

**HERITAGE RESOURCE  
MONITORING FOR THE  
RECONSTRUCTION OF THE  
NORWOOD AND MAIN STREET  
BRIDGES (1996 - 1998)**

Submitted to

**REID CROWTHER & PARTNERS**

**QUATERNARY  
CONSULTANTS  
LIMITED**

October 1998

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## **1.0 INTRODUCTION AND SCOPE**

Quaternary Consultants Ltd. was contracted to provide archaeological monitoring of the construction activities during the rebuilding of new bridges at the locations of the existing Norwood Bridge (across the Red River) and the Main Street Bridge (across the Assiniboine River). Initial construction consisted of demolition of the current bridges, followed by the building of new abutments on both shores of both rivers.

The Main Street bridge (Bridge of the Old Forts) was first constructed ca. 1880 (Guinn 1980:327) and rebuilt at least twice—the latest time being in the 1930s. The result of previous modifications and construction was extensive prior impact. Similarly, the Norwood Bridge was first constructed in 1891, replacing the former ferry system (Winnipeg Evening Tribune 1925). It also experienced modifications over the years resulting in peripheral impact.

The construction excavation activities were monitored on an “as required” basis under the terms of a series of Heritage Permits: A68-96; A28-97; and A24-98 (Appendix A). These permits, issued by Historic Resources Branch, Manitoba Culture, Heritage and Citizenship, sequentially covered the span of the construction project.

## **2.0 METHODOLOGY**

During periods of excavations for removal of the abutments for both bridges, the monitoring archaeologist observed the extent of the current impact. In addition to excavating around the existing abutments, access roads were developed from the upper banks to the riverbank. The access road at the Main Street Bridge was between the existing bridge and the new northbound Main Street Bridge. The riverbank access cut at the Norwood Bridge was on the west side of the existing bridge in an area which had been modified for riverbank stabilization during the reconstruction of the C.N. Rail Overpass (Quaternary 1995:3).

Archaeological monitoring consisted of visual observation of the face of the excavation with projected hand retrieval of artifacts from historic fill layers, with a focus upon diagnostic artifacts. Diagnostic artifacts are those which provide evidence of function, time period of use, and company of manufacture, i.e., bottles, ceramics, etc. Recovery was selective in that non-diagnostic structural items such as iron pipes, generic bricks, and metal fragments were not curated. If the excavations extended into undisturbed original sediments, the monitoring archaeologist watched for buried soil horizons and potential archaeological deposits. Indicators of archaeological deposits would be charcoal and ash lenses from campfires, food remains (mammal or fish bones), lithic tools, lithic flakes resulting from tool manufacture, and/or fragments of earthenware containers.

## **3.0 OBSERVATIONS**

While undertaken by two different companies and working under two different sets of conditions, the impact of both bridges was relatively similar. Due to slight variations, each bridge will be discussed separately. Both bridges required minor portions of road rebuilding to connect the reconstructed structures to the existing Main Street and St. Mary's Road.

### ***3.1 Main Street Bridge***

The construction remained constrained within prior impact. Changes in construction methodology and the use of larger machines with longer reaches enabled the construction firm to operate within a tightly constrained geographical location. The excavation on the north bank of the Assiniboine River was limited to the west by the presence of the former and current water/sewer control facilities. For this reason, the access road to the lower (bank level) portion of the construction site occurred immediately adjacent to the new northbound Main Street Bridge. The abutment removal, access road development, and abutment reconstruction were all within areas of prior impact. The prior impact around the abutments extended into Agassiz clays. No evidence of the bank rip-rap and historic debris deposition recorded during the construction of the northbound Main Street Bridge was present (Quaternary 1996).

A short section of the original Main Street between the north edge of the north abutment and the Main Street reconstruction component (Quaternary 1998a) was excavated. This excavation was solely within recent fill layers, i.e., sands and gravels. Similarly, on the south side of the south abutment, a linking section of road was built to connect the reconstructed bridge with the rebuilt section of Main Street across South Point (Quaternary 1998a). This also traversed structural fill deposits and did not impact into undisturbed sediments.

### ***3.2 Norwood Bridge***

The excavation on the south bank of the Red River remained within the area of prior impact occasioned by the original construction and subsequent modifications of this bridge. Riverbank access occurred on the western side of the construction zone after the south abutment had been removed. Excavations on the north bank of the Red River, to remove the existing abutment, also occurred within prior impact zones. The access road to the riverbank was situated on the west side in an area which had been modified for future riverbank pedestrian walkways during the construction of the new northbound Norwood Bridge (Quaternary 1995:3).

The south linking approach to St. Mary's Road traversed an area containing structural fill deposits. The north linking approach extended from the north abutment to the St. Mary's Road turning lane on the new extension of Stradbrook Avenue to Main Street (Quaternary 1998b) which links into the reconstructed Main Street across South Point (Quaternary 1998a). The excavations were primarily in structural gravels resulting from prior roadbed development, but extended slightly into undisturbed sediments, particularly in the northern 20% of the approach road. These undisturbed sediments were culturally sterile, similar to those recorded during the reconstruction of the South Point section of the original Main Street (Quaternary 1998a:9) and the Donald Street link (Quaternary 1998b:4).

## 4.0 SUMMARY

Inasmuch as all work was in areas which had experienced one or more construction episodes in the past, no evidence of activities other than construction was present. The most common matrix was gravel with occasional deposits of sand, again relating to previous construction. No artifacts relating to subsistence and/or living practices were present (not even remnants of workman's lunches encapsulated within the sands and gravels). Occasional artifacts relating to prior construction were observed but not curated. These consisted of small to moderate sized fragments of iron, some of which could tentatively be identified as portions of beams, and pieces of milled lumber.

In terms of impact upon heritage resources, both of these projects caused no disruption and/or destruction of any artifacts or archaeological horizons. Perhaps in the future, massive artifacts relating to earlier construction such as bridge components may be preserved in a construction-related museum. The Manitoba Heavy Construction Association may wish to explore this concept. However, in terms of practicality and space requirements, preservation of photographic records and architectural plans of former structures which are to be demolished, such as these two bridges, should suffice.

## 5.0 BIBLIOGRAPHY

Guinn, Rodger

- 1980 *The Red-Assiniboine Junction: A Land Use and Structural History. Manuscript Report Series, No. 355, Parks Canada. Ottawa.*

Quaternary Consultants Ltd.

- 1995 *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, Winnipeg.*
- 1996 *Archaeological Monitoring of the Northbound Main Street Bridge Construction Project. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.*
- 1998a *Archaeology of Main Street Roadworks: York Avenue to Tache Avenue 1996 - 1998. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.*
- 1998b *Archaeological Monitoring of the Island Area Road Works: Donald Street to Main Street. On file with Reid Crowther & Partners and Manitoba Culture, Heritage and Citizenship, Historic Resources Branch, Winnipeg.*

Winnipeg Evening Tribune

- 1925 *Norwood Bridge Has a History. July 27.*

**APPENDIX A**  
**HERITAGE PERMITS**



**Heritage Permit No. A68-96**

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

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

ATTENTION Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

monitor excavation activities relating to the reconstruction of the original Main Street bridge;

during the period:

November 12, 1996 to March 31, 1997

This permit is issued subject to the following conditions:

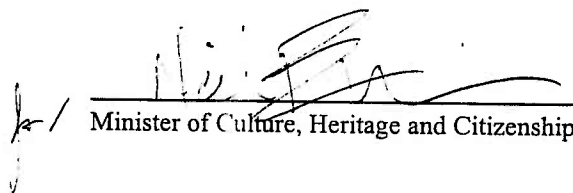
- (1) That the information provided in the application for this permit dated the 8th day of November, 1996, is true in substance and in fact;
- (2) That the permittee shall comply with all the provisions of *The Heritage Resources Act* and any regulations or orders thereunder; PLEASE NOTE ATTACHMENT 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:  
July 31, 1997
- (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 of Man and Nature by July 31, 1997, 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 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;
- 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" (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.

Dated at the City of Winnipeg, in Manitoba, this 12th day of November 1996.

  
Minister of Culture, Heritage and Citizenship





**Heritage Permit No. A28-97**

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

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

ATTENTION: Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

monitor excavation activities relating to the reconstruction of the original Main Street and Norwood Bridges, to record the presence or absence of heritage resources, and to mitigate if necessary.

during the period:

June 1, 1997 to March 31, 1998

This permit is issued subject to the following conditions:


- (1) That the information provided in the application for this permit dated the 23rd day of May 1997, 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:  
July 1, 1998
- (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 2nd day of June 1997.

 Minister of Culture, Heritage and Citizenship

  
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## Heritage Permit No. A24-98

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

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

ATTENTION: Mr. Sid Kroker

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

monitor excavation activities relating to the reconstruction of roads leading to the rebuilt southbound bridges over the Assiniboine and Red rivers, to record the presence or absence of heritage resources, record stratigraphy, with retrieval of archaeological resources, if present, and to mitigate if necessary.

during the period:

May 13 to May 25, 1998

This permit is issued subject to the following conditions:

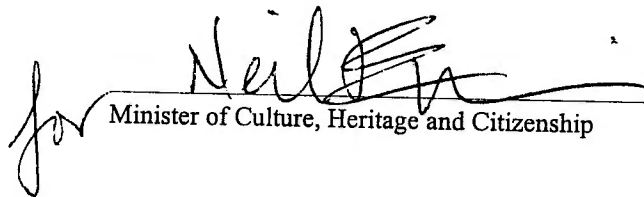
- (1) That the information provided in the application for this permit dated the 13th day of May 1998, is true in substance and in fact;
- (2) That the permittee shall comply with all the provisions of *The Heritage Resources Act* and any regulations or orders thereunder; **Please note attachment re 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
- (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; DILg-21/98A; or as appropriate;
- c. All heritage objects from The Forks are to be deposited with the Manitoba Museum by March 31, 1999 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 these sites;
- 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;
- 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 13th day of May 1998.

  
Minister of Culture, Heritage and Citizenship