

05-451

**HISTORICAL RESOURCES IMPACT ASSESSMENT
NOSE HILL TRAIL AND PATHWAY PLAN
JOHN LAURIE BLVD. PEDESTRIAN OVERPASS ALIGNMENT
NOSE HILL PARK EAST-WEST CROSS PARK PATHWAY CONNECTOR
FINAL REPORT, PERMIT 05-451**

A report prepared for
City of Calgary, Calgary Parks #75
Community Vitality and Protection
P.O. Box 2100, Station "M"
Calgary, AB

Prepared by
Historical Resource Management Ltd.
27 Berkshire Road, N.W.,
Calgary, AB
T3K 2A1

September 9, 2005

ABSTRACT

Two pedestrian pathways were assessed on behalf of the City of Calgary on September 6, 2005. The first pathway is the 162 metre linkage between the John Laurie Pedestrian Overpass and an existing Nose Hill Park gravel trail. The development is located in L.S. 7 Section 6 Township 25 Range 1 W. 5M., just southeast of the Brisebois Drive N.W. parking lot in Nose Hill Park in the City of Calgary, Alberta. The second pathway is the 732 metre missing link on the Nose Hill Park East-West Pathway. The study area is located in the northeast quarter of Section 7 Township 25 Range 1 W. 5M., just south and east of the Edgemont Boulevard N.W. parking lot in Nose Hill Park in the City of Calgary, Alberta.

Both surface reconnaissance and subsurface testing were undertaken on the development property. Historical resources were not recorded during the assessment. As all historic resources seem to have been avoided, the author recommends that Historical Resources Act clearance be granted and that the development of these pedestrian pathways be allowed to proceed as planned.

ACKNOWLEDGMENTS

Permit Holder/Report Author/Photographer
Andrea D. Richardson

Draftsman
Richard Lalonde

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	iv
LIST OF PLATES	v
INTRODUCTION	1
PROJECT DESCRIPTION	3
PREVIOUS HISTORICAL RESEARCH	6
ARCHAEOLOGICAL SITES	7
PROCEDURES	9
FIELD METHODS	9
RESULTS	10
JOHN LAURIE PEDESTRIAN OVERPASS ALIGNMENT	10
NOSE HILL PARK EAST-WEST CROSS PARK PATHWAY CONNECTOR	12
RECOMMENDATIONS	14
SUMMARY	14
REFERENCES CITED	15
APPENDIX A: PATHWAY ALIGNMENT PLANS	19

LIST OF FIGURES

Figure 1. Location of study area	2
Figure 2. John Laurie Overpass Trail Alignment.	4
Figure 3. East-West Cross Park Pathway Connector	5

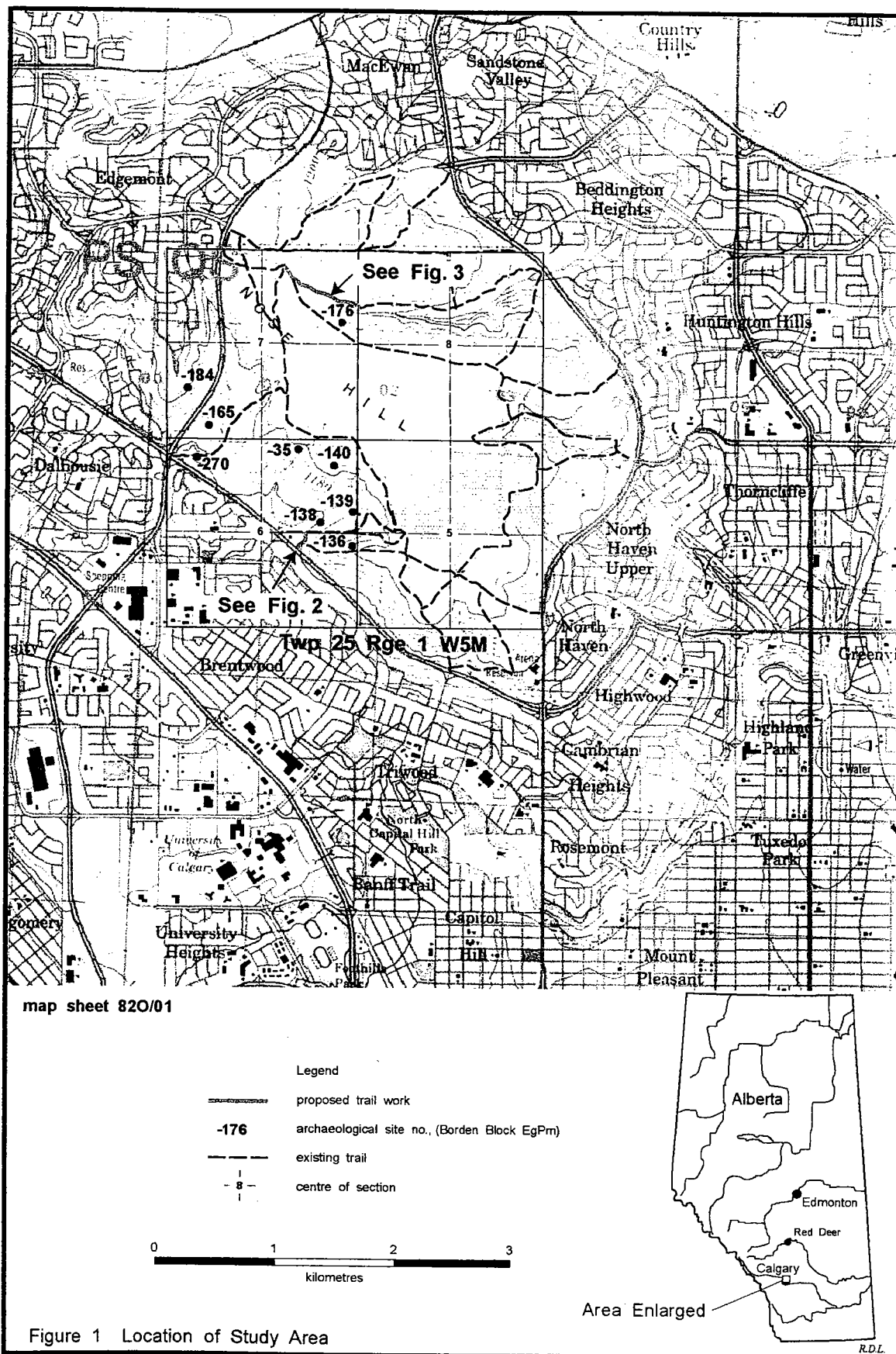
LIST OF PLATES

Plate 1. Overview of the John Laurie Overpass Alignment.....	3
Plate 2. Overview of the East-West Connector from the west end.	6
Plate 3. Slope along the John Laurie trail alignment.....	11
Plate 4. View west along the John Laurie trail area.....	11
Plate 5. View to the east along the East-West Connector.	12
Plate 6. Coulee along the south edge of the East-West Connector.....	13

**HISTORICAL RESOURCES IMPACT ASSESSMENT
NOSE HILL TRAIL AND PATHWAY PLAN
JOHN LAURIE BLVD. PEDESTRIAN OVERPASS ALIGNMENT
NOSE HILL PARK EAST-WEST CROSS PARK PATHWAY CONNECTOR
FINAL REPORT, PERMIT 05-451**

INTRODUCTION

Historical Resource Management Ltd. was contracted to conduct an historical resources impact assessment on two pedestrian pathways in Nose Hill Park on behalf of the City of Calgary. The proposed pathways are located in L.S.D 7 of Section 6 and the northeast quarter of Section 7 Township 25 Range 1 west of the 5th meridian, in Nose Hill Park in the City of Calgary, Alberta. Figure 1, page 2, shows the locations of the study areas. The author did the assessment on September 6, 2005. Surface reconnaissance and subsurface testing were undertaken. The following report presents details of the assessment and resulting recommendations.



PROJECT DESCRIPTION

Two pathways were assessed for historical resources (Figure 2, page 4 and Figure 3, page 5). The first pathway is the 162 metre by two metre linkage between the John Laurie Pedestrian Overpass and an existing Nose Hill Park trail (Plate 1, page 3). The second pathway is the 732 metre by two metre missing portion of the paved Nose Hill Park East-West Pathway (Plate 2, page 6). The historical resources impact assessment was recommended for these two pathways because the developments are located in native prairie vegetation in areas designated HRV 4 based on the presence of known historic resources.

Park pathway construction entails stripping of topsoil down to 20 centimetres below the surface, as well as contouring and leveling along steep slopes. Historic resources within the impact zone would therefore be destroyed.

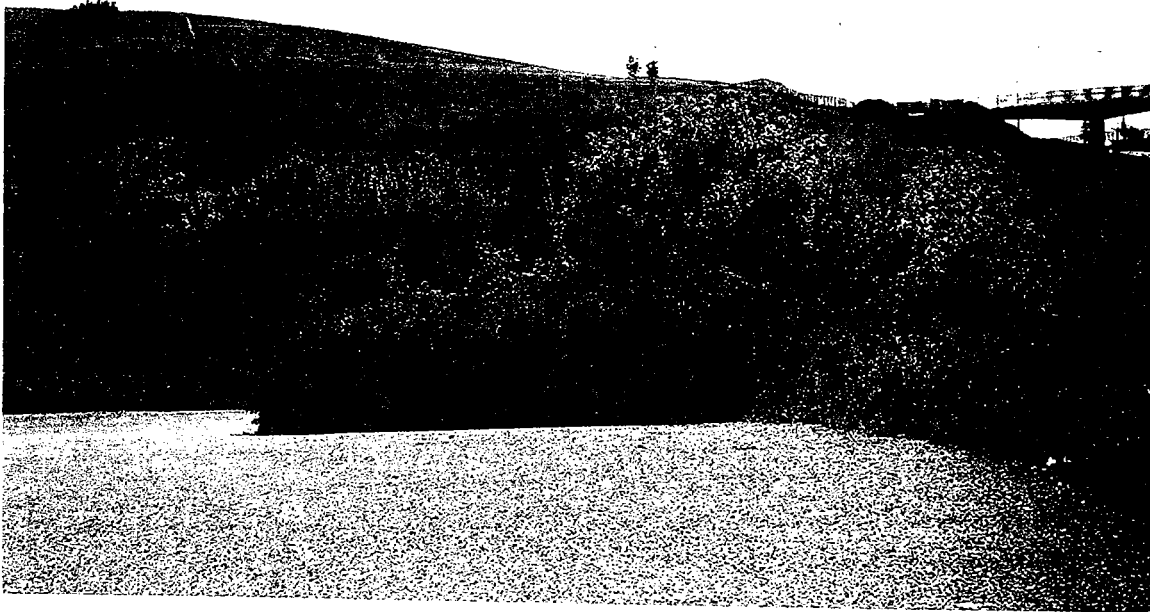
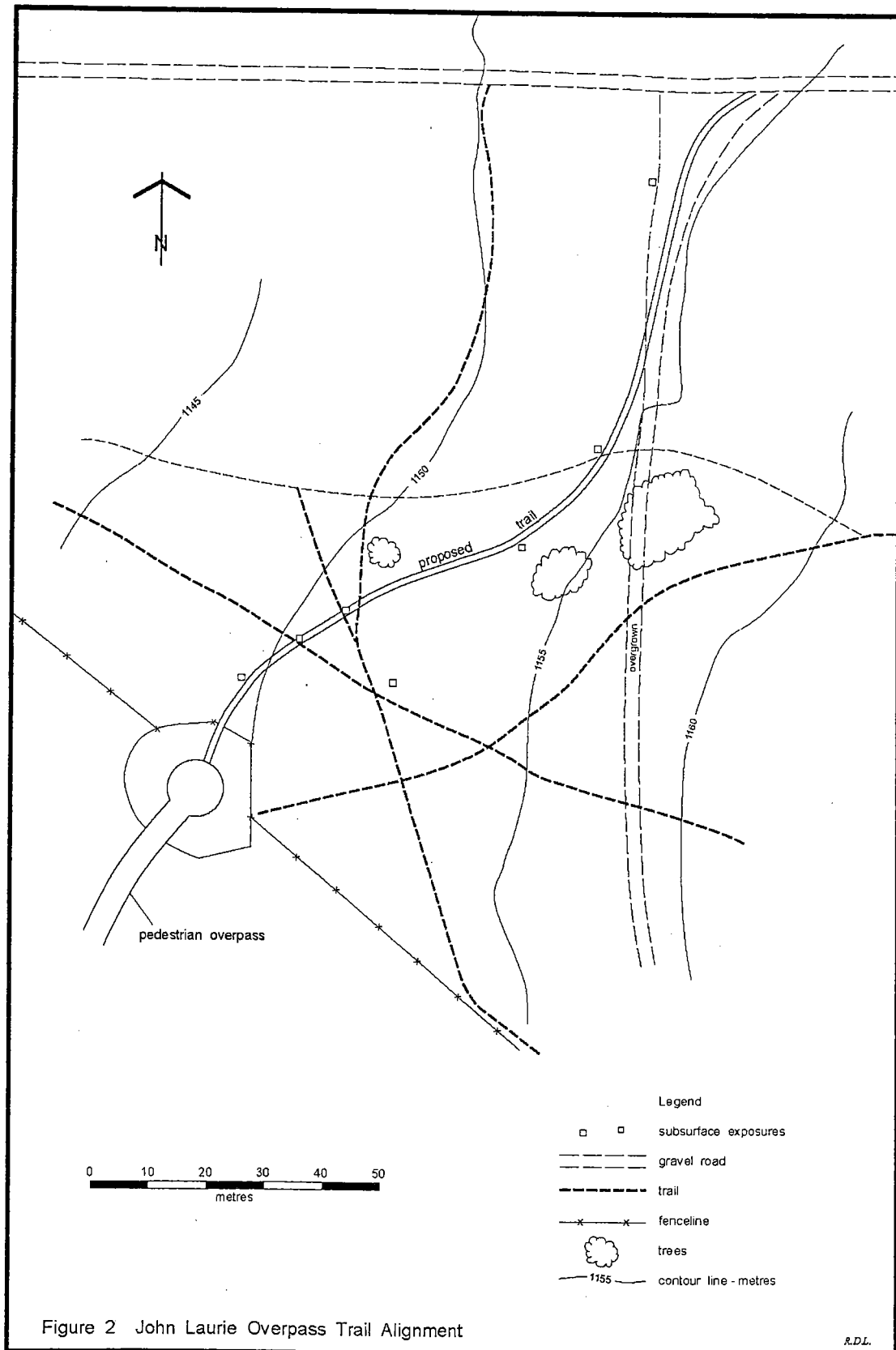


Plate 1. Overview of the John Laurie Overpass Alignment.



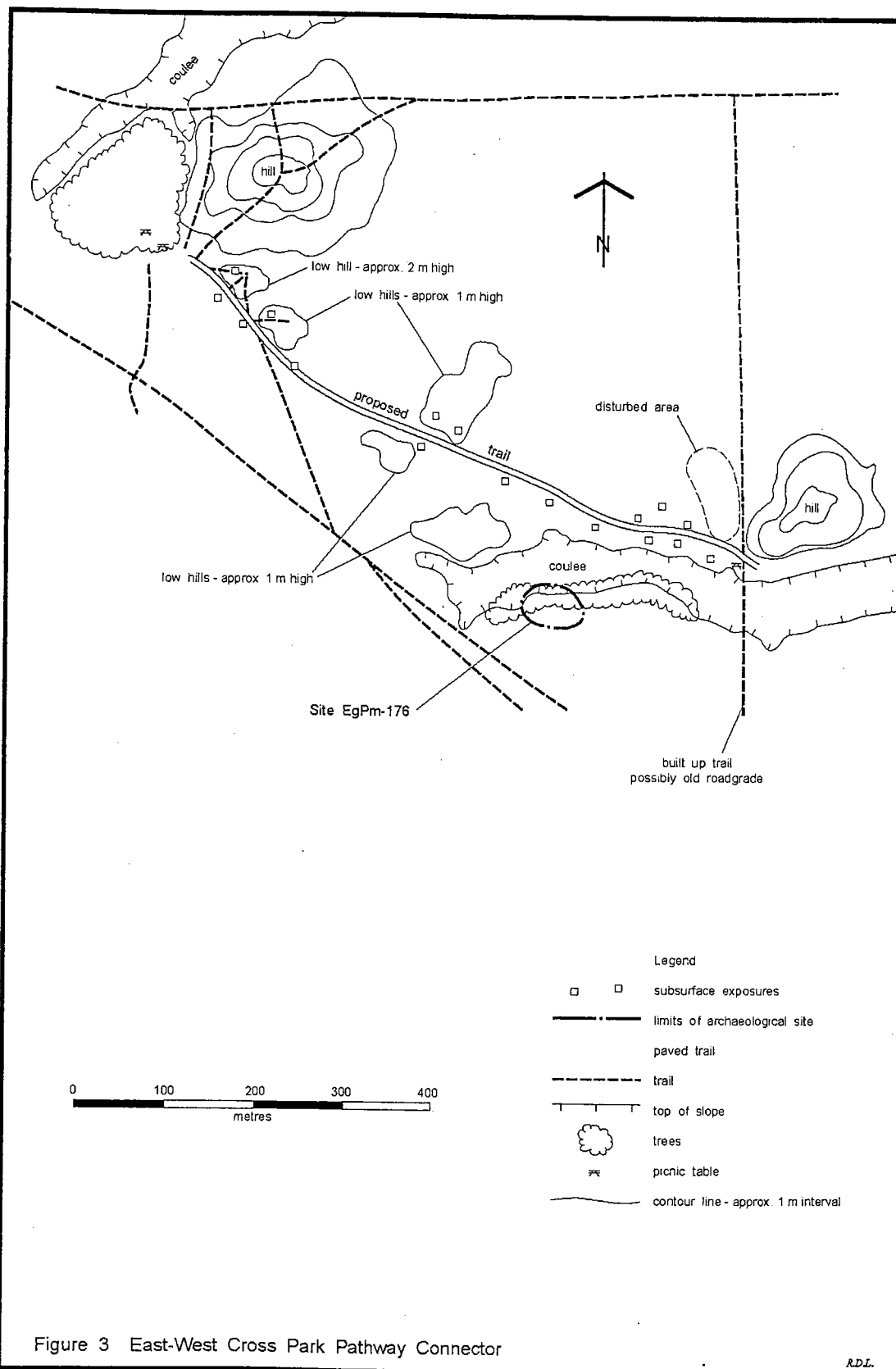




Plate 2. Overview of the East-West Connector from the west end.

PREVIOUS HISTORICAL RESEARCH

The historical and archaeological resources of Nose Hill Park and the City of Calgary in general have been studied numerous times since the beginnings of archaeological research in the province of Alberta. Reeves et al. (2001: 3-6) define three periods of research: the Glenbow Foundation (1957-1966), the University of Calgary (1962-1973), and the Alberta Historical Resources Act (1973-2000+). These three periods reflect the changing focus of research in the city from preservation to inventory to historical resources impact assessments and mitigation studies (Reeves et al. 2001: 3-6). Most of the studies in and around Nose Hill Park fall into the latter categories.

The majority of the historical resources impact assessments in the areas adjacent to the park have been related to subdivision developments (e.g. Balcom 1989; Calder 1980, 1981; Gryba 1995a, 1995b; Head 1997b; Hunt 1980;

McCullough 1978; Reeves 1976a, 1977, 1989, 1990a, 1990b; Van Dyke 1981c, 1981d, 1981e; Wright 1980, 1985). Infrastructure projects such as power and water lines, and road developments make up most of the rest of the historical resource impact assessments in the vicinity of the park (Brewer 1992; Calder 1978; de Mille 1997; Head 1997a; Reeves 1976b; Ronaghan 1980; Van Dyke 1981a, 1981b). Other impact assessments included a quarry and a golf driving range (Poole 1996; Reeves 1981).

Mitigative excavations and site inventories form the remainder of the studies in the vicinity of the proposed developments in Nose Hill Park. In 1978, Reeves undertook a historic resources inventory and assessment of Nose Hill Park (Reeves 1978). EgPm-135 through EgPm-177 were recorded as part of this project. Wright (1981) did test excavations at EgPm-81 as part of permit 81-032. Loveseth (1981a, 1981b, 1982) performed comparative archaeological conservation studies at EhPm-34 in 1981 and 1982. EgPm-34 and EgPm-260 were excavated by Walde (1991a, 1991b, 1992) under permits 91-006, 91-090 and 92-025. The most recent excavations were carried out by de Mille (1997, 1998) at EgPm-82, EgPm-109, EgPm-279 and EgPm-280.

ARCHAEOLOGICAL SITES

Nose Hill Park and the Nose Hill Escarpment has very high archaeological site density. There are 311 recorded sites within the Borden block that incorporates the project study areas in Nose Hill Park. The two project areas are in sections designated with an Historic Resource Value of 4 based on the presence of known archaeological sites. There are seven sites in Section 6 and three sites in Section 7 of Township 25 Range 1 west of the 5th Meridian (see

Figure 1, page 2). These sites vary from surface scatters with little significance to campsites and stone feature sites that have significant historical value.

In Section 6, the seven archaeological sites are EgPm-35, EgPm-136, EgPm-138, EgPm-139, EgPm-140, EgPm-267 and EgPm-270. EgPm-35 is a campsite/killsite with an HRV of 4 identified by the University of Calgary inventory study in 1970 (Rogers 1971). It is located on the surface at the prairie level, adjacent to a small creek. EgPm-140 is a stone feature/stone circle site with an HRV of 4 recorded in the 1978 historical resources inventory of Nose Hill Park (Reeves 1978). The site is located at the prairie level on the south side of the Nose Hill Escarpment (Reeves 1978). EgPm-267 is a surface scatter of prehistoric materials identified as part of the TRACE 1991 project. The site location is approximate in L.S.D. 1 and 5 of Section 6. EgPm-270 is a subsurface scatter located on a terrace near the intersection of John Laurie Boulevard and Shaganappi Trail, at the corner of Nose Hill Park (Brewer 1992). This site was identified as part of an assessment for the Nose Hill Park detention pond under permit 92-048 (Brewer 1992). The remaining three sites in Section 6 are campsites along the north and south edges of coulees on the south side of the park (Reeves 1978). EgPm-136 and EgPm-138 are situated at the prairie level, while EgPm-139 is at the coulee bottom (Reeves 1978). These sites were identified under permit 78-102 (Reeves 1978). None of these sites are located within the same legal subdivision as the proposed pathway alignment.

The three sites in Section 7 are EgPm-165, EgPm-176, and EgPm-184. EgPm-165 is a campsite with an HRV of 4, located on the native prairie of the western slope of Nose Hill (Reeves 1978). Butchered bone and fire broken rock were observed in a test adjacent to a stream bed (Reeves 1978). EgPm-184 is a lookout and quarry site on the south side of the Nose Hill Escarpment. This site was recorded as part of a subdivision assessment under permit 80-005 (Calder 1980). These two sites are located outside the project development area.

EgPm-176 is the only one of the five sites located within the same quarter section as the proposed pathway development for the East-West Connector pathway. This site is a campsite with an HRV of 0, identified under permit 78-102 (Reeves 1978). Based on the UTM coordinates and on the site sketches, the campsite is located on the south side of a coulee, near the west end. The

site description indicates that this site was located in a partially cultivated area of the park (Reeves 1978). The site is located on the opposite side of the coulee from the proposed trail alignment.

PROCEDURES

Prior to conducting field work, a site file search is commissioned to determine if any known historical resources are in conflict with the proposed development. A permit was applied for on August 30, 2005, obtained on September 6, 2005, and deemed valid between September 6, 2005 and December 2, 2005.

FIELD METHODS

Each segment of the development is walked to look for surface features or artifacts, and shovel tested to determine the potential for buried historical resources. The development area is walked in narrowly spaced transects. Fortuitous subsurface exposures on the proposed development area, such as tree throws, blowouts and rodent spoil piles, are examined. Shovel tests are normally about 40 centimetres in diameter and are dug until they encounter clearly culturally sterile deposits. Soil matrix is not screened but the excavated material is thoroughly troweled. Shovel test locations are recorded using a GPS receiver.

Areas with sediments that are too deep for practical shovel testing are tested using a backhoe. Backhoe tests are usually about one to two metres long and 50 centimetres wide. Again, they are dug until clearly sterile deposits are encountered.

When a historical resource site is found it is further assessed, either by surface reconnaissance, shovel testing, or the placement of one metre by one metre excavation units, as appropriate. All excavated material from an identified site is screened through six millimetre mesh. GPS readings of the site

site description indicates that this site was located in a partially cultivated area of the park (Reeves 1978). The site is located on the opposite side of the coulee from the proposed trail alignment.

PROCEDURES

Prior to conducting field work, a site file search is commissioned to determine if any known historical resources are in conflict with the proposed development. A permit was applied for on August 30, 2005, obtained on September 6, 2005, and deemed valid between September 6, 2005 and December 2, 2005.

FIELD METHODS

Each segment of the development is walked to look for surface features or artifacts, and shovel tested to determine the potential for buried historical resources. The development area is walked in narrowly spaced transects. Fortuitous subsurface exposures on the proposed development area, such as tree throws, blowouts and rodent spoil piles, are examined. Shovel tests are normally about 40 centimetres in diameter and are dug until they encounter clearly culturally sterile deposits. Soil matrix is not screened but the excavated material is thoroughly troweled. Shovel test locations are recorded using a GPS receiver.

Areas with sediments that are too deep for practical shovel testing are tested using a backhoe. Backhoe tests are usually about one to two metres long and 50 centimetres wide. Again, they are dug until clearly sterile deposits are encountered.

When a historical resource site is found it is further assessed, either by surface reconnaissance, shovel testing, or the placement of one metre by one metre excavation units, as appropriate. All excavated material from an identified site is screened through six millimetre mesh. GPS readings of the site

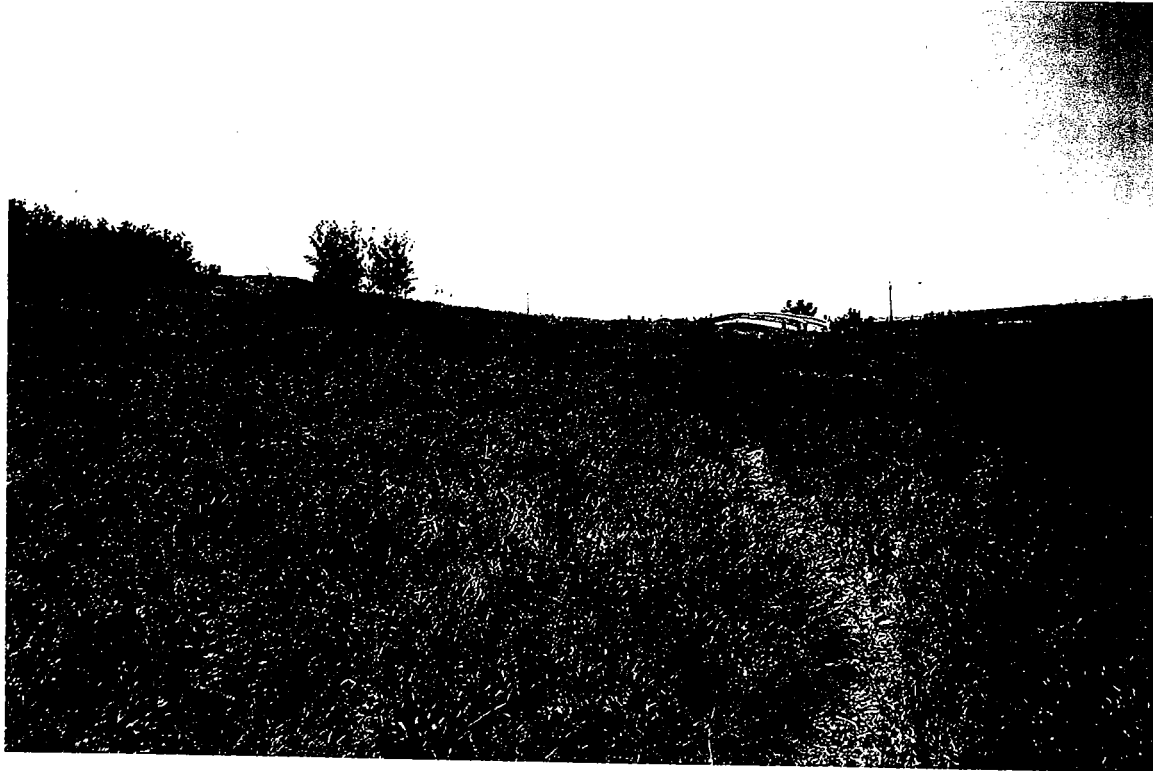


Plate 4. View west along the John Laurie trail area.

The development area was walked and the surface was examined, as described in the previous section. Seven subsurface exposures were examined throughout the development area. All seven were negative, both for buried soil horizons and for historical resources. The stratigraphy in the exposures was consistent throughout the development area. Five to ten centimetres of dark grayish brown loam was underlain by medium brown clayey loam and gravel. Stones were found all through the shovel tests, and varied in diameter from one to ten centimetres. Depth of the subsurface exposures varied from 20 to 30 centimetres. There was no visible sign of EgPm-138 on the slope of the coulee near the proposed trail alignment, and the site appears to be located well outside the development area. Because the site would not be affected by the proposed development, it was not revisited during this historical resources impact assessment.

NOSE HILL PARK EAST-WEST CROSS PARK PATHWAY CONNECTOR

The Nose Hill Park East-West Cross Park Pathway Connector is located at the prairie level in the north end of Nose Hill Park (Plate 5, page 12). The pathway alignment crosses several small hills and follows along the northern edge of an east-west coulee in the centre of the park (Plate 6, page 13). The vegetation of the area is predominantly native grasses with weedy species such as Canadian thistle, and trembling aspen along the coulee slopes (Plate 6, page 13). The vegetation is interrupted by the existing trail along the proposed trail alignment, a disturbed area at the western end of the trail alignment, paved trails at the east and west ends of the trail, rodent exposures, and small cut banks.

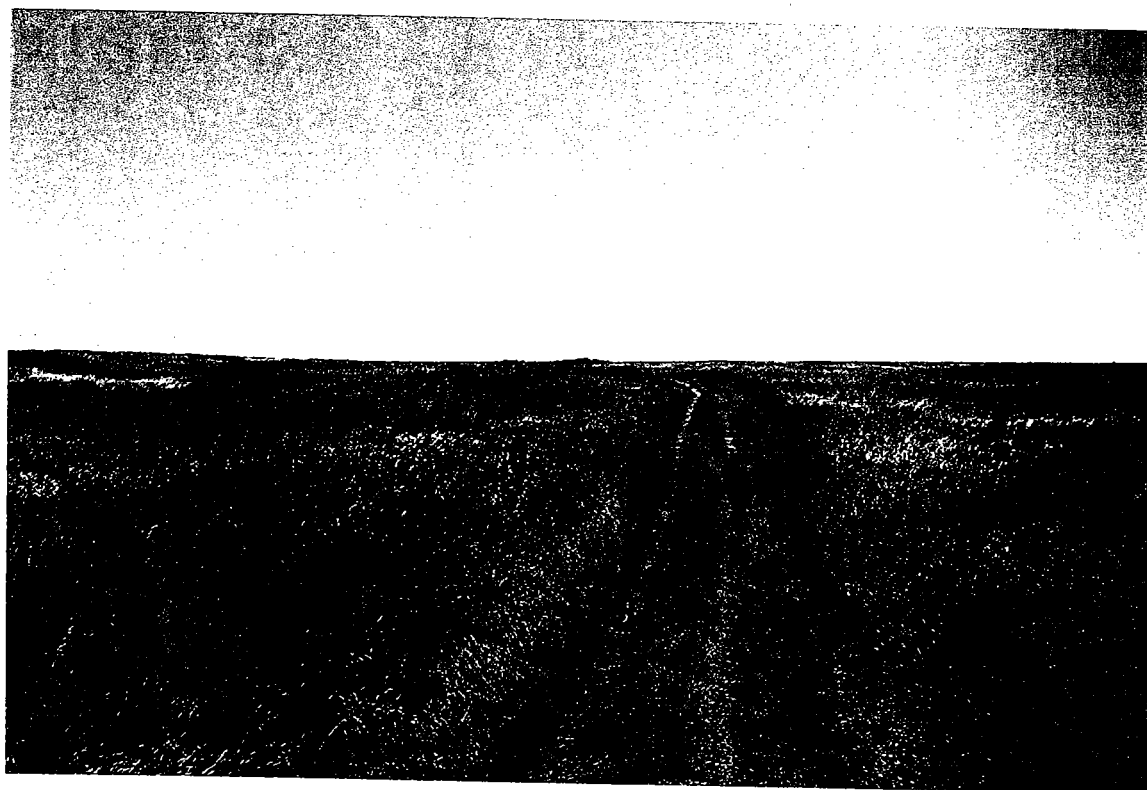


Plate 5. View to the east along the East-West Connector.

The development area was walked and the surface was examined as described in the previous section. Seventeen subsurface exposures were examined throughout the development area. All 17 were negative, both for buried soil horizons and for historical resources. The stratigraphy was consistent throughout the study area. Five to 20 centimetres of dark grayish brown to

medium brown loam was underlain by medium brown clayey loam and gravel. Stones were found all through the depths of the exposures. The small hill at the northeastern end of the pathway alignment had exposed gravel on the top and sides. Depth of the subsurface exposures varied from 10 to 30 centimetres. There was no visible sign of EgPm-176 on the north side of the coulee near the proposed trail alignment, and the site appears to be located well outside the development area. Because the site would not be affected by the proposed development, it was not revisited during this historical resources impact assessment.



Plate 6. Coulee along the south edge of the East-West Connector.

RECOMMENDATIONS

Thorough surface reconnaissance and subsurface testing did not result in the recording of any historical resources during this assessment. Therefore, the author recommends that Historical Resource Act clearance be granted and that the development be allowed to proceed as planned.

SUMMARY

Two pedestrian pathways were assessed on behalf of the City of Calgary on September 6, 2005. The first pathway is the 162 metre linkage between the John Laurie Pedestrian Overpass and an existing Nose Hill Park gravel trail. The development is located in L.S. 7 Section 6 Township 25 Range 1 W. 5M., just southeast of the Brisebois Drive N.W. parking lot in Nose Hill Park in the City of Calgary, Alberta. The second pathway is the 732 metre missing link on the Nose Hill Park East-West Pathway. The study area is located in the northeast quarter of Section 7 Township 25 Range 1 W. 5M., just south and east of the Edgemont Boulevard N.W. parking lot in Nose Hill Park in the City of Calgary, Alberta.

Both surface reconnaissance and subsurface testing were undertaken on the development property. Historical resources were not recorded during the assessment. As all historic resources seem to have been avoided, the author recommends that Historical Resources Act clearance be granted and that the development of these pedestrian pathways be allowed to proceed as planned.

REFERENCES CITED

Balcom, R.J.

- 1989 Historical resources impact assessment Country Hills development: final report. Permit 89-031. Copy on File, Archaeological Survey of Alberta, Edmonton.

Brewer, G.R.

- 1992 Historical resources impact assessment Nose Hill Park detention pond: final report. Permit 92-048. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1994 Permit 94-097. Copy on File, Archaeological Survey of Alberta, Edmonton.

Calder, J.M.

- 1978 Historical resources impact assessment Bow Valley Exploration Limited Airdrie area pipeline. Permit 78-045. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1980 Historical resources impact assessment subdivision development Edgemont IV: final report. Permit 80-005. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981 Historical resources impact assessment Optimax development SE ¼ 25-25-1-W4M: final report. Permit 81-175. Copy on File, Archaeological Survey of Alberta, Edmonton.

de Mille, C.N.

- 1997 Historical resources mitigation Beddington Trail N.W. EgPm-82: final report. Permit 97-059. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1998 Historical resources mitigation Hanson Ranch: final report. Permit 98-001. Copy on File, Archaeological Survey of Alberta, Edmonton.

Gryba, E.M.

- 1995a Historical resources impact assessment part SW section 23 TP 25 R1 W of 5 M Harvest Hills subdivision. Permit 95-016. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1995b Historical resources impact assessment parts of LSD 13-15 and SW-23 of TP 25 R 1 W of 5 M Arbour Lake stage 6 subdivision at Calgary, Alberta: final report. Permit 95-017. Copy on File, Archaeological Survey of Alberta, Edmonton.

Head, T.H.

- 1982 Archaeological assessment and excavations EhPm-34, area C, the Balzac site: final report. Permit 82-158. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1997a Historical resources impact assessment Beddington Trail N.W. from Hidden Valley Link N.W. to Simmons Valley Road: final report. Permit 97-010. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1997b Historical resources impact assessment proposed Hanson Ranch subdivision. Permit 97-047. Copy on File, Archaeological Survey of Alberta, Edmonton.

Hunt, J.M.

- 1980 MacEwan Glen subdivision historical resource inventory and assessment: final report. Permit 80-179. Copy on File, Archaeological Survey of Alberta, Edmonton.

Loveseth, B.A.

- 1981a Interim report EhPm-34 (area D) 1981 comparative archaeological conservation studies. Permit 81-113. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981b Permit 81-155. (See 81-113)
- 1982 Permit 82-113. Copy on File, Archaeological Survey of Alberta, Edmonton.

McCullough, E.J.

- 1978 Historical resources impact assessment, Beddington Creek Lands, Northwest Calgary: final report. Permit 78-088. Copy on File, Archaeological Survey of Alberta, Edmonton.

Poole, C.P.

- 1996 Historical resources impact assessment part of NW section 15 TP 25 R 1 W 5 M Harvest Hills golf driving range at Calgary, Alberta: final report. Permit 96-058. Copy on File, Archaeological Survey of Alberta, Edmonton.

Reeves, B.O.K

- 1976a Archaeological inventory Carma lands in north Calgary. Permit 76-067. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1976b Historical site impact assessment Calgary Power Ltd. north Calgary site. Permit 76-078. Copy on File, Archaeological Survey of Alberta, Edmonton.

- 1977 Historical resources impact assessment, Sterling Homes, Beddington Heights subdivision. Permit 77-060. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1978 Historical resources inventory and assessment, Nose Hill Park. Permit 78-102. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981 Historical resources impact assessment section 5, township 25, range 1, west of the 5th meridian Burnco Rock Products Limited. Permit 81-101. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1989 Historical resources impact assessment portion of E ½ 20-25-1-W5M Hidden Valley, Calgary, Alberta. Permit 89-095. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1990a Historical resources impact assessment City of Calgary Beddington Trail project. Permit 90-078. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1990b Historical resources impact assessment portion of NE ¼ 20-25-1-W5M Hidden Valley stage II residential subdivision Calgary, Alberta. Permit 90-081. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1990c Historical resources impact assessment (portions of NW, SE & SW 19-25-1-5) Carma Developers Ltd. Vol. 1; Appendix I historical resources impact assessment Carma Hidden Valley (Portions of NW, SE & SW 19-25-1-5) Carma Developers Ltd.; Historical resources impact assessment Wooliams lands – Hidden Valley (portion of NW 20-25-1-5) vol. 2; Historical resources impact assessment Wooliams N2N Hereford Ranchstead Hidden Valley stage I residential subdivision City of Calgary NE 19-25-1-5 (vol. 3). Permit 90-115. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1996 Mitigative archaeological studies Nose Creek Confluence Park: final report. Permit 96-022. Copy on File, Archaeological Survey of Alberta, Edmonton.

Reeves, B., C. Bourges, C. Olson and A. Dow

- 2001 City of Calgary Native Archaeological Site Inventory. Vol. 1, 2. Lifeways of Canada Limited, Calgary. Copy on File, Archaeological Survey of Alberta, Edmonton.

Rogers, J.L.

- 1971 Archaeological Investigations in the Calgary Area – Preliminary report – 1971. Copy on File, Archaeological Survey of Alberta, Edmonton.

Ronaghan, B.M.

- 1980 Historical resources impact assessment Home Oil, Cremona Division pipeline expansion – Balzac area: final report. Permit 80-193. Copy on File, Archaeological Survey of Alberta, Edmonton.

Van Dyke, S.G.

- 1981a Historical resources impact assessment Town of Airdrie water supply line and sanitary forcemain. Permit 81-016. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981b Historical resources impact assessment City of Calgary water supply line and forcemain. Permit 81-019. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981c Historical resources impact assessment NE ¼ 23-25-1-W5M: final report. Permit 81-171. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981d Historical resources impact assessment Beddington business park S ½ NW ¼ 25-25-1-W5M. Permit 81-172. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981e Historical resources impact assessment Agra-Park N ½ SW ¼ 25-25-1-W4: final report. Permit 81-173. Copy on File, Archaeological Survey of Alberta, Edmonton.

Walde, D.A.

- 1991a Permit 91-006. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1991b EgPm-34 and EgPm-260 mitigative excavations: final report [permit 91-90 and 92-25]. Permit 91-090. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1992 EgPm-34 and EgPm-260 mitigative excavations: final report [permit 91-90 and 92-25]. Permit 92-025. Copy on File, Archaeological Survey of Alberta, Edmonton.

Wright, B.W.

- 1980 Historical resources impact assessment North Calgary subdivision: final report. Permit 80-125. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1981 Test excavation EgPm-81: final report. Permit 81-032. Copy on File, Archaeological Survey of Alberta, Edmonton.
- 1985 Historical resources impact assessment Calgary subdivision SW 18-25-1-W5: final report. Permit 85-006. Copy on File, Archaeological Survey of Alberta, Edmonton.

APPENDIX A: PATHWAY ALIGNMENT PLANS

STAMP

CONSULTANT

GENERAL NOTES

1. REPORT BACKGROUND: THE LANDSCAPE ARCHITECT HAS CONDUCTED A VISUAL ANALYSIS OF THE PROPOSED PROJECT AND HAS IDENTIFIED THE FOLLOWING AREAS OF CONCERN: ALL LANDSCAPE SURFACES REMAIN THE PROPERTY OF THE LANDSCAPE ARCHITECT. ALL SURFACES ARE TO BE MAINTAINED IN ACCORDANCE WITH THE STANDARDS OF THE LANDSCAPE ARCHITECT.

REV NO DATE DESCRIPTION

CLIENT

City of Calgary Parks

PROJECT

NOSEHILL PARK
EAST- WEST CROSS PARK
PATHWAY CONNECTOR

TITLE

LOCATION PLAN

DRAWN BY CHD SH

PROJECT NUMBER C2310

SCALE 1:2000

DATE 20/08/05

L101

