outlined in Table 9. The food remains indicate a reliance on the nearby rivers for sustenance during the people's visit to this location as well as on-site food preparation. Both identified species are present in the Red River at all seasons of the year. Occasionally the season of an occupation can be ascertained by the frequency of specific species which would be more common during their spawning season. This sample size is too small to make any such determination.

TAXON	ELEMENT	QTY	WT	CAT. #	COMMENTS
Fish Undifferentiated	Unidentifiable	8	2.8	5	-
Ictalurus sp. (Catfish)	Articular	1	9.0	3	-
Aplodinotus Grunniens (Drum)	Dorsal spine	1	1.4	4	-
TOTAL FOOD REMAINS		10	13.2		

Table 9: Food Remains from Locus 1 at York Avenue

3.2.1.4 Summary

Numerous Pre-Contact cultural horizons were identified during The Forks Access Project (Quaternary n.d.). This cultural layer at Locus 1 is considered to be an outlier or peripheral component of an encampment represented by one of those horizons. The depth below surface and the separation between the two cultural horizons along York Avenue (Figure 2) indicate that the potential correlate is Horizon C, Horizon D, or Horizon F. As the strata are not continuously linked due to original spacing within the encampment, flood movement of artifacts and charcoal, or fluvial erosion, a definite correlation cannot be made.

3.2.2 Locus 2

Forty-eight artifacts, all faunal, were recovered from this location. One specimen has evidence of cultural modification, while the remaining forty-seven specimens are the residue of subsistence activities.

3.2.2.1 Faunal Tool

DlLg-33:98A/6 is a modified section of rib from a large mammal. It measures 108.7 mm in length, 20.4 mm in width, and 7.4 mm in thickness. The weight is 13.3 grams. This tool has been carved from the medial section of the rib and has a flat basal surface and a rounded working end. There is a medium amount of polish and wear at the working end and polish on the upper surface. Some coarse nibbling on the lateral sides suggests that the tool has been gnawed by a carnivore.

Tools of this type have been designated as spatulas. These could have been used during cooking or food preparation possibly as a scoop for marrow retrieval from long bones. A second use could have been as a scraper for delicate work on fragile hides such as rabbit or as a finishing scraper for final softening of the prepared hide prior to clothing manufacture.

3.2.2.2. Butchering Remains

Table 10 outlines the faunal recoveries that were designated as the residue from subsistence activities. All of the material came from undifferentiated fish, i.e., the species could not be definitely identified, although the bones appear to represent a smaller species such as sucker rather than catfish.

TAXON	ELEMENT	QTY	WT	CAT. #	COMMENTS
Fish					
Undifferentiated	Unidentifiable	37	0.7	10	-
	Hyomandibular	1	0.2	9	-
	Vertebra	1	0.1	7	-
	Rib	6	0.3	8	-
	Scale	2	0.1	11	-
TOTAL FOOD REMAINS		47	1.4		

Table 10): Food	Remains	from	Locus	2 at	York Avenue
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3.2.2.3 Summary

No culturally diagnostic artifacts were recovered from this locus. However, it can be correlated with Horizon B (Quaternary n.d.), a very extensive occupation site extending in an arc from the York Avenue/Pioneer Boulevard intersection to the Pioneer Boulevard/Water Avenue intersection and then westward along Water Avenue to the C.N.R. service road (Quaternary 1990a, 1990c). This horizon

appears to represent an encampment of different groups who would have come to The Forks to trade with each other. A radiocarbon date of 580 ± 70 years ago was obtained from bone samples from this horizon during the St. Mary Archaeological Recovery Project (Quaternary 1990b).

A westward extension of the horizon was observed in two other vertical shafts at 20W and 32W. The intermediate location (20W) was sterile although charcoal was present in the buried soil horizon. The cultural evidence at 32W consisted of the outline of a slightly curved storage pit in the southwest corner of the excavation. The top of the pit started at 213 cm DBS where there was evidence of a faint buried soil horizon but no cultural material. The base of the storage pit was at 310 cm DBS and a degree of blackish loam had developed in the lower 3 centimetres. This indicates that the pit had remained open for at least one season resulting in leaf litter and other organic material accumulating prior to infill by subsequent flood-deposited sediments. A similar storage pit, albeit smaller (60 cm diameter by 40 cm depth), was encountered during the excavations for subsurface services at The Forks (Kroker and Goundry 1990a:152). That storage pit had similar black organic stains at the base and was estimated to have been excavated 400 to 600 years ago. If this York Avenue storage pit definitely correlates with Horizon B, its date of construction would have been near the lower limit of the previous estimate.

4.0 SUMMARY AND RECOMMENDATIONS

As is readily evident from Figure 2, the entire construction zone is covered with a thick layer of fill deposited during the last century as a result of various railroad construction and land modification events. The section on the west side of the trestle shows much thicker deposits of fill reflecting the building up of Main Street and the adjacent business building sites.

Most of the land modification activities eradicated the existing soil level when the area was first occupied by the railroad in 1888. The historic artifacts collected from this fill layer represent several different temporal periods as would be expected where the artifacts' location is the result of secondary deposition and often relocation. Only one small portion of that original soil zone is present on the east side of the trestle. Numerous buried soil horizons were observed at different locations. Due to the vagaries of fluvial deposition, it was impossible to link the individual profiles into continuously represented layers. Thus, many of the soil horizons recorded on Figure 2 probably link with others. It is possible that some of the upper soil horizons could be correlated with specific historic flood events, if continuous trench excavation had occurred providing the opportunity to follow the undulations of individual layers.

Two Pre-Contact cultural levels were recorded. The previous caveat applies in that presence of these strata was observed in vertical shafts and the linkage is assumed between the occurrances. As continuous open-cut trenching did not occur, the configuration of the strata, as portrayed on Figure 2, is tenuous.

It would appear that there was a mental limit placed on the need for proximity to existing water sources by the occupants of the two cultural levels. The Pre-Contact occupation horizons become much denser and continuous as one proceeds toward the Red River (Quaternary 1989; 1990a; n.d).

The recording of pre-European cultural levels at the Pioneer Boulevard/York Avenue intersection indicates that developments near this intersection will require mitigative action if there is a subsurface component to the development. This caveat should be strongly enforced.

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APPENDIX A

HERITAGE PERMIT

The Heritage Resources Act (Subsection 14(2) and Sections 52 and 53)

Manitoba Culture, Heritage And Citizenship



Heritage Permit No. A58-97

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

Name:Quaternary Consultants Ltd.Address:130 Fort StreetWinnipeg MBR3C 1C7

ATTENTION: Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

conduct a heritage resource impact assessment of The York Street - Pioneer Boulevard redevelopments, the reconstruction of the York Street underpass and related services at The Forks (DILg-33).

during the period:

July 28, 1997 to October 31, 1998

This permit is issued subject to the following conditions:

- That the information provided in the application for this permit dated the <u>23rd</u> day of <u>July</u> <u>1997</u>, is true in substance and in fact;
- (2) That the permittee shall comply with all the provisions of *The Heritage Resources Act* and any regulations or orders thereunder; **Please note attachment re custody and ownership of heritage objects**
- (3) That the Permittee shall provide to the Minister a written report or reports with respect to the Permittee's activities pursuant to this permit, the form and content of which shall be satisfactory to the Minister and which shall be provided on the following dates: March 31, 1999

March 51, 1999

- (4) That this permit is not transferable;
- (5) This permit may be revoked by the Minister where, in the opinion of the Minister, there has been a breach of any of the terms or conditions herein or of any provision of *The Heritage Resources Act* or any regulations thereunder;

(6) Special Conditions:



- a. All surface collections, excavations, etc. are to be carried out using the provenience system established for use at The Forks;
- b. All heritage objects (artifacts) recovered are to be catalogued according to the CHIN system with the relevant Borden designations; D1Lg-32/96B; D1Lg-33/96B; or as appropriate;
- c. All heritage objects from The Forks are to be deposited with the Manitoba Museum by July 1, 1998, for permanent curation and storage, unless appropriate loan requirements are arranged with the Curatory 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 these sites;
- g. In the event t hat 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;
- I. 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";
- 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.

Dated at the City of Winnipeg, in Manitoba, this <u>24th</u> day of July

1997.

Minister of Culture, Heritage and Citizenship

APPENDIX B

CATALOGUE OF RECOVERED ARTIFACTS

YORK AVENUE (DILg-33:98A)

SPECIMEN CATALOGUE RECORD

Site:	DL_	LG-33:98A YORK (<u>AVENUE</u> Ar	ea: <u>RED RIVER</u>	<u> </u>
Clier	nt:	STANLEY CONSULTING	Ac	c. No.:	
Cat. #	Qty	Object Name / Object Type	Material / Cultural Phase	Location / Unit	Coll. Date
1	ł	BODY SHERD BODY	EARTHENWARE PRE-CONTACT	HOLE 2	19980326
2	1	FIRE-CRACKED RDCK	GRANITE PRE-CONTACT	HOLE 2	19980326
3	1	ARTICULAR Ictalurus	BONE PRE-CONTACT	HOLE 2	19980326
4	1	DORSAL SPINE APLODINOTUS GRUNNIENS	BONE Pre-contact	HOLE 2	19980326
5	8	UNIDENTIFIABLE FISH	BONE Pre-contact	HOLE 2	19980326
6	i	SPATULA Nannalia	BONE Pre-contact	HOLE 1	19980326
7	1	VERTEBRA FISH	BONE Pre-contact	HOLE 1	19980326
8	6	RIB FISH	BONE Pre-contact	HOLE 1	19980326
9	1	HYDMANDIBULAR Fish	BONE Pre-contact	HOLE 1	19980326
10	37	UNIDENTIFIABLE FISH	BONE Pre-contact	HOLE 1	19980326
11	2	SCALE F I SH	SCALE Pre-contact	HOLE 1	19980325
12	1	SHERD CUP	PORCELAIN Industrial		19980325
13	1	SHERD Plate	PORCELAIN Industrial		19980325
14	1	SHERD Saucer	PORCELAIN Industrial		19980325
15	1	SHERD PLATE	PORCELAIN Industrial		19980325
16	1	SHERD PLATE	PORCELAIN Industrial		19980325
17	1	BOTTLE Bottle	GLASS Industrial		19980325
18	1	WINDOWPANE	GLASS Industrial		19980725
19	1	WINDOWPANE	GLASS INDUSTRIAL		19980725
20	2	WINDDWPANE	GLASS INDUSTRIAL		19980725
21	4	NAIL SQUARE	IRON INDUSTRIAL		19980725
22	1	UNKNOWN	IRON Industrial		19980725
23	i	DOOR KNOB	PORCELAIN INDUSTRIAL		19980725
24	1	BATTERY DRY CELL	CARBON INDUSTRIAL		19980725
25	1	PIPE FITTING	IRON INDUSTRIAL		19980725

SPECIMEN CATALOGUE RECORD

			AVENUE	Area: <u>RED_RIVER_</u>	
211er	it:	STANLEY CONSULTING	····	Acc. No.:	
at, #	Qty	<u> Object Name / Object Type</u>	Material / Cultural Phase	e Location / Unit	Coll. Dati
6	1	SCISSORS	IRON Industrial		19980725
:7	1	KNIFE Pocket	BONE; COPPER Industrial		19980725
8	1	INSULATOR Electric	MICA Industrial		19980725
29	1	HUMERUS Sus scrofa	BONE INDUSTRIAL		19980725
0	, ¹	TIBIA Sus scrofa	BONE Industrial		19980725
31	1	INNOMINATE SUS SCROFA	BONE Industrial		19980725
32	2	RIB BOS TAURUS	BONE INDUSTRIAL		19980725
3	1	VERTEBRA BOS TAURUS	BONE Industrial		19980725
}4	4	LONG BONE BOS TAURUS	BONE Industrial		19980725
5	3	UNDETERNINED Mammalia	BONE INDUSTRIAL		1 998 0725
6	i	SHOE Adul t	LEATHER; IRON INDUSTRIAL		19980725
37	1	BOTTLE Bottle	GLASS; CORK Industrial		19980725
8	1	BOTTLE Bottle	GLASS Industrial		19980725
19	6	SHERD BOTTLE	GLASS INDUSTRIAL		19980725
10	2	SHERD BOTTLE	GLASS Industrial		19980725
11	1	SHERD BOTTLE	GLASS INDUSTRIAL		19980725
12	3	SHERD JAR	GLASS INDUSTRIAL		19980725
3	1	SHERD Bottle	GLASS Industrial		19980725
4	1	SHERD BOTTLE	GLASS Industrial		19980725
5	1	SHERD BOTTLE	GLASS Industrial		19980725
6	2	SHERD BOTTLE	GLASS Industrial		19980725
7	3	SHERD BOTTLE	GLASS INDUSTRIAL		19980725
8	2	SHERD LANP	GLASS Industrial		19980725
9	1	SHERD BOTTLE	STONEWARE Industrial		19980725
Ù	5	SHERD PLATE	PORCELAIN Industrial		19980725

SPECIMEN CATALOGUE RECORD

Site		<u>LG-33:98A YORK AV</u>	ENUE	Area:	RED RIVER	
Clie	nt:	STANLEY CONSULTING		Acc.	No.:	····-
<u>Cat. #</u>	Qty_	Object Name / Object Type	Material / Cultural Pha	5e	Location / Unit	Coll. Date
51	1	SHERD PLATE	PORCELAIN Industrial			19980725
52	1	SHERD Plate	PORCELAIN INDUSTRIAL			19980725
53	10	SHERD BOWL?	PORCELAIN INDUSTRIAL			19980725
54	i	SHERD BOWL	PORCELAIN INDUSTRIAL			19980725
55	1	SHERD Saucer	PORCELAIN INDUSTRIAL			19980725
56	11	SHERD Bowl	PORCELAIN INDUSTRIAL			19980725
57	5	SHERD BOWL	PORCELAIN Industrial			19980725
58	1	SHERD PITCHER	PORCELAIN Industrial			19980725
59	11	SHERD Bowl	PORCELAIN INDUSTRIAL			19980725
60	2	SHERD TEAPOT	PORCELAIN Industrial			19980725
61	4	SHERD CUP	PORCELAI# INDUSTRIAL			19980725
62	9	SHERD Bowl	PORCELAIN Industrial			19980725
63	1	SHERD BOWL	PORCELAIN INDUSTRIAL			19980725
64	1	SHERD BOWL	PORCELAIN Industrial			19980725
65	9	SHERD SAUCER	PORCELAIN Industrial			19980725
66	2	SHERD Plate?/Saucer?	PORCELAIN INDUSTRIAL			19980725
67	2	SHERD TEAPOT	PORCELAIN INDUSTRIAL			19980725
68	1	SHERD BDWL ?	PORCELAIN Industrial			19980725
69	1	SHERD Bowl?	PORCELAIN INDUSTRIAL			19980725
70	1	SHERD BOWL	PORCELAIN Industrial			19980725