



Halifax Public Gardens

Excavation of French Drain Near Horticultural Hall

Archaeological Resource Impact Assessment

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**Halifax Public Gardens:
Excavation of French Drain Near Horticultural Hall
Archaeological Resource Impact Assessment**

Heritage Research Permit A2012NS169

Davis MacIntyre & Associates Limited
Project No. 12-079.1

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Submitted to:

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- and-

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Cover image: Study area prior to excavation, looking north. The trench was located on the west (left) side of the light standard. The drainage problem is evident in the photo.

Executive Summary

Davis MacIntyre & Associates Limited conducted an archaeological assessment of excavation for the installation of a French drain between Horticultural Hall and the bandstand in Halifax Public Gardens on December 20, 2012. The purpose of the assessment was to ensure that no significant archaeological resources were impacted during excavation of the trench. The assessment concluded that there were no in situ archaeological resources present within the excavated area and, therefore, no further recommendations are necessary.

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1.0 Introduction

Davis MacIntyre & Associates Limited was retained by Halifax Regional Municipality to conduct an archaeological resource impact assessment of a French drain just northwest of Horticultural Hall and south of the bandstand in the Halifax Public Gardens. The purpose of the assessment was to ensure that no significant archaeological resources were impacted during excavation, and to provide recommendations for further mitigation if necessary.

The assessment was conducted under Category C Heritage Research Permit A2011NS169 (Appendix A). This report conforms to the standards of the Nova Scotia Heritage Division and the Heritage Research Permit requirements as per the Special Places Protection Act (*R.S., c. 438, s. 1.*).

2.0 Study Area

The study area is located approximately 6 meters northwest of Horticultural Hall along the west edge of the pathway, and approximately 50 meters south of the bandstand. The trench was approximately 13 meters long and ran northward from a catch basin on the west side of the pathway beside (west of) Horticultural Hall (Figure 2.0-1). A French drain was installed to alleviate a drainage issue that appeared to originate near a light standard on the west edge of the walkway. Water could be seen seeping to the surface and running along the pathway to the north of Horticultural Hall which resulting in migration of surface material from the walkway.

The study area is located in an urban setting within Provincial natural theme region #833 – Eastern Shore Beaches (Figure 2.0-2). The coastal region is characterized by an indented submerged coastline and is divided into headlands separated by long inlets, most of which are drowned river estuaries. The underlying soils of peninsular Halifax and Dartmouth are predominantly slate-derived shaly loam Bridgewater soils. Historically, the slate that characterizes bedrock outcrops in this area was used as building material and can still be seen in many of the extant nineteenth century constructions such as Alexander Keith’s Brewery on Lower Water Street in Halifax. Because of continued urban expansion and development since the mid-eighteenth century, many aspects of the natural history of this region including floral and faunal sustainability, no longer apply.¹

¹ Davis and Browne, 1996:198-200.



Figure 2.0-1: Map of the Halifax Public Gardens showing the approximate location of the excavated trench. Map taken from The Friends of the Public Gardens website (www.halifaxpublicgardens.ca).

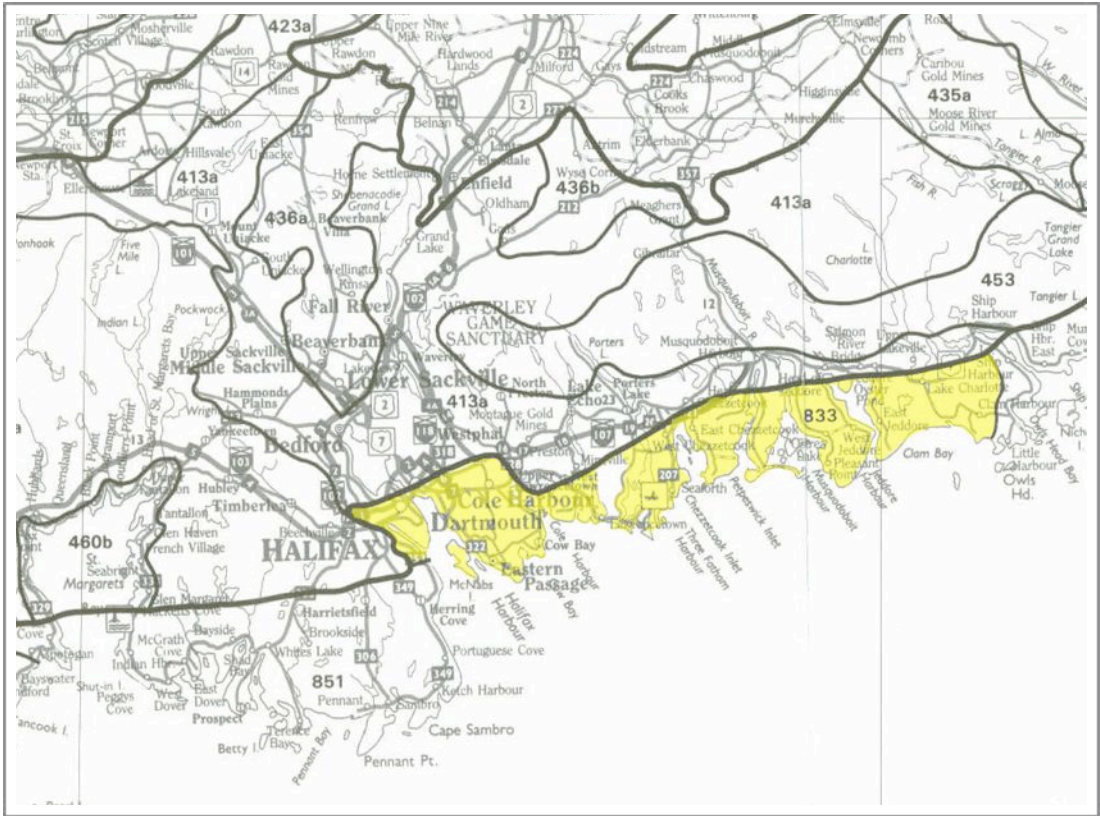


Figure 2.0-2: Natural Theme Regions of Nova Scotia, showing region #833 (highlighted) – Eastern Shore Beaches.²

3.0 Methodology

Several previous archaeological assessments have been conducted in the Public Gardens to date and, as such, the history of the Gardens has been reported extensively by other archaeologists as well as by the Friends of the Public Gardens. A brief summary of the Gardens’ history is presented below and is borrowed primarily from the Friends of the Public Gardens website.

A 2003 salvage project was conducted by Dr. Jonathan Fowler in response to significant damage during Hurricane Juan. A subsequent in-depth assessment of hurricane damage by Black Spruce Heritage Services during the 2004 restoration project revealed a wealth of artifacts throughout the property. Monitoring of trenching in the vicinity of Horticultural Hall for water services revealed late 19th and early 20th century artifacts. Significant previous disturbance in these areas was noted by archaeologists at the time.

² Davis and Browne, 1996.

In 2006, Davis Archaeological Consultants Limited (now Davis MacIntyre & Associates Limited) conducted monitoring on the east side of the Gardens around the gardener's shed (previously the female washroom) as well as in front (south) of and to the west of Horticultural Hall for installation of the swan fountain, public washrooms and water system upgrades. Monitoring in these areas revealed significant disturbance due to previous electrical trenching, installation of catch basins and possible demolition of late 19th century buildings, as well as infilling in the late 19th and 20th centuries.³

Archaeological monitoring of trench excavation for installation of a French drain was monitored by April MacIntyre on December 20, 2012 and is the subject of this assessment.

3.1 Historic Background

Prior to 1836, the land now known as the Halifax Public Gardens was part of the city Commons which stretched northward to the present-day skateboard park on the north side of North Park Street. Freshwater Brook connected Griffins Pond in the north end of the Gardens to Egg Pond (no longer in existence) near the skateboard park to the north. The land in between, now the Wanderer's Ground, was largely marsh land and the area from Griffins Pond to the Nova Scotia Museum parking lot appear to have been used as a city dump.⁴

The Nova Scotia Horticultural Society was established in 1836, aided largely by Joseph Howe. In 1841, 5.5 acres of the Halifax Commons were granted to the Society on the south side of the city dump, but entrance to the Gardens was largely by private membership. In 1866, the first public garden was opened by the city on an adjacent 2-acre parcel. A short time later, the Horticultural Society's gardens were purchased by the city and amalgamated with the Public Garden. Much of the land was swampy waste land, previously used for dumping, which was converted and landscaped.⁵ By 1845, the Gardens featured "two dwelling-houses, two hot-houses, a new hall, [and] a new barn."⁶ In 1859, a covered skating rink was built to the southeast of Griffins Pond and may have been the first covered skating rink in Canada.⁷ In 1872, the Gardenesque plan that we know today was implemented. In the late 19th and early part of the 20th centuries the bandstand, Pavilion Entrance, Jubilee Fountain, Boer War Memorial Fountain, Gardener's Lodge (Horticultural Hall), fencing and bridges were constructed. In 2003, the Gardens suffered significant damage during Hurricane Juan and the restoration that followed included rehabilitation of Horticultural Hall, installation of a new lighting system, and

³ Davis Archaeological Consultants Limited, 2006:4-6.

⁴ Black Spruce Heritage Services, 2004:5-6.

⁵ The Friends of the Public Gardens, URL www.halifaxpublicgardens.ca

⁶ Black Spruce Heritage Services, 2004:6.

⁷ Black Spruce Heritage Services, 2004:6.

construction of public washrooms and a fountain on the Spring Garden side of the property.

Although First Nations peoples are known to have inhabited the Halifax peninsula prior to settlement by Europeans, there have been no known First Nations archaeological finds in the area of the Public Gardens and a search of the Maritime Archaeological Resource Inventory database on January 7, 2013 revealed no records of archaeological sites within the Gardens, although historic period archaeological deposits are known to exist.

3.2 Archaeological Monitoring

Monitoring of excavation of the trench was conducted by April MacIntyre on December 20, 2012. The trench was approximately 13 meters long and 0.6 meters wide and ran parallel to the walkway that runs north-south along the west side of Horticultural Hall (Plate 1). The trench ran northward from the catch basin adjacent to the light standard (Plate 2). The soil to the north of the light standard was clean medium brown sandy clay loam and natural till was reached at approximately 12 inches (30 cms) below the surface (Plate 3). A lead electrical conduit was encountered running along the long axis of the trench approximately 6 meters north of the light standard (Plate 4).

In the south end of the trench, there was significantly more disturbance related to previous activities. The installation of the catch basin at the southern boundary of the trench resulted in obvious disturbance in this area and it appears that there may have been an earlier French drain on the west side of the catch basin as this area was in-filled with clear stone which was underlain by geotextile fabric (Plate 5). The drain was encountered at approximately 18 inches (45 cms) below the surface. The drain was capped with a layer of clay. On the north side of the catch basin adjacent the light standard, exposed electrical wires (no conduit) were encountered running across the trench (Plate 5). A single sherd of blue transfer printed whiteware was seen amongst the disturbance but was not collected as it was in a disturbed/secondary context.

Just north of the light standard in the area where water could be seen seeping to the surface, running water was encountered (Plate 6). It appeared to be a natural rivulet running across (east-west) the trench. Along the path of the flow, broken rock and brick fragments were encountered which appear to be related to a fill episode, perhaps as an attempt to in-fill the stream (Plate 7). The debris does not appear to be structural in nature, meaning that it was not likely associated with a formal drain feature. A single unmarked clay tobacco pipe stem was noted among the stone and brick fill.

4.0 Results and Discussion

Previous archaeological investigations in the Public Gardens, particularly in the vicinity of the current study area, have indicated that there is significant disturbance to the soils. This is further corroborated by the record of past activities in the area including installation of catch basins and light standards. No significant archaeological resources were encountered during excavation of the trench. It was shown that a small watercourse once ran through this area, which was likely the source of the recent drainage problem, and that an earlier attempt had been made to in-fill this watercourse.

5.0 Conclusions

No significant archaeological resources were encountered during trenching for the French drain and the study area was shown to have been heavily disturbed prior to the excavation. As excavation for the drain is complete, no further mitigation is recommended.

6.0 References Cited

Black Spruce Heritage Services. 2004. Halifax Public Gardens: Archaeology During the 2004 Restoration. HRP A2004NS51. Manuscript on file: Nova Scotia Department of Communities, Culture and Heritage and Halifax Regional Municipality.

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Davis, Derek and Sue Browne. 1996. Natural History of Nova Scotia, Volume II: Theme Regions. Nimbus Publishing Co. Ltd. and Nova Scotia Museum, Halifax.

The Friends of the Public Gardens, URL www.halifaxpublicgardens.ca Accessed January 7, 2013.

PLATES



Plate 1: Location of the trench prior to excavation, looking north.



Plate 2: The trench after excavation, looking north.



Plate 3: West wall profile of the trench north of the light standard, looking southwest.



Plate 4: A lead electrical conduit can be seen in front of and beside the excavator bucket (looking south southeast).



Plate 5: Beginning of excavation at the south end of the trench at the catch basin. An older French drain was installed on the west (left) side of the catch basin (looking north). Exposed electrical wires can be seen just in front of the excavator and are being secured in place by the upright shovel.



Plate 6: The south end of the trench showing the rivulet (at the far north end of the excavated area) draining out (looking north).



Plate 7: East wall profile of the trench where the rivulet cuts across it. The watercourse appears to have been in-filled with brick and stone.

**APPENDIX A:
HERITAGE RESEARCH PERMIT**



Heritage Research Permit (Archaeology)

Special Places Protection Act 1989

(Original becomes Permit when approved by
Communities, Culture and Heritage)

Office Use Only
Permit Number:

A2012NS169

<i>Greyed out fields will be made publically available. Please choose your project name accordingly</i>	
Surname MacIntyre	First Name April
Project Name Halifax Public Gardens Bandstand Drainage	
Name of Organization Davis MacIntyre & Associates Limited	
Representing (if applicable)	
Permit Start Date 19 December 2012	Permit End Date 31 December 2012
General Location: Halifax Public Gardens	
Specific Location: <i>(cite Borden numbers and UTM designations where appropriate and as described separately in accordance with the attached Project Description. Please refer to the appropriate Archaeological Heritage Research Permit Guidelines for the appropriate Project Description format)</i> 20 T 4943436.03 m N 453842.54 m E	
Permit Category: Please choose one	
<input type="checkbox"/> Category A – Archaeological Reconnaissance	
<input type="checkbox"/> Category B – Archaeological Research	
<input checked="" type="checkbox"/> Category C – Archaeological Resource Impact Assessment	
<input checked="" type="checkbox"/> I certify that I am familiar with the provisions of the <i>Special Places Protection Act</i> of Nova Scotia and that I have read, understand and will abide by the terms and conditions listed in the Heritage Research Permit Guidelines for the above noted category.	
Signature of applicant 	Date 17 December 2012
Approved by Executive Director 	Date Dec 21, 2012