Appendix 11 Archaeological Resource Impact Assessment

LVM Maritime Testing

Coldbrook Sand Pit Expansion

Archaeological Resource Impact Assessment

Heritage Research Permit A20124NS011 - June 2014

DAVIS MACINTYRE & ASSOCIATES LIMITED
109 John Stewart Drive, Dartmouth, NS B2W 4J7

COLDBROOK SAND PIT EXPANSION:
ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT

Heritage Research Permit A2014NS011
Category C

Davis MacIntyre & Associates Limited
Project No.: 14-004.1MTL

Principal Investigator: Laura de Boer
Report Compiled by: Laura de Boer

Submitted to:

LVM Maritime Testing
97 Troop Avenue
Dartmouth, NS B3B 2A7

-and-

Coordinator, Special Places
Communities, Culture and Heritage
1747 Summer Street
Halifax, NS B3H 3A6

Cover: The existing sand pit at Coldbrook, looking west.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF PLATES

EXECUTIVE SUMMARY

In February 2014, Davis MacIntyre & Associates Limited was contracted by LVM Maritime Testing to conduct an archaeological resource impact assessment of a proposed expansion of an existing sand pit in Coldbrook, Kings County. The purpose of the assessment was to determine the potential for archaeological resources within the impact zone and to provide any recommendations for further mitigation, if deemed necessary. The assessment consisted of a background study and a reconnaissance of the study area.

This impact assessment has indicated that although known First Nations sites exist in proximity to the study property, only one area of elevated archaeological potential was identified. This area is currently outside of the planned extraction area for the pit expansion. If this area is to be impacted during further pit expansion in the future, it is recommended that this area be subjected to shovel testing in accordance with provincial standards for an area of moderate archaeological potential.

In the event that any archaeological material is encountered during ground disturbance activities, all activity should cease and the Coordinator of Special Places, Sean Weseloh-McKeane (902-424-6475) should be contacted immediately to determine a suitable method of mitigation.

1.0 INTRODUCTION

In February 2014, Davis MacIntyre & Associates Limited was contracted by LVM Maritime Testing to conduct an archaeological resource impact assessment of a proposed expansion of an existing sand pit in Coldbrook, Kings County. The purpose of the assessment was to determine the potential for archaeological resources within the impact zone and to provide any recommendations for further mitigation, if deemed necessary. The assessment consisted of a background study and a reconnaissance of the study area.

This assessment was completed under Category C Heritage Research Permit A2014NS011 issued by the Nova Scotia Culture and Heritage Development Division. This report conforms to the standards required by the Department of Communities, Culture and Heritage as specified under the guidelines of the Special Places Protection Act (*R.S., c. 438, s. 1.).*

2.0 STUDY AREA

An existing sand pit located south of Highway 101 and west of the Cornwallis River in Coldbrook is slated for an expansion. The property (PID 55433619) is approximately 67 acres in size and includes a small frontage on the Cornwallis River (Figure 2.0-1). The existing pit, based upon field survey and aerial photographs, is approximately one-quarter of this property. Coupled with additional extraction areas that have overgrown, at least half of the property has been significantly disturbed, while wetland making up the floodplain of the Cornwallis River comprises nearly another quarter of the land (Figure 2.0-2).

The study area is located in the Valley region of the Triassic Lowlands (Natural Theme Region #610) (Figure 2.0-3). The Annapolis Valley extends from the eastern edge of St. Mary's Bay in the west to the mouth of the Cornwallis River in the east. The palaeo-geology here was comprised mainly of sandstones and basalts. The sandstones were gradually carved out of the basalt as a result of river action and glacial scouring. Rivers once flowed at right angles across the valley, rising on South Mountain and flowing north across the present valley and North Mountain before emptying into a river that flowed down the Bay of Fundy. As the ice retreated after the last glaciation, sea levels rose and the land rebounded. In the Bay of Fundy area, sea levels encroached inland. The average elevation above present sea level in the Bay area is 15 to 30 metres and raised beaches and terraces can be seen in Digby County at the mouths of rivers and around the lower part of the Annapolis Basin. Rising sea levels over the past 4,000 years have resulted in flooding of the Annapolis Basin and the sea broke through the gap at the north end of Digby Gut.

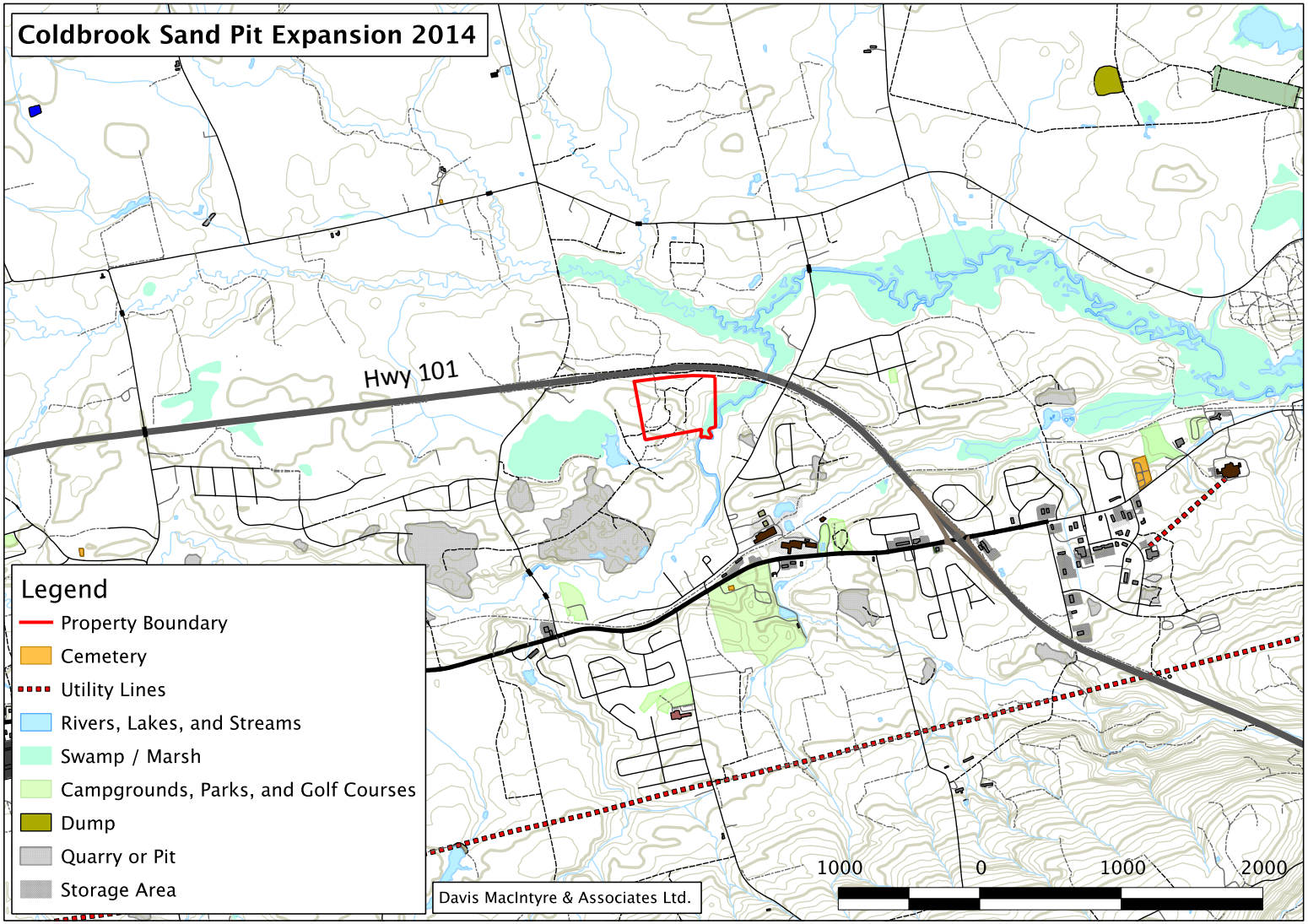

Figure 2.0-1: A map showing the location of the sand pit in relation to Coldbrook and Highway 101.

Figure 2.0-2: A recent aerial photo shows the current extents of the sand pits, both inside the property boundaries and in the Shaw pits to the west and south. Image courtesy Google Maps / Viewpoint.ca.

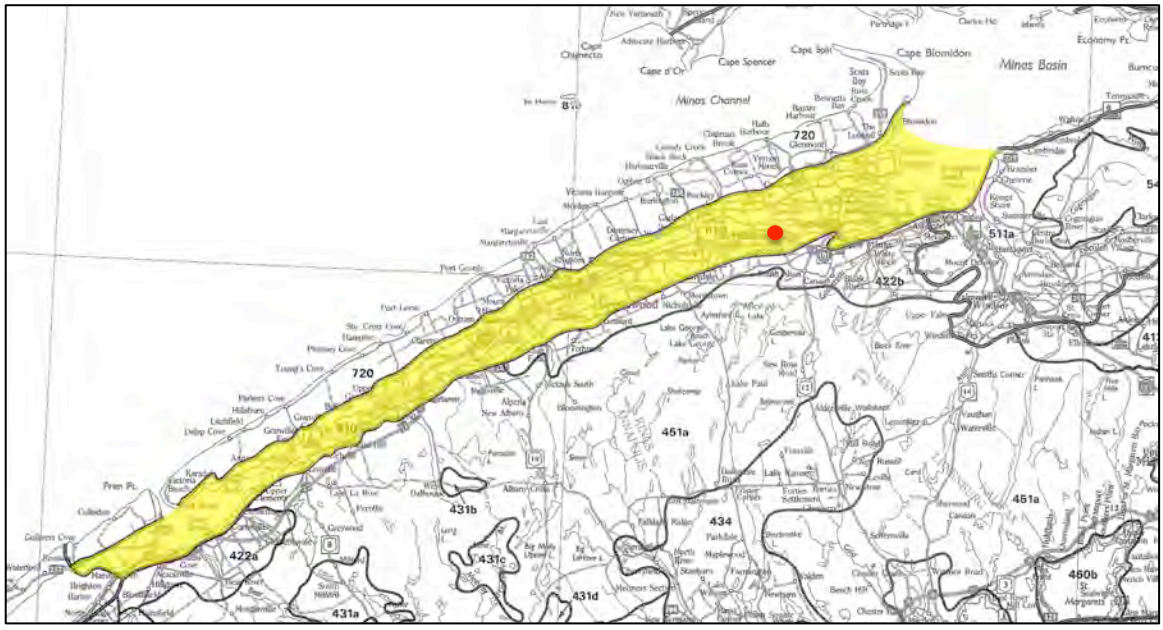

Figure 2.0-3: Natural Theme Regions of Nova Scotia, showing region #610 (highlighted) - Valley region, Triassic Lowlands. The study area is indicated in red.

3.0 METHODOLOGY

A historic background study was conducted to understand the area's history and topography. This included consultation of historic maps and manuscripts at the Nova Scotia Archives as well as online resources.

A field reconnaissance of the entire property was conducted by Stephen Davis and Laura de Boer on 3 June 2014. The survey was guided by a hand-held GPS unit, and representatives of LVM Maritime Testing as well as the sand pit owner were also on site to delineate the property and proposed impact areas.

3.1 Maritime Archaeological Resource Inventory

The Maritime Archaeological Resource Inventory, a Provincial database of known archaeological sites held at the Nova Scotia Heritage Division, was consulted in May 2014 to understand prior archaeological research and known archaeological resources in proximity to the study area.

Two First Nations sites are known near the study area. The first, Mijiktook 1 (BgDd-03) is on a terrace above the Cornwallis River floodplain, and was identified when archaeological testing in 2009 yielded quartz and quartzite flakes resulting from lithic manufacture. No diagnostic artifacts were recovered during testing. [1]

The second site, Mijiktook 2 (BgDd-04) was also located during testing in 2009 and 2010. It is located on a slightly higher terrace, and is further inland from the Cornwallis River than would normally be expected for a First Nations encampment site. Chert flakes and a possible ground slate tool fragment were recovered, but the lack of artifact density suggests that this was a single-use site. Again, no diagnostic artifacts were recovered during testing. Test units were not excavated beyond 50cm in depth, and it appears that all artifactual material came from a maximum depth of 30cm.[2]

Bordering the highway approximately 1km southeast of the proposed sand pit expansion is a historic domestic site that was identified in 2008 (BgDd-02).

The most prominent archaeological sites in general proximity to the study area are the extensive First Nations sites along the Gaspereau Lake system (BfDd-01 through 05, 07-14, 16-35, and 38-49). These inland sites represent a long and dense pattern of precontact occupation and have in recent years yielded artifactual material unlike anything previously recovered in the province.

[1] Cultural Resource Management Group Limited 2010.
[2] Cultural Resource Management Group Limited 2010.

The ground in front of the Cornwallis Inn was reportedly the location of an "Indian graveyard" unearthed at an uncertain date decades ago (BgDd-01). The Inn is approximately 7.3km from the study area.

The area south of Coldbrook also includes recorded historic sites such as a mill (BfDd-36) and two stone-lined wells (BfDd-15).

3.2 Historical Background

3.2.1 The Precontact Period

The history of human occupation in Nova Scotia has been traced back approximately 11,000 years ago, to the Palaeo-Indian period or Sa'qewe'k L'nu'k (11,000 – 9,000 years BP). The only significant archaeological evidence of Palaeo-Indian settlement in the province exists at Debert/Belmont in Colchester County.

The Saqiwe'k Lnu'k period was followed by the Mu Awsami Kejikawe'k L'nu'k (Archaic period) (9,000 – 2,500 years BP), which included several traditions of subsistence strategy. The Maritime Archaic people exploited mainly marine resources while the Shield Archaic concentrated on interior resources such as caribou and salmon. The Laurentian Archaic is generally considered to be a more diverse hunting and gathering population.

The Archaic period was succeeded by the Woodland/Ceramic period or Kejikawek L'nu'k (2,500 – 500 years BP). Much of the Archaic way of subsistence remained although it was during this period that the first exploitation of marine molluscs is seen in the archaeological record. It was also during this time that ceramic technology was first introduced.

The Woodland period ended with the arrival of Europeans and the beginning of recorded history. The initial phase of contact between First Nations people and Europeans, known as the Protohistoric period, was met with various alliances particularly between the Mi'kmaq and French.

The Mi'kmaq inhabited the territory known as Mi'kma'ki or Megumaage, which included all of Nova Scotia including Cape Breton, Prince Edward Island, New Brunswick (north of the Saint John River), the Gaspé region of Quebec, part of Maine and southwestern Newfoundland. Halifax, Lunenburg, Kings, Hants and Colchester Counties were part of the district known as Sipekni'katik or "wild potato area" (Figure 3.2-1). The Cornwallis River was known as Chijikwtook, meaning "narrow river."[3]

[3] Rand 1875:86 and Eaton 1910:22.

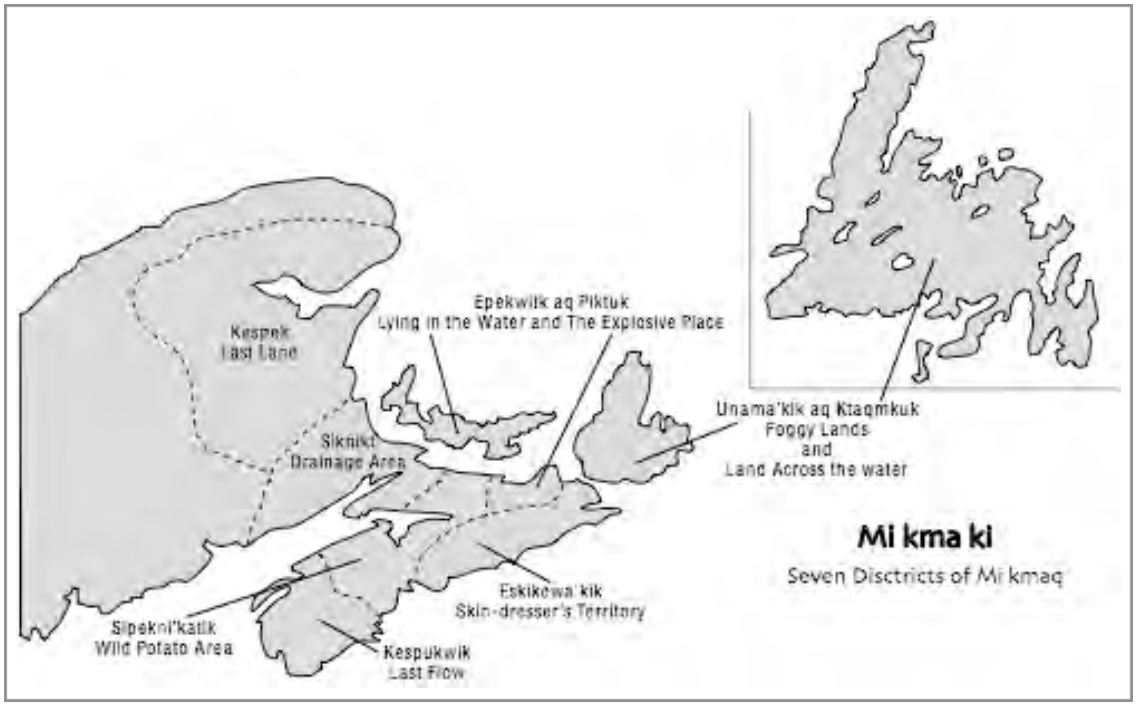

Figure 3.2-1: Map of the Mi'kmaq districts.[4]

3.2.2 European Settlement

Early European settlement in Nova Scotia typically began along the coast, where transportation by boat was readily available and the construction of inland roads was not a necessary struggle. In these early years of the seventeenth and eighteenth centuries, French settlement was most notable on the nearby Minas Basin. These settlers, who would soon be known as the Acadians, built dykes on the tidal marshes and drained the salt water, creating productive fields with minimal clearing of forest and stone. The abundance and fertility of the marshlands that dominated the upper and lower ends of the Annapolis Valley allowed for a flourishing population of French settlers arriving to establish farms. Farther inland, the absence of fertile salt marshes meant that Acadian settlement was less practical due to decreased productivity and increased workload in order to clear land and grow crops.

The productivity of the land soon led to conflict between the English and the French, who had already been enemies for generations. Although mainland Nova Scotia came under the power of the English crown in 1713, it was not until 1755 that the English began to forcibly remove the French Acadian inhabitants from the land and replace them with those loyal to the English crown. The deportation of 1755 stretched across Acadia, and scattered villages and families into other colonial regions. Soon lands

[4] Confederacy of Mainland Mi'kmaq 2007:11.

improved by Acadian families were granted to new settlers arriving from New England and elsewhere.

The township of Cornwallis was founded in 1759, marking the arrival of the first wave of New England Planters replacing the Acadian settlers. The first divisions and lots of this Township were placed near the mouths of the Cornwallis, Cunard, and Habitant Rivers, on the fertile lands on or near Acadian dykes. Settlement quickly moved inland and upstream from here.

Located near Berwick, Coldbrook's earliest known European settler is thought to have been Asa Davidson, sometime between 1764 and 1782.[5] Other historical family names in the Berwick area reflect the progress of settlement inland from both the east and west ends of the Annapolis Valley, including the Parker and Shaw families from Annapolis as well as the Skinner, Huntington, Lyon, and Loomer families who previously hailed from farther east in what is now King's County.[6]

The Annapolis Valley population expanded rapidly in the wake of the American Revolution, as Loyalists to the British crown began to seek refuge in Nova Scotia beginning in 1776 and continuing until about 1785. The Loyalist settlers included military officers who, when the war came to an end, chose to retire and receive grants in Nova Scotia, which had remained under Britain's control. [7]

The community of Coldbrook may have derived its name from a settlement in Wales. In 1792, a known stopping place between Windsor and Annapolis on the Annapolis Road (now for the most part Highway 1) was an English farm "now known as Colebrook." For several years after the completion of the Dominion Atlantic Railway in 1869, the area was known as Cold Brook Station. [8] Coldbrook has been known for at least a century for its fruit growing and processing industries, predominated in the second half of the twentieth century and into modern times by the Scotian Gold Cooperative. [9]

It is thought that Lovett Road (previously Lovitt Road), which is used to access the study area, formed as a trail used by early European settlers living north of the Cornwallis River to access the Annapolis Road to the south. By 1845, the road was in use by patrons of the Marchant-West sawmill to the north. Similarly, by 1850 Bishop Road to the west of the study area was used as a service road to a combination lumber, grist, and wool-carding mill operated by a man named Bishop on Brandywine Brook north of what is now Highway 101. [10]

[5] Fergusson 1967:139.
[6] Eaton 1910:99.
[7] Eaton 1910:99.
[8] Fergusson 1967:139.
[9] Fergusson 1967:139.
[10] Sanford 1967:32.

Historical maps and aerial photographs indicate that the study area, although surrounded by settlements and farms, saw little human activity in the nineteenth and twentieth centuries. Ambrose Church's 1872 map of the county shows nothing but blank space between Bishop Road and the Cornwallis River (Figure 3.2-2), while aerial photographs show what appears to be a logging road and deforested patches in the 1930s (Figure 3.2-3), regrown by the 1980s prior to the establishment of the existing sand pit (Figure 3.2-4).

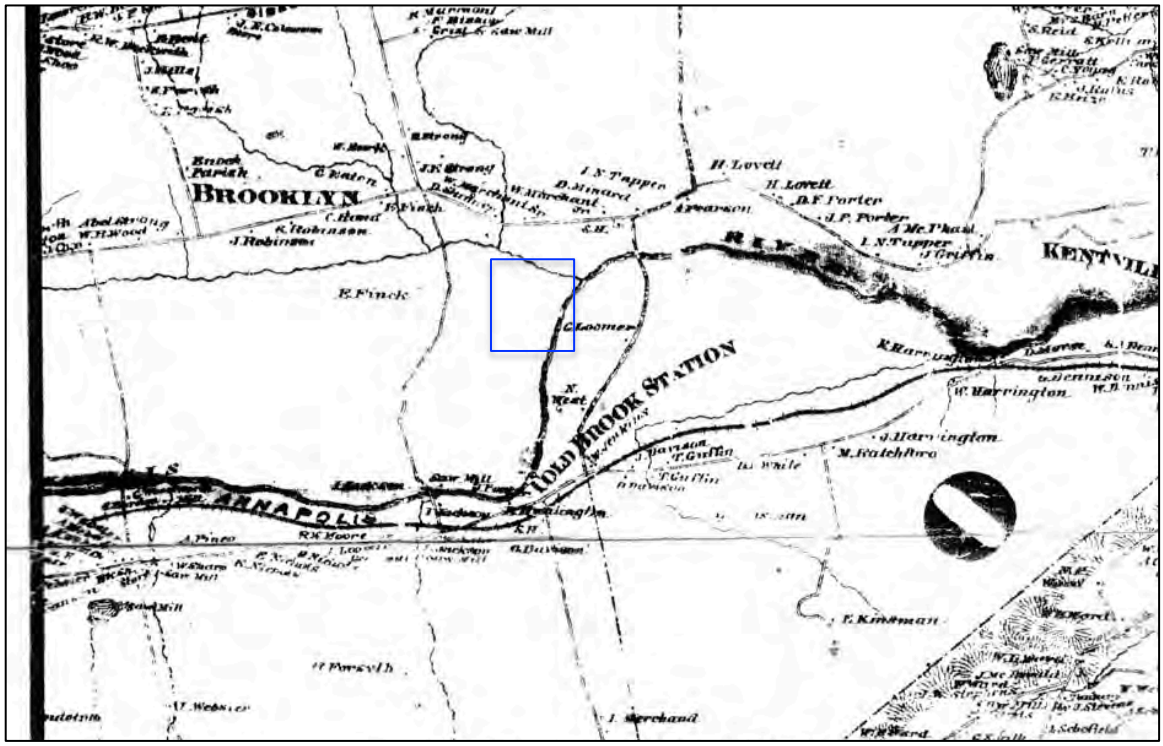

Figure 3.2-1: An 1872 map shows the study area (blue) was most likely unoccupied in the second half of the nineteenth century.[11]

[11] Church 1872.

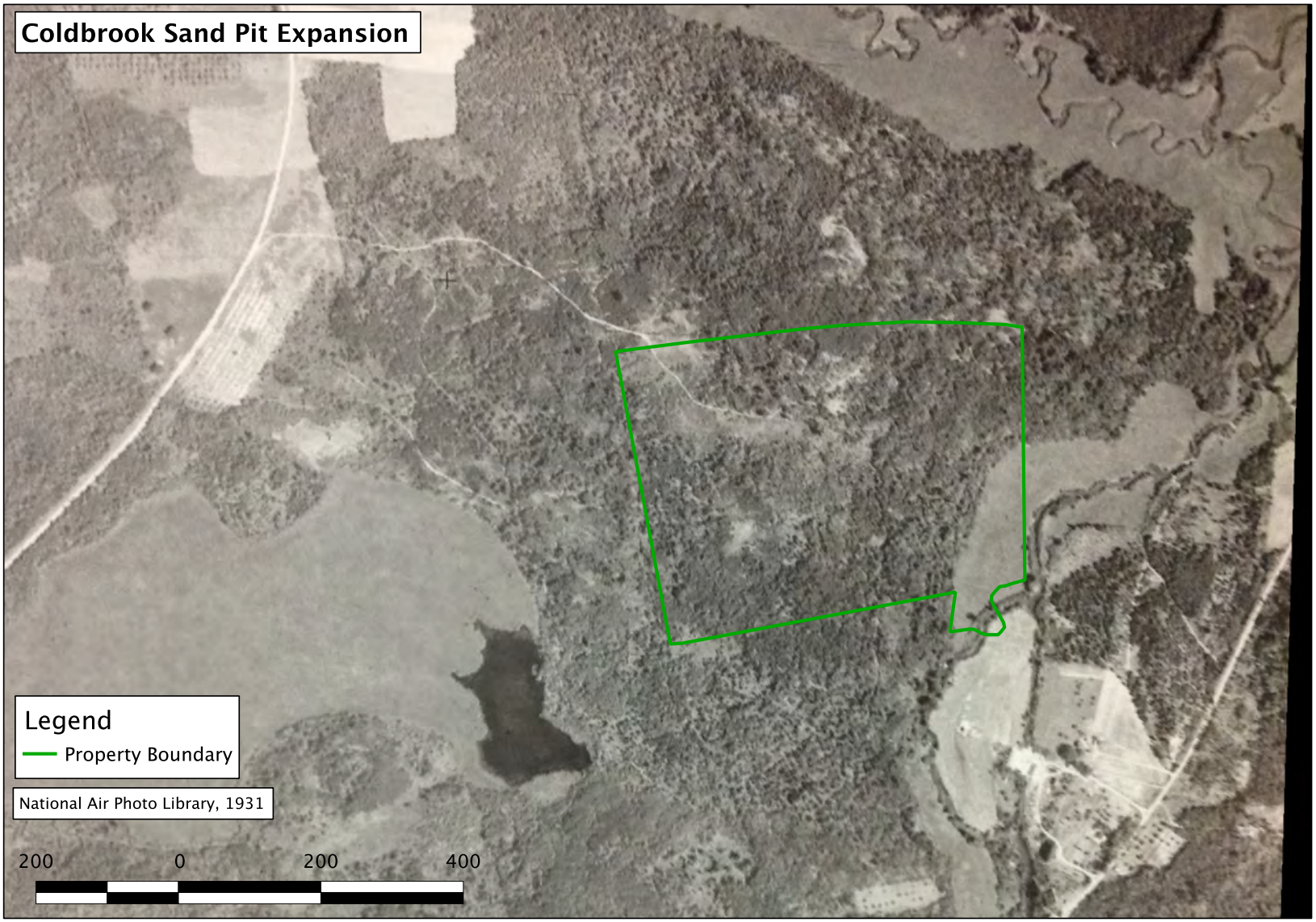

Figure 3.2-3: A georeferenced aerial photograph suggests that some logging activity was taking place within the study area, with lumber being hauled out along a logging road west to Bishop Road.

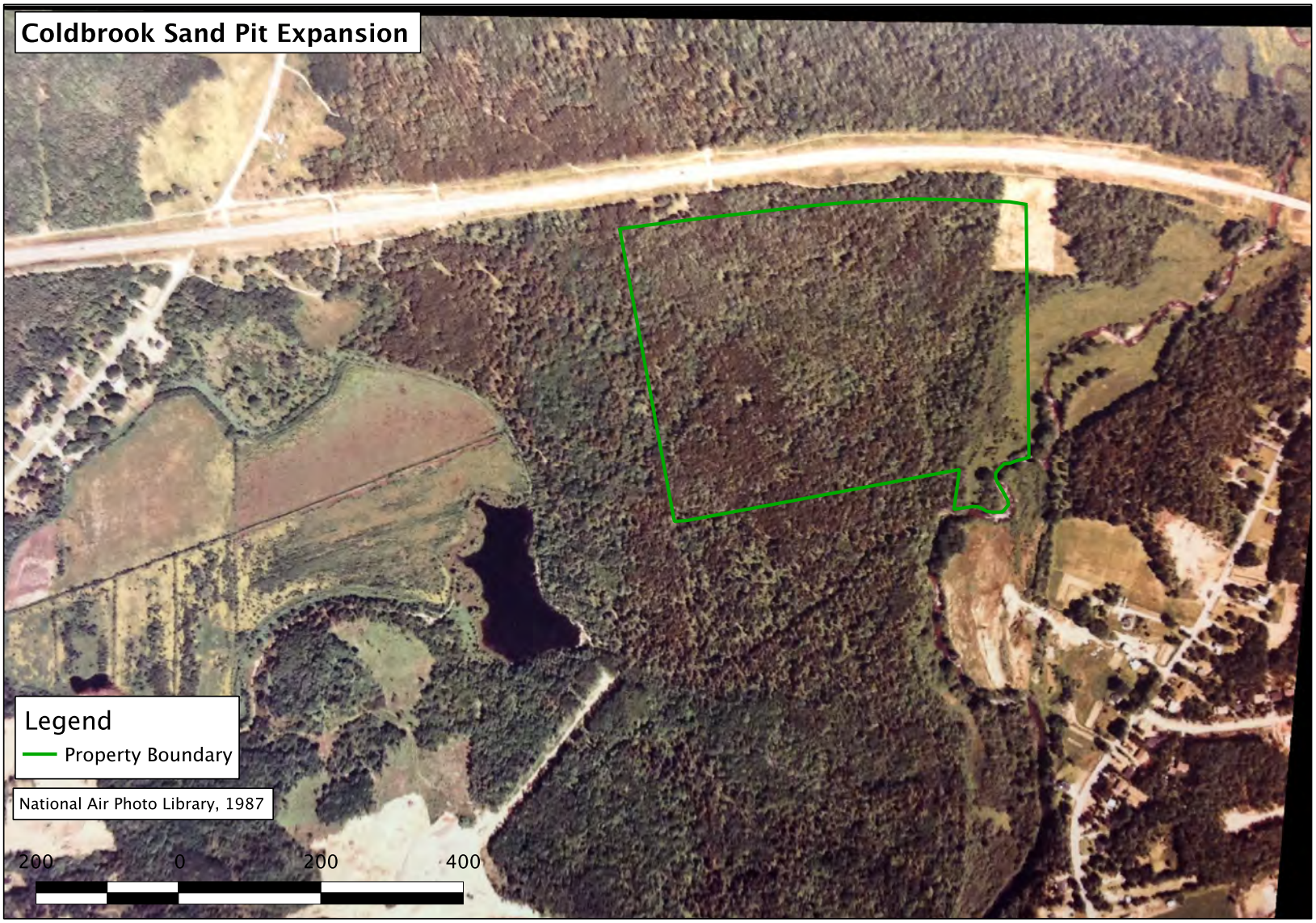

Figure 3.2-4: A georeferenced aerial photo shows that the study area was almost completely wooded in 1987, with no pit activity at this point.

3.3 Field Reconnaissance

A field reconnaissance was conducted by Stephen Davis and Laura de Boer on 4 June 2014. Also on site where two representatives of LVM Maritime Testing delineating an appropriate wetland setback, a botanist conducting an environmental assessment, and the current owner of the sand pit who assisted in delineating the property boundaries and providing information related to pit activity. Notable points identified during the survey are shown on Figure 3.3-1.

The reconnaissance began by relocating the three loci of known archaeological sites BgDd-03 (Mijiktook 1) and BgDd-04 (Mijiktook 2). All three loci were found to be distant from the rough pasture fence that currently delineates the eastern edge of the sand pit property (Plate 1). It should be noted, however, that the current owner of the sand pit indicated during the reconnaissance that the actual property boundary is at least twelve feet (3.6m) east of the existing fence line, and perhaps more based upon available mapping and GIS boundary data. At this time there are no plans to impact the partially overgrown pasture portion of the property during the pit expansion.

The existing sand pit takes up a very large portion of the centre of the property, extending nearly to the edge of the Cornwallis River wetlands and floodplain in the southeast and up to the existing Shaw sand pit to the south (Plate 2). Approximately 365,000 tonnes of aggregate sand had been removed from the pit prior to purchase by the current owner, with an additional 200,000 tonnes in the last ten years.

The sand pit is entered from an access road on its north side, curving south and leaving a small buffer of forested land between the pit and the fenced pasture (Plate 3). This small strip of forest shows signs of bulldozer or other heavy equipment activity prior to regrowth, as it undulates heavily and unnaturally through most of its north end. This area becomes more level to the south, where it passes a formerly proposed realigned right-of-way (ROW) subjected to the 2009 archaeological testing as marked by ROW stakes (Plate 4).[12] The testing in this area did not yield any archaeological material.

[12] Cultural Resource Management Group Limited 2010.

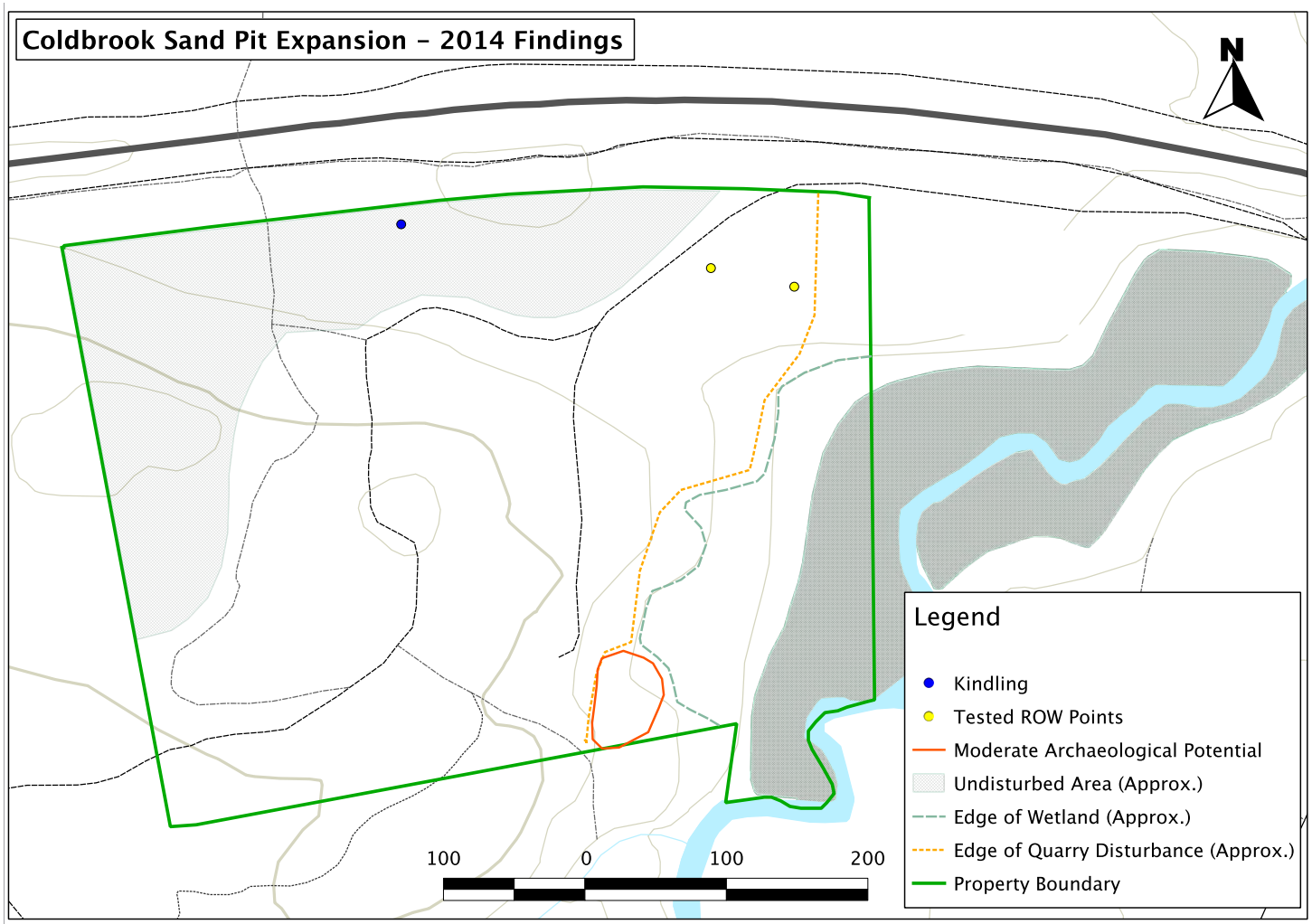

Figure 3.3-1: The study area, showing results of the field survey. Note that although the available GIS base data shows the wetland as 100m east of the approximate edge of the pit disturbance (orange), the survey revealed that it falls within approximately 10m of this line on average.

Less than ten metres south of the 2009 tested ROW, the existing sand pit extends east to closely border the pasture fence. Soil profiles were readily visible and were examined for signs of archaeological deposits, but none were evident. Farther south, the pit's edge curves westward, reflecting the edge of the wetland that borders the Cornwallis River. Had this area not already been significantly impacted by pit extraction, it would have been flagged as having elevated archaeological potential, as it is an extension of the long terrace on which the existing archaeological sites were located. Significant amounts of sand have already been removed however, and an examination of both the remaining edges of the terrace and of a pile of grubbed material (tree roots and organics mixed with sod) revealed no disturbed archaeological material (Plate 5).

The remainder of the sand pit's southeastern edge follows the same pattern, having been excavated to the very edge of a terrace and leaving a steep, narrow hill of exposed sand in its inner side and forest on the side facing the river (Plate 6). The slope on the river side drops off abruptly into wetland, eventually leading to the riverbank. The only exception to the pattern along this edge is a narrow gap between the sand pit and the marsh, where excavations removed the steep buffer and sand has since washed out and down into the wetland to create a low artificial terrace (Plates 7 and 8). During the reconnaissance, the LVM Maritime Testing team used a soil-coring tool to confirm that beneath the 15cm or more of washed-in sand the soil was blackened and wet, consistent with the wetland elsewhere on the property.

Near the southeast corner of the property, the existing pit does not reach as close to the wetland. A small remnant terrace, approximately 50m east-west by 70m north-south, appears to have remained relatively untouched between the sand pit and the wetland (Plate 9). An overgrown road forms the western boundary of this undisturbed area (Plate 10).

As previously noted, the southern edge of the property borders the existing Shaw sand pit, which has been excavated to a much greater depth than the study area. Heavy sand disturbance within the study property has occurred up to the edge of this other pit.

During reconnaissance, the field team was informed that most of the western edge of the property, although covered in shrubs and small trees, had already been heavily impacted by the removal of the top layers of sand before regrowth occurred. The property is bordered on the west by a smaller Shaw sand pit (Plate 11) and by Highway 101 to the north (Plate 12).

The northwest corner of the property is therefore the only dry and relatively undisturbed part of the study area. This corner was forested by poplar, maple, and pine, the latter being particularly prevalent near Highway 101. Plants in the understorey included ferns, wild blueberry bushes, pink ladyslippers, and starflowers, growing on sand with few stones (Plate 13). The forest floor was relatively level and even in the

northwest corner, beginning to undulate more and more as the survey team proceeded east along the northern edge. Several ATV trails crisscross the forest, exposing sand that the team examined for signs of archaeological material (Plate 14). No such signs were present.

Aside from the trails, the only notable cultural activity appears to have been logging, both historic and recent. In one location, a tree had been felled and its trunk cut into rounds and split into kindling for later collection (20 T 374904 4992851) (Plate 15). The same tree trunk rounds were spotted elsewhere along the northern edge of the property.

Finally, the existing pit itself consists of a large open area of light red-brown sand, almost completely pure with only a few small stones in the mix. In some areas grasses and small shrubs have overgrown the disturbed sands (Plate 16). Tracks from ATVs as well as large dogs, along with modern debris and burnt garbage and tires, show that the pit is sometimes used recreationally by local visitors.

4.0 RESULTS AND DISCUSSION

A combination of previous heavy disturbance and a significant amount of exposed soils has resulted in the identification of only one area of elevated archaeological potential within the study area. This oblong remnant of a terrace above the Cornwallis River wetland is approximately 50m by 70m, and is centred approximately at coordinates 20 T 375065 4992515. The moderate archaeological potential of this area was discussed with both the current pit owner and with LVM Maritime Testing while on site, and it was determined that this area could be excluded from the current pit expansion proposal, and if desired could be revisited and subjected to archaeological testing in at least five years' time if further expansion was desired.

The remainder of the property was either already heavily disturbed, or (in the case of the northwest corner) significantly distant from the Cornwallis River or any other navigable watercourse or historic roadway, and as such was not considered to be of elevated archaeological potential.

5.0 RECOMMENDATIONS AND CONCLUSIONS

It is recommended that the identified area of moderate archaeological potential near the southeast corner of the property be avoided by all heavy equipment, particularly when related to pit activity. In the event that avoidance is not possible, it is recommended that the area be subjected to archaeological shovel testing in accordance

with provincial standards for areas of moderate potential. Shovel test units should be placed on a grid spaced ten metres apart across the entire area of undisturbed terrace.

In the event that any archaeological material is encountered during ground disturbance activities, all activity should cease and the Coordinator of Special Places, Sean Weseloh-McKeane (902-424-6475) should be contacted immediately to determine a suitable method of mitigation.

6.0 REFERENCES CITED

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PLATES

Plate 1: The partially overgrown pasture site of Mijiktook 2, looking south. The approximate locations of Loci 1 and 2 are shown in blue.

Plate 2: Approximately half of the existing pit, looking west.

Plate 3: The access road leading into the sand pit, looking south. The main body of the pit is around the bend to the right or west.

Plate 4: Stephen Davis walks along the staked ROW line where previous testing occurred. Note one of the remaining stakes (blue). Looking west.

Plate 5: Grubbed material at the eastern edge of the sand pit, representing the remains of the same terrace on which Mijiktook 2 was identified over 100m to the east. Looking southeast.

Plate 6: Stephen Davis examines the steep edge of the existing sand pit, behind which lies the wetland and Cornwallis River. Looking south.

Plate 7: An artificial terrace formed over the wetland by sand washed down from the pit to the left (west). Looking northeast.

Plate 8: The view from the top of the steep hill between the sand pit and the wetland, looking northeast down into the gap where sand has washed down into the wetland.

Plate 9: The undisturbed terrace, covered in young and relatively dense maple, poplar, and pine. Looking southeast.

Plate 10: The bulldozed road that forms the western edge of the terrace. Looking south.

Plate 11: Stephen Davis examines a soil profile on the edge of the western Shaw pit. The study area is the tree-covered property to the left or east. Looking south.

Plate 12: A marker shows the northwestern corner of the property. Looking north with Highway 101 in the background.

Plate 13: Laura de Boer examines exposed soil in a tree fall near the northwest corner of the property. Looking east.

Plate 14: One of the ATV trails crisscrossing the northern end of the study area. Looking northeast.

Plate 15: Kindling production north of the existing pit. Looking south.

Plate 16: The main body of the existing sand pit, looking northeast from a high point near the southern boundary.

APPENDIX A: HERITAGE RESEARCH PERMIT

NOVA SCOTIA

Heritage Research Permit (Archaeology)

Office Use Only
Permit Number:
A2014NS011

Special Places Protection Act 1989

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

Greyed out fields will be made publically available. Please choose your project name accordingly

Surname de Boer	First Name Laura

Project Name: Coldbrook Sand Pit Expansion

Name of Organization: Davis MacIntyre & Associates Ltd.

Representing (if applicable): LVM Maritime Testing

Permit Start Date 3 March 2014	Permit End Date 2 June 2014

General Location: Coldbrook, King's County, Annapolis Valley

Specific Location: *(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)*

PID 55433619, bordering the Cornwallis River and Highway 101

Permit Category:
Please choose one

- ☐ Category A – Archaeological Reconnaissance
- ☐ Category B – Archaeological Research
- ☑ Category C – Archaeological Resource Impact Assessment
- ☑ I certify that I am familiar with the provisions of the *Special Places Protection Act* 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 for Laura de Boer	Date 10 February 2014
Approved by Executive Director	Date

Appendix 12 Wildlife Interaction Training Material

Potential Wildlife Conflicts Associated with a Sand Pit Operation

The sand pits located in Coldbrook N.S. on Lovett Road could potentially be used by species at risk wildlife including Bank Swallows, Common Nighthawks, Snapping Turtles and Wood Turtles. If these species or evidence of them are found by a sand pit operator, they should left undisturbed until they are no longer present.

Bank Swallows - small swift flying insect eaters that nest in small colonies in burrows excavated in the face of a sand or gravel embankment. They could be present from mid to late May until the first week of August. **If a colony becomes established, the area should be avoided until the young birds have fledged and left the area.** Young bank swallows mature very quickly compared to many birds and should be out of the nesting area by early August (source: Cornell Lab of Ornithology).

Bank Swallow

Bank Swallow Burrows

Common Nighthawk: These are sleek, dark, pigeon-sized birds often seen and heard flying high overhead as they forage on insects. In flight they have long, narrow curved wings with a noticeable white strip underneath. They prefer to nest in open barren areas and sometimes on gravel top roofs. They do not nest in colonies and the nesting period is usually from June 1 to mid July when the young are nearly fully developed. Two buff white, brown speckled eggs are laid on bare ground. **If a nest is found, it should be left alone until the young are hatched and gone** (source: Cornell Lab of Ornithology).

Common Nighthawk on nest

Snapping Turtle: These long lived turtles (100 + years) can grow to become quite large with shell sizes of 20 inches (50 cm) or larger in diameter being common. They are best identified by a long tail with jagged ridge on top. They are unable to retract their head and feet into the shell and so have developed a powerful snapping method of defence. In June females travel over land away from water to search for nesting areas that consist of areas containing loose sand and gravel, such as road shoulders. 20 to 40 eggs are laid in a burrow and buried. Hatching time varies depending upon temperature. **A disturbed area in a gravel or sand slope could be evidence of a nesting site. Snapping turtle nests should be marked and left alone until the eggs have hatched, usually by September or October** (source: NS Museum and NSDNR publications).

Female Snapping Turtle searching for a nest site

Wood Turtles: Wood Turtles are smaller and less muscular than snapping turtles with a shell diameter of 6 to 10 inches (16 to 25 cm). The shell is dark on top and yellow underneath. Bright orange or red patches are visible under the front legs. Found along rivers and floodplain wetlands, these turtles do travel up smaller streams and overland in summer. They nest in sand usually close to water, but nests have been found on road shoulders and gravel pits. A shallow nest will contain 8 to 10 eggs that hatch in about 70 days. **A female turtle seen in a sand pit in early summer is likely looking for a nesting site and should be avoided** (source: NS Museum and NS DNR publications). **If wood turtles are found in the pit during operations, they should be picked up and moved to near the Cornwallis River.** The Kentville DNR office can be contacted at 902-679-6097 for further guidance.

Wood Turtle on land

Wood Turtle eggs