



Appendix D

Heritage Resources Report

**ARCHAEOLOGICAL
IMPACT ASSESSMENT FOR
THE OLYWEST PROJECT
(ST. BONIFACE
INDUSTRIAL PARK)**

Submitted to

Earth Tech Canada Inc.

QUATERNARY
CONSULTANTS
LIMITED

July 2006

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1.0 INTRODUCTION

The Olywest Project is located in the southern portion of the Saint Boniface Industrial Park, immediately north of the Symington Rail Yard. The triangular area (Figure 1) is bounded on the north by the Winnipeg Aqueduct and Railway with the Mazenod Road right-of-way forming the western boundary.

Quaternary Consultants Ltd. was contracted by Earth Tech Canada Inc. to conduct an archaeological impact assessment. The archaeological assessment, occurring on July 4, 2006, was conducted under the terms of Heritage Permit A35-06, issued by Historic Resources Branch, Manitoba Culture, Heritage and Citizenship (Appendix A).

1.1 Location and Scope of the Project

The site extends 1.6 kilometres east/west and has a north/south dimension of 600 metres alongside the Mazenod Road allowance, south of the crossing of the Winnipeg Aqueduct and Railway. The archaeological project consisted of two components: accessing the Air Photo Library maintained by Map Branch, Manitoba Conservation; and conducting a foot traverse and a test pit survey of the location.

1.2 Study Team

The entire archaeological impact assessment project was conducted by Sid Kroker (M.A.) (Senior Archaeologist). The computer map drafting was done by Sid Kroker. Report preparation was undertaken by Sid Kroker.

1.3 Recent Site History

The activities on the land location have been documented by aerial photographs for the past sixty years. Examination of data at the Air Photo Library has shown that agricultural practices have occurred over the majority of the area. The earliest air photo located for the area dates to 1948 (A11322-304). Better images were available in a 1950 series (A12650-180, 181, 182). In these photos, the western two-thirds of the area was cultivated with the eastern section being hayed. The treed areas were smaller than present with the eastern area having three small clumps of bush.

The next good image dates to 1972 (A22448-53). More of the area was occupied by hay land with the demarcation line having moved about 100 metres west. The next photo, dated 1980 (A25385-72, 73, 74), showed that a spur rail line had been built across the eastern section of the property, heading north from the Symington Yard to the St. Boniface Industrial Park. The eastern portion, although bisected by the rail line, was still dedicated to hay production, although the size of the treed area had increased. The western portion was still under cultivation. In this portion, it appeared that the size of the treed areas had also increased. The air photos from 1985 (A26735-43, 44) showed a similar land use pattern. It appeared that some of the central areas had been converted into domestic grass for hay production, although that impression could result from the lack of clarity and/or the oblique angle of the photograph.

During the field archaeological investigations, the entire western area was domestic grass with some alfalfa and sweet clover. Two large round hay bales were present suggesting that the area was still used for hay production until very recently.

1.4 Impact Assessment

The procedure consisted of foot traverses across the area, concentrating on the periphery of the wooded areas. During the traverses, the surface of the ground, where visible through the grass cover, was examined. The majority of the ground was grass-covered but approximately 15% of the surface was visible. With this percentage, isolated artifacts may not be observed but a concentration of artifacts would be discernible. The poplar and willow areas are indicative of micro-habitats resulting from ephemeral water containment areas. At the time of the investigation, all of the ponds were dry in the interior but the presence of cat-tails (*Typha latifolia*) indicates that the central portions of the treed areas had had standing water throughout the spring.

Several shovel test pits were excavated at locations adjacent to the treed areas (Figure 1). The rationale for this was that if the resources of these micro-habitats had been utilized, the campsites of the people would have been nearby. Alternatively, preliminary food processing, such as pulverizing cat-tail roots, would have been done by a task force prior to return to the primary campsite which would have been near permanent water.

The test pits were 50 cm x 50 cm and were excavated into the sterile C horizon of the soil. Due to past cultivation activities, artifacts, if they had been present, would be mixed throughout the plow zone which was observed to extend to depths of 20 cm. The observed soil profiles were very similar with the plow zone extending between 17 and 21 centimetres in depth. Below the plow zone, which was a black clay, a light grey brown clay represented the B Horizon. In a few of the test pits, the excavation continued into the C Horizon, represented by a light yellowish grey brown clay. This occurred at a minimal depth of 35 centimetres and as deep as 44 centimetres.

The only difference occurred in the eastern portion which did not appear to have been cultivated. In the test pits in this area, there was a definite A Horizon of black clay with a thin loamy cap. The A Horizon graded into the B Horizon without a distinct demarcation line as had occurred in the western (cultivated) area. The C Horizon was slightly higher, at a depth of 30 centimetres, indicating that organic material had not leached downward as far. There had been no admixture of the upper top soil throughout the plow zone as had occurred on the west side increasing the organic content of the A Horizon.

1.5 Laboratory Procedures

During the impact assessment, no artifacts were recovered. Thus, no activity was required at Quaternary Consultants laboratory facilities.

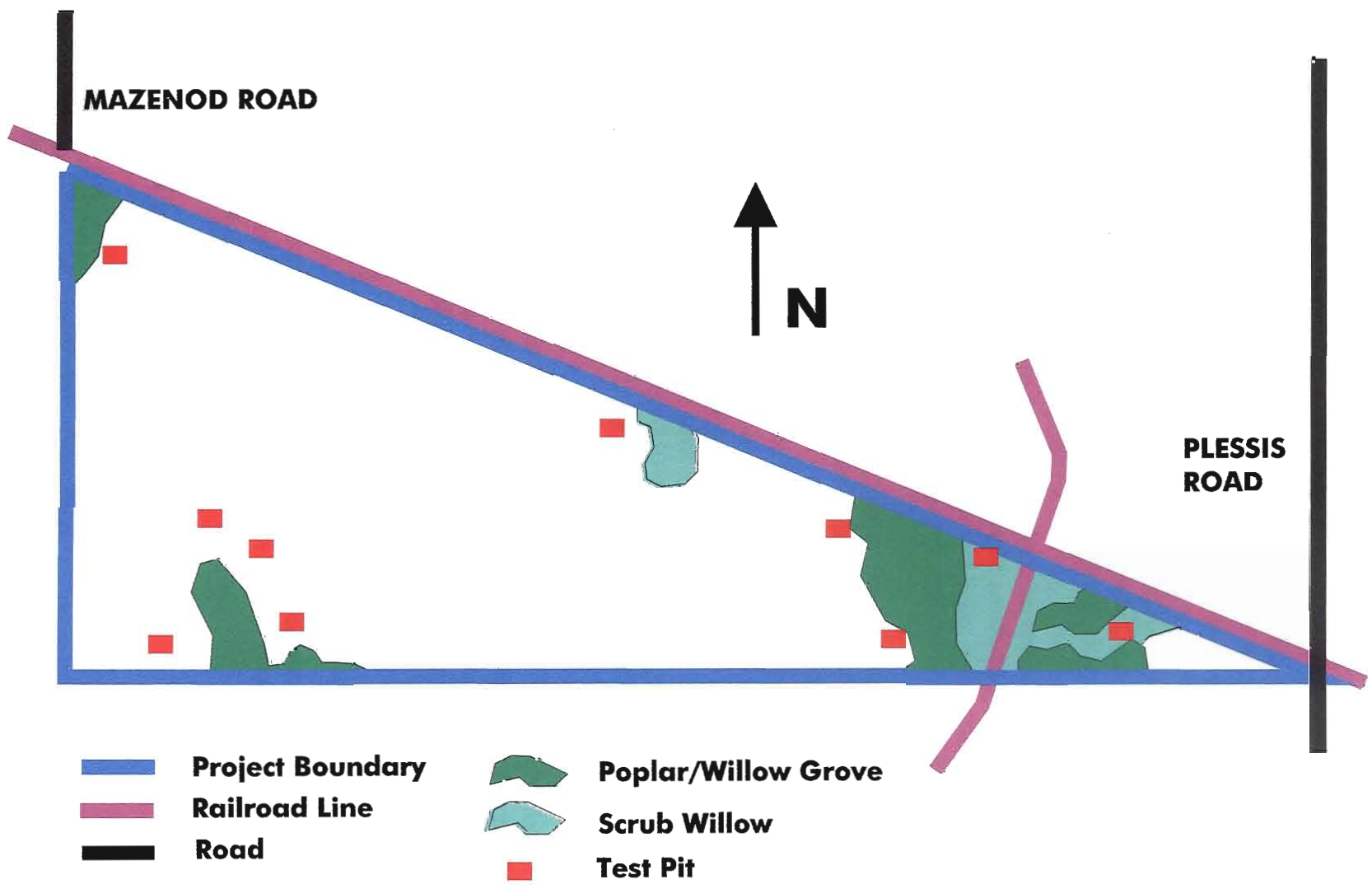


Figure 1: Project Area, Vegetation, and Test Pit Locations

2.0 DISCUSSION

The location has a low potential for archaeological resources due to the distance from water. Located at least eight kilometres from the nearest permanent water source, it is unlikely that this area would have been chosen as a location for a campsite which would have been occupied more than overnight. The amenities which could have resulted in utilization of the area are predicated upon the presence of ephemeral water ponds. These would have given rise to microhabitats in the low areas that could have retained spring meltwater. The presence of poplar (*Populus* sp.) and willow (*Salix* sp.) would have provided a source of fuel and wood for manufacture of tools, although these resources would be much more plentiful in the riverine gallery forest along the Red, Assiniboine, and La Salle Rivers. Cat-tails (*Typha latifolia*) and mint (*Mentha* sp.) could have been harvested as food resources but, again, these would be equally plentiful in areas much closer to more satisfactory campsite locations. Indian turnip (*Psoralea esculenta*), a major food resource for people living in the prairie regions, could have been present in the drier portions of the location although it tends to prefer soils that are more silty.

The area would have experienced no erosion and minimal soil aggradation over the past millennia. Aeolian deposition of fine particles during extended droughts would have added slightly to the upper soil layer. The amounts would have been small, even during periods like the Hypsothermal. Also, minimal deposition would have occurred during flooding of the Red and Assiniboine Rivers. Air photos taken during the 1950 flood show that the area is on the periphery of the flood waters. It would have been inundated by the waters of the 1826 flood but, as it is such a distance from the main current, the sediment load of the water would have been minimal, consisting only of fine clay particles. A similar situation would have occurred during the 750-year flood, documented from thick sand deposits at The Forks (Kroker and Goundry 1990:143)—a flood that appears to have been considerably larger than the 1826 flood.

The result of this minimal accretion of soil would be that any artifacts left behind as an indicator of past utilization of the area would be on or very near the surface. The disturbance caused by cultivation can both bring artifacts to the surface and also bury them within the plow zone. No artifacts were observed on the surface or during any of the test pits, suggesting that the area was minimally utilized, if at all.

3.0 RECOMMENDATIONS

No evidence of *in situ* cultural resources was observed during the archaeological impact assessment. Hence, Quaternary Consultants Ltd. **can recommend that no further archaeological investigations are required and the development can proceed.**

4.0 BIBLIOGRAPHY

Kroker, Sid and Pamela Goundry

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

APPENDIX A
HERITAGE PERMIT



Heritage Permit No. A35-06

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

Name: Quaternary Consultants Ltd.

Address: 130 Fort St.
Winnipeg, MB R3C 1C7

Attention: Mr Sid Kroker,

(hereinafter referred to as "the Permittee"),

is hereby granted permission to:

to undertake a Heritage Resource Impact Assessment of the Olywest Building Site, Borden Block DILg, Winnipeg, Manitoba.

during the period:

June 26 – June 30, 2006.

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 June 2006, 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, 2007;
- (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. The permittee must obtain permission from any landowner, lessee or regulatory authority as applicable, concerning access to any property to be examined;
- b. Neither the Government of Manitoba nor the party issuing this permit shall 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 actions, liens, demands, loss, liability, cost, damage and expense including, without limitations, reasonable legal fees, which the Government, Minister or any employee or official of the Government may suffer or incur by reasons of any of the activities pursuant to or related to this permit..
- c. The permittee has, along with this permit, received enclosure: *Provisions Regarding Found Human Remains Under THE HERITAGE RESOURCES ACT, And Manitoba's Policy Respecting the Reporting, Exhumation and Reburial of Found Human Remains (1987)*.

Dated at the City of Winnipeg, in Manitoba, this 26th day June 2006.



Minister of Culture, Heritage and Tourism