

February 2012



Middleton Long Term Care Facility

Archaeological Resource Impact Assessment



Davis MacIntyre & Associates Limited

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Heritage Research Permit A2012NS13

Davis MacIntyre & Associates Limited

Project No. 12-005.1

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Executive Summary

Davis MacIntyre & Associates Limited conducted an archaeological resource impact assessment of the proposed Middleton Long Term Care Facility expansion project. The purpose of the assessment was to determine the potential for archaeological resources through consultation of historic maps, manuscripts, published resources and the Maritime Archaeological Resource Inventory, as well as through predictive modeling for First Nations resources.

The assessment determined that the study area is of low potential for archaeological resources related to European or First Nations resources. However, a field reconnaissance is required by the Department of Communities, Culture and Heritage in order to clear the study area for ground disturbance.

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1.0 Introduction

Davis MacIntyre & Associates Limited was contracted by Maritime Testing (1985) Limited to conduct an archaeological resource impact assessment of the proposed expansion of the Middleton Long Term Care Facility owned by GEM Health Care Group. The purpose of the assessment is to determine the potential for archaeological resources within the study area and to provide recommendations for further mitigation, if necessary.

The assessment was conducted under Category C Heritage Research Permit A2012NS13. This report conforms to the standards of the Nova Scotia Department of Communities, Culture and Heritage (Heritage Division) as required by the Special Places Protection Act.

2.0 Study Area

The Middleton Long Term Care Facility (known as the Heart of the Valley Long Term Care Facility) is located at 89 North Street in Middleton, Annapolis County. GEM Health Care Group plans to expand the existing facility to the eastward on an undeveloped wetland (Figures 2.0-1 and 2.0-2).

Middleton is located in the Valley region of the Triassic Lowland of Nova Scotia (Natural Theme Region #610) (Figure 2.0-3). The Valley was formed by river action and deepened by glacial scouring of soft basalt and the underlying sandstone. As the ice retreated at the end of the Pleistocene era, sea levels rose and the land surface that we previously depressed beneath the weight of glaciers rebounded. In the Bay of Fundy region, sea level rose faster and encroached inland forming beaches, marine deltas, elevated shorelines, sand spits and sand bars which are now elevated well above sea level (on average 15-30 meters above current sea level). Glacial outwash deposits are preserved in this area as well. Rising sea levels over the past 4,000 years has drowned the lower reaches of the Annapolis and Cornwallis rivers, and both rivers drain the Valley, the Annapolis flowing west and Cornwallis flowing east. Many first and second order streams drain from North and South Mountain into the Cornwallis and Annapolis rivers. Both rivers are influenced by tidal activity in the Bay of Fundy and large meanders form at high tide, but are reduced to mere trickle at low tide when tidal flats and muddy banks are exposed.

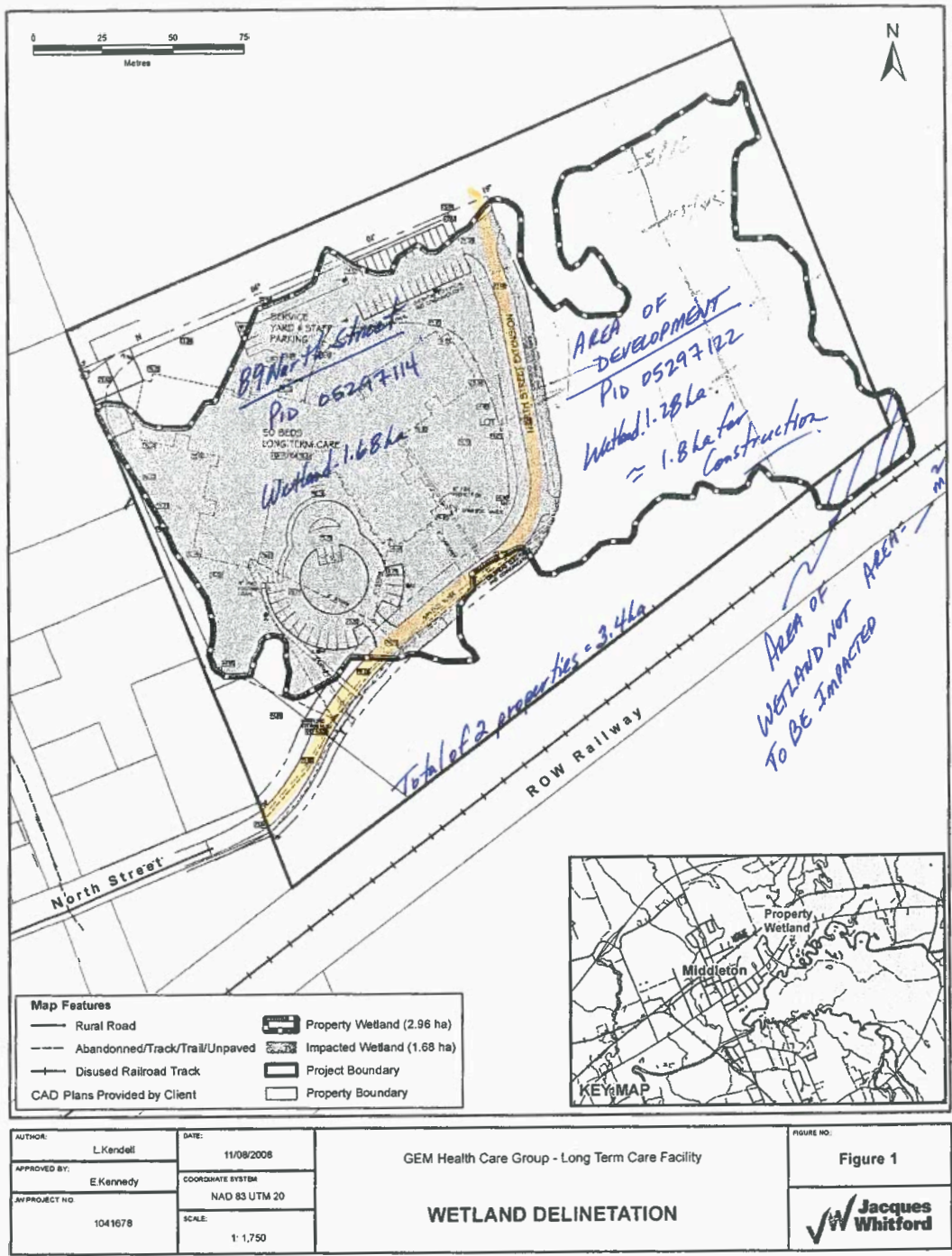


Figure 2.0-1: Map of the surrounding area showing the existing facility on the west (left) as well as the wetland to be developed on the east (right) (map courtesy Maritime Testing (1985) Ltd.).

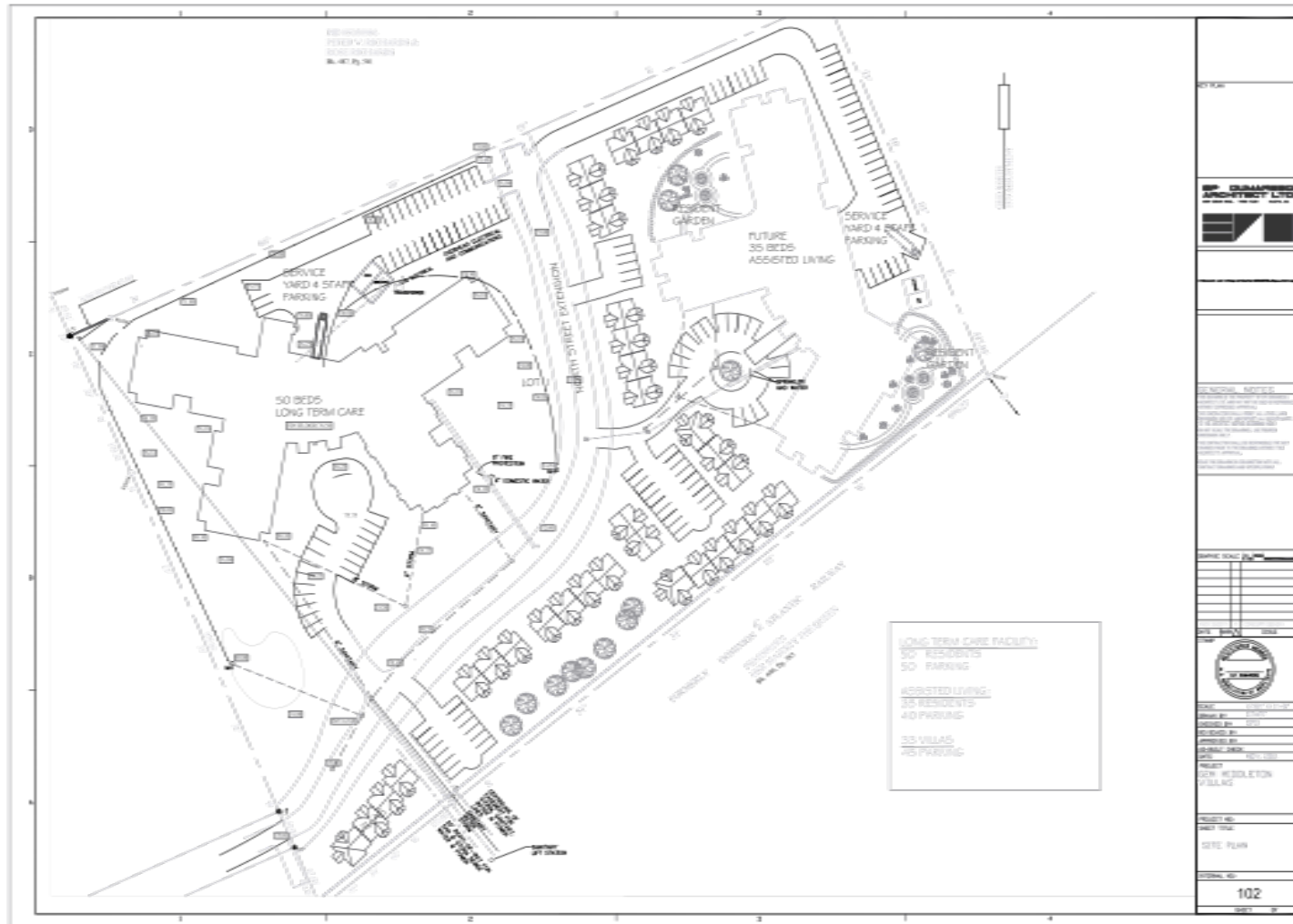


Figure 2.0-2: Map of the surrounding area showing the existing facility on the northwest side of North Street Extension, as well as the proposed development on the south and east sides of the road (map courtesy Maritime Testing (1985) Ltd.).

Large productive freshwater wetlands occur along both major rivers in the headwater areas between Kingston and Kentville. There are few lakes in this region but many slow meandering streams and rivers. Coastal habitats consist mainly of extensive intertidal areas including salt marshes and mud flats and associated dykelands. Mammals include raccoons, Red Fox, woodchuck, skunk, muskrat and mink. Pheasant, snipe, woodcock, and hawks are abundant as are crows and a large Bald Eagle population overwinters here. Gray Partridge and Short-eared Owls can be seen along the dykelands. The Annapolis River provides migration habitat for waterfowl in spring and fall and a moderate number of duck remain in winter. Anadromous fish including American Shad and Atlantic Salmon pass through the Annapolis River to spawn in freshwater further upstream. Striped Bass are also present but do not spawn upstream.¹

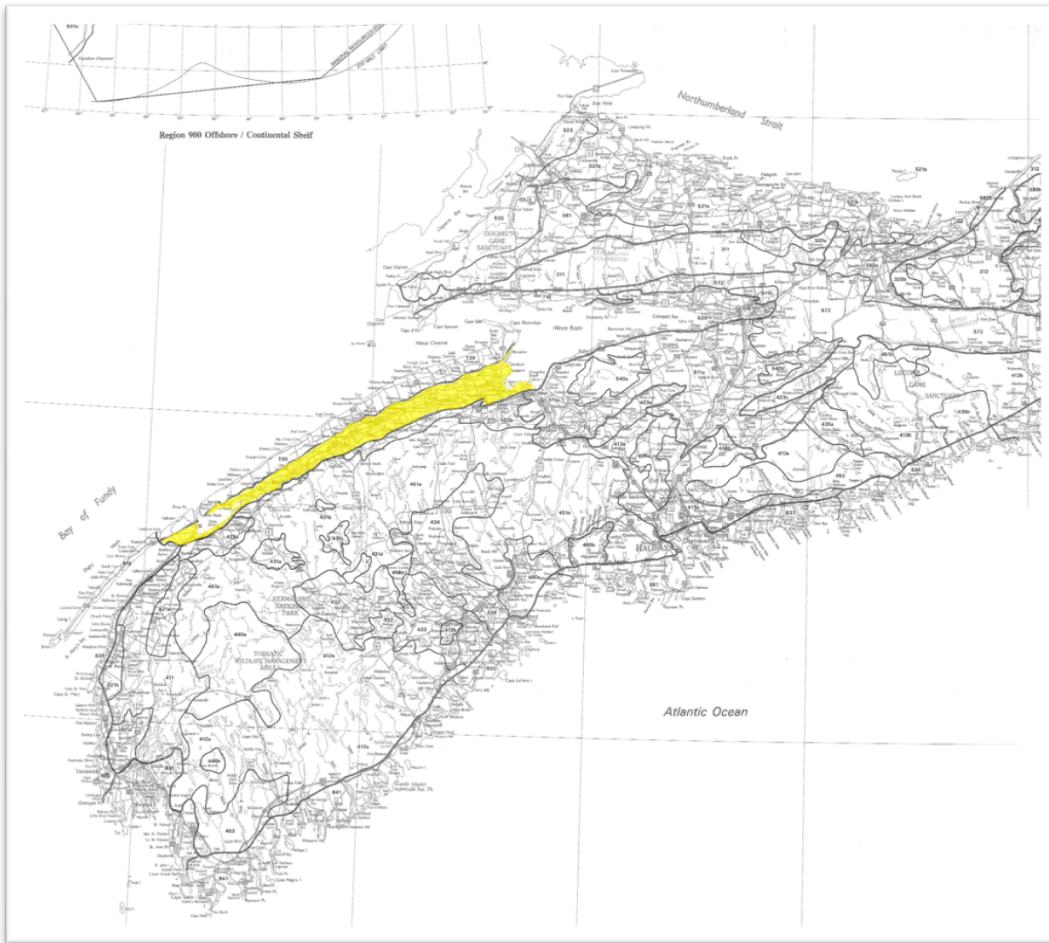


Figure 2.0-3: Natural Theme Regions of Nova Scotia, showing region #610 (highlighted) – Triassic Lowland, Valley region.

¹ Davis and Browne, 1996:159-163.

3.0 Methodology

A historic background study was conducted by Davis MacIntyre & Associates Limited in January 2012. Historic maps and manuscripts as well as published literature were consulted at Nova Scotia Archives in Halifax. The Maritime Archaeological Resource Inventory, a database of known archaeological resources in the Maritime region, was searched to understand prior archaeological research and known resources neighboring the study area.

3.1 Maritime Archaeological Resource Inventory

The Maritime Archaeological Resource Inventory was consulted in January 2012. At least nine archaeological finds have been recorded near the study area. Five of these are related to First Nations land use while the remaining four are related to 18th or 19th century activity. First Nations finds have been recorded at nearby Lawrencetown and North Williamston as well as at Wilmot near the fertilizer plant. In Middleton, precontact finds were made during ploughing of a field on the north bank of the Annapolis River, east of Highway 10. All five of these First Nations finds were located on the banks of the Annapolis River and attests to the importance this waterway had to early First Nations peoples.

Historic sites have been found at nearby Lawrencetown as well as at Wilmot. MARI records suggest the Lawrencetown site may be related to Acadian settlement although no archaeological research has been conducted to determine if this is the case. Three historic period Loyalist sites at Wilmot date to the late 18th through mid-19th centuries and are likely all associated with Brigadier Timothy Ruggles, a disbanded Loyalist who served in Massachusetts during the American Revolution. He was a known slave owner when he came to Nova Scotia at the close of the war and was granted 1,000 acres of land in Wilmot. Ruggles built a grand estate along what is now known as Ruggles Road. It is believed the estate included Ruggles' original house which is now preserved beneath a modern house, as well as a laborers shack. An early to mid-19th century house was built by one Mr. Phinney who was the first person to purchase a piece of Ruggles' land after his death. The remains of Mr. Phinney's house are also extant.

The absence of recorded archaeological resources within or immediately adjacent the proposed development area is likely an indication that this area was not subjected to previous archaeological assessments or research.

3.2 Historic 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 *Saqwe'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 (Figure 3.2-1). Queens, Shelburne, Yarmouth, Digby and Annapolis Counties were known by the Mi'kmaq as *Kespukwik* or “last flow”.² The Annapolis River was known as *T!w"psk#* meaning “flowing out between rocks”, likely referring to the North and South Mountains.³

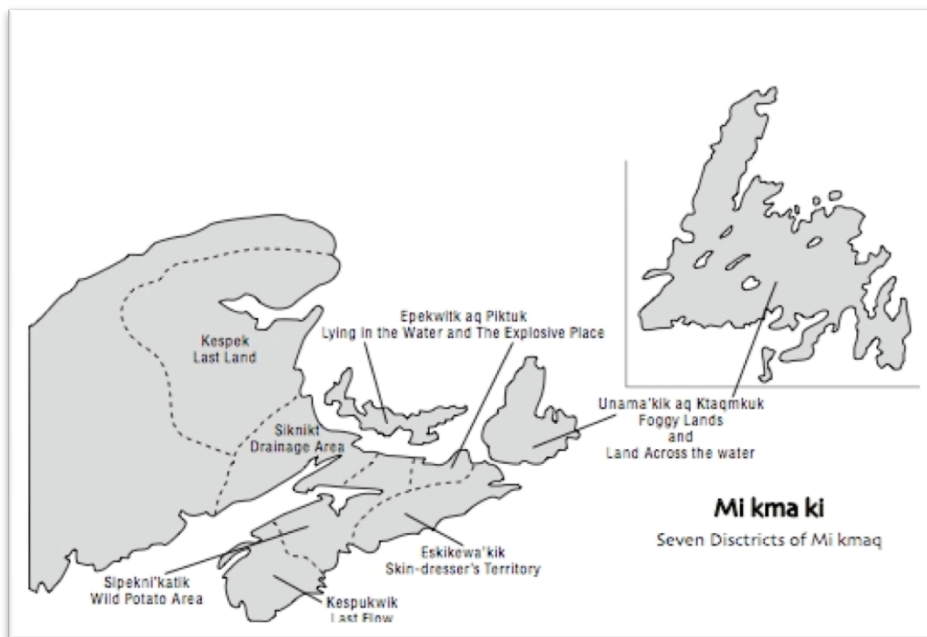


Figure 3.2-1: Map of the Mi'kmaq districts.⁴

² Confederacy of Mainland Mi'kmaq, 2007:11.

³ Rand, 1875:82.

⁴ Confederacy of Mainland Mi'kmaq, 2007:11.

3.2.2 European Settlement

The earliest European settlement in Annapolis County, and probably in the Province, was at Port Royal. It was in 1604 that Sieur de Monts and Champlain landed here and surveyed the coasts. After overwintering on St. Croix Island near the present-day Maine-New Brunswick border, de Monts removed to Port Royal and established a fortified settlement. For the next century and a half, French ownership of Acadia, which included New Brunswick, Prince Edward Island, and mainland Nova Scotia, was continually contested and the land changed hands several times between British and French forces until finally, in 1758 the British seized official control of all of Acadia and Cape Breton Island, having previously expelled the majority of French Acadian settlers from the provinces.

Wilmot Township, which included all the land in Annapolis County from Paradise in the west to the Kings County border in the east, was not settled as early as other parts of the county. The township was ordered to be laid out in 1764 and was named after Nova Scotia Governor Montague Wilmot. It was not until 1777, however, that lot numbers 38 through 44 (containing a total of 2,000 acres) were granted. These lands lay on the north side of the Annapolis River just northeast of the Nictaux River junction and encompass the study area lands. These lots together were granted to Philip Richardson, one of the oldest grantees of Wilmot and probably the first magistrate appointed in the township. Immediately east of Richardson's lots was the estate of Timothy Ruggles, aforementioned (Figure 3.2-2). The lots to the west of Richardson (lots 37 and 36) were not granted until 1785.⁵

The 1768 census for the township lists 40 people who possessed five horses (which amounted to about one per family), 62 horned cattle, eight sheep, and 15 swine. There was also one saw mill. However, it was not until 1783, at the close of the American Revolution and the subsequent arrival of Loyalist refugees and disbanded soldiers, that any marked progress on settlement was made in the township. At the same time, many of the original settlers of Annapolis and Granville Townships sold their lots and removed to Wilmot. Dr. Jonathan Woodbury purchased a portion of the Richardson grant and his descendants continued to occupy the land at least until the latter part of the 19th century. It is not clear if Philip Richardson ever settled his grant as he is not listed as a ratepayer on the 1792 census, although Jonathan Woodbury was.⁶

Settlement in Middleton, proper, was slow throughout the early part of the 19th century was later enjoyed a commercial boom. In 1834, there were only three or four houses in the town. There was a store in which the post office was kept and one of the houses served as an inn. The village was so named because it lay almost midway between Annapolis Royal and Kentville.⁷ The Nova Scotia Central Railway (later the Dominion & Atlantic Railway) was constructed through the town by 1868 and between 1902 and 1905, a railway was built between Middleton and Port Wade. By 1965, it ran as far as Bridgetown.⁸

⁵ Calnek, 1972:226-228.

⁶ Calnek, 1972:228-230.

⁷ Calnek, 1972:240-241.

⁸ Public Archives of Nova Scotia, 1967:435.

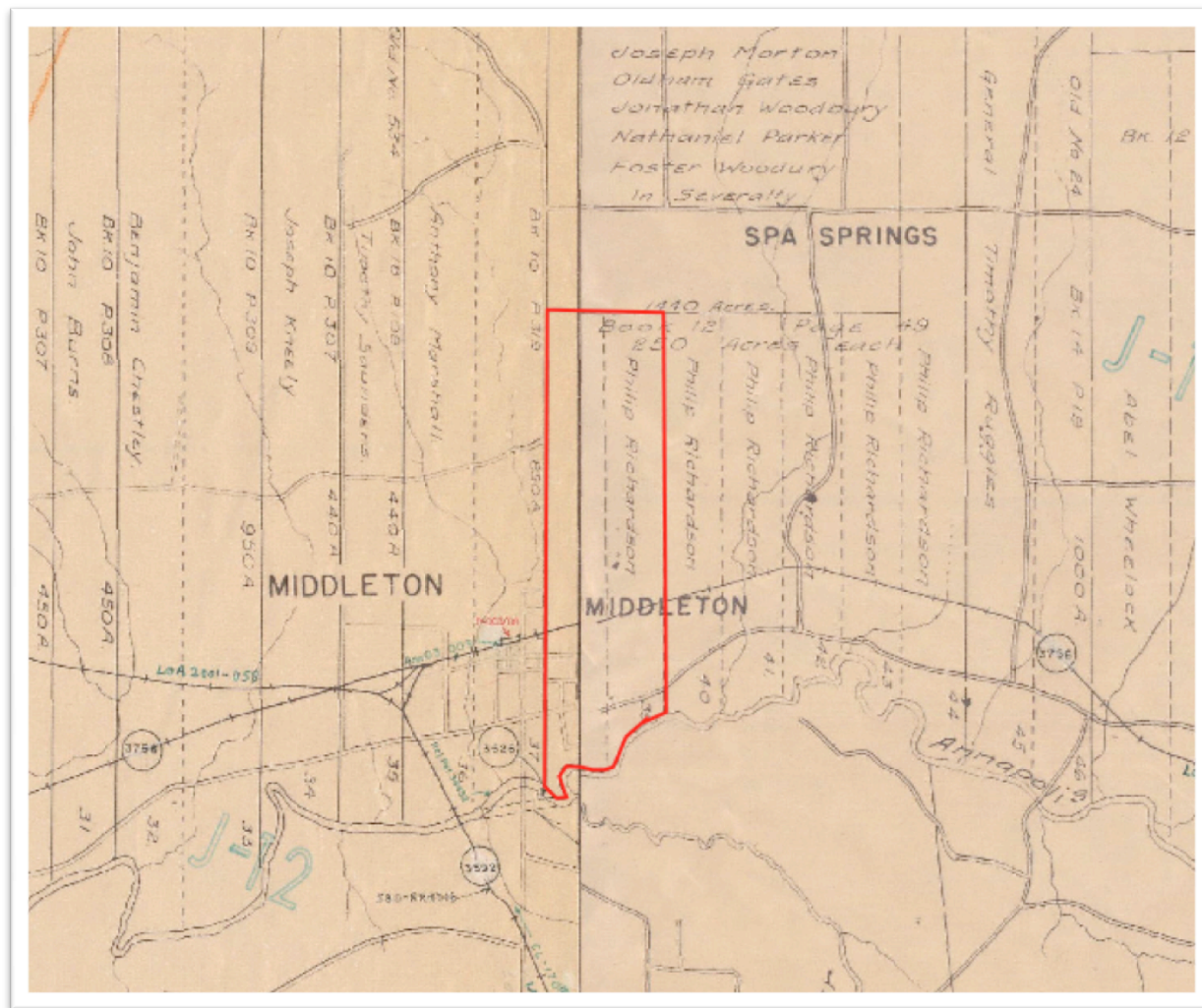


Figure 3.2-2: Original land grants in the area of Middleton and Wilmot Township.⁹ The land grants which encompass the study area are outlined in red.

Even by the end of the 19th century, it does not appear that there was any marked concentration of settlement to the north of the village. Fire Insurance Plans from 1897 and 1914 show that North Street ended just west of the existing GEM Long Term Care Facility, although Commercial Street extended well north beyond the study area (Figure 3.2-3). This is likely an indication that the study area was not occupied at that time. Ambrose F. Church's map of Annapolis County in 1876 show scattered farms along what is now Highway 362 as well as clustered settlement on the south side of the railway in Middleton and along present-day Route 1 (Figure 3.2-4).

⁹ Nova Scotia Department of Lands and Forests, 2009a & b.



Figure 3.2-3: 1897 Fire Insurance Plan of Middleton.¹⁰ North Street is indicated on the map as well as in the inset.

¹⁰ Goad, 1897.

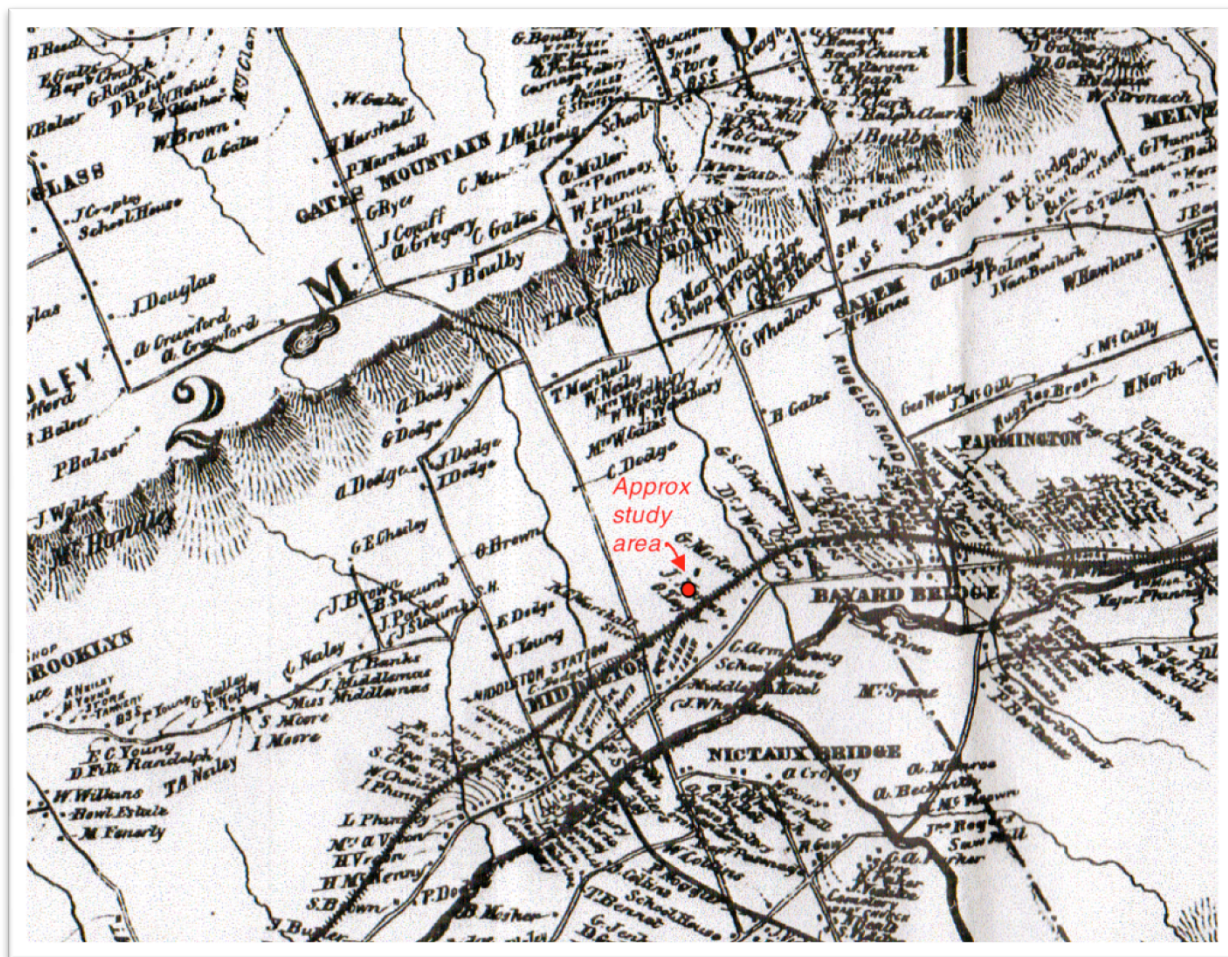


Figure 3.2-4: Part of A. F. Church's map of Annapolis County in 1876. The approximate location of the study area is indicated.

3.3 Predictive Model

A predictive model was developed for the study area for the purpose of determining the potential for First Nations resources within the boundaries. The model is based on visual analysis of modern 1:10 000 topographic maps and takes into consideration availability of resources (primarily food and potable water) as well as proximity of transportation routes (both by land and water), topography, climate, and proximity to known First Nations resources or historically documented land use (Figure 3.3-1).

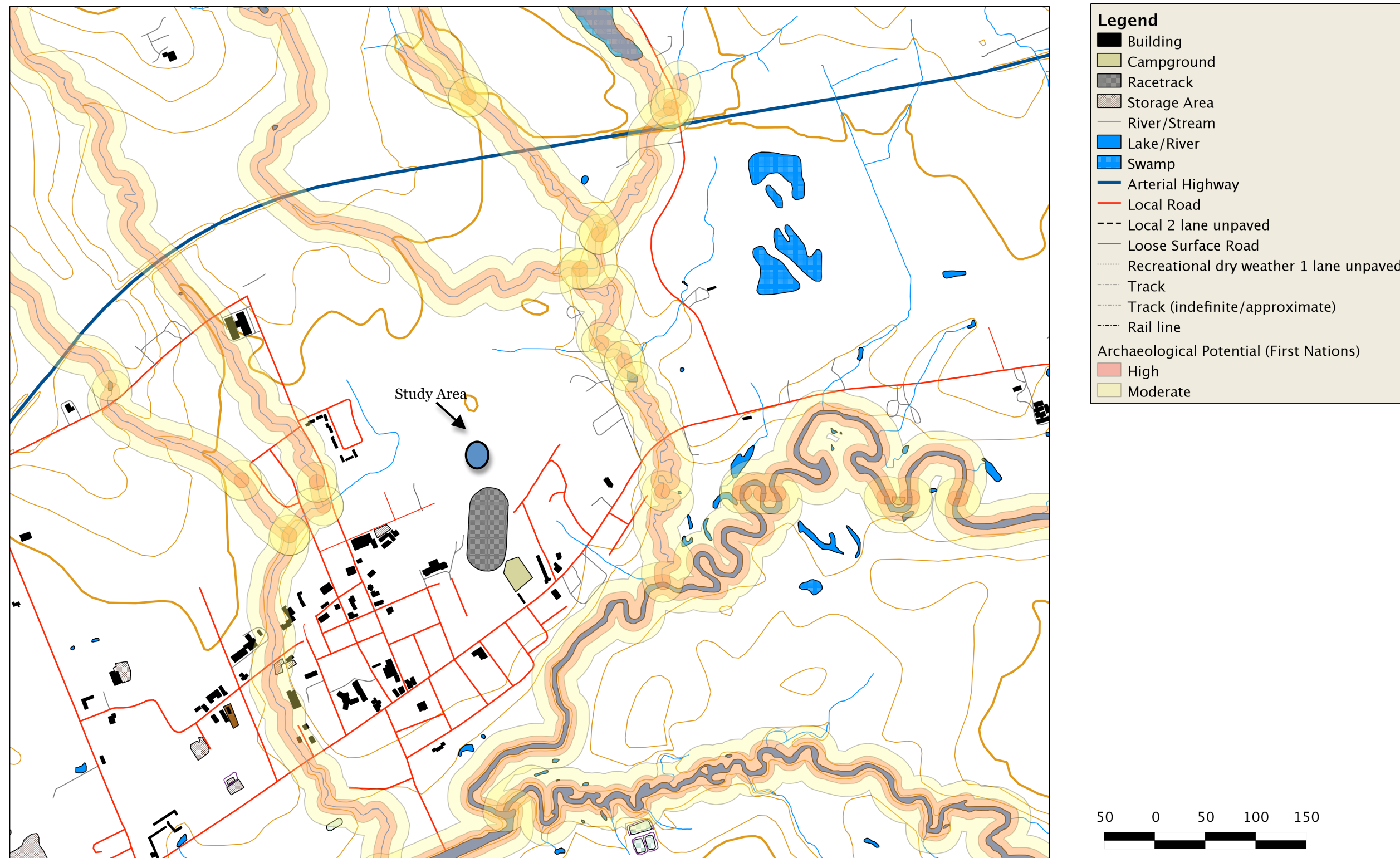


Figure 3.3-1: Topographic map of the lands surrounding the study area (the approximate location indicated by a blue circle), showing the perceived archaeological potential for First Nations resources based on visual analysis.

High potential has been attributed to a distance of 30 meters beyond the shoreline of those areas of waterbodies and watercourses determined to have potential for First Nations resources. Moderate potential has been attributed to an area from 30 meters to 80 meters from those shorelines.

A preliminary visual analysis of topography and water resources indicated that the highest potential for First Nations resources is along the Annapolis-Nictaux River system, including the adjacent terraces as well as along the rivers which flow down from North Mountain to intersect the Annapolis River, and their adjacent terraces as well. The study area itself is known to be wetland and the topographic maps reinforce this as small springs or streams appear to flow from a low area on the north side of the racetrack, as seen in Figure 3.3-1. Therefore, this area has been determined to be of low archaeological potential for First Nations resources.

4.0 Results and Discussion

The historic background study did not indicate any settlement in the study area during the historic period, which is logical given that the area is wetland. Likewise, predictive modeling for First Nations resources indicated that while aboriginal people were settled along the banks of the Annapolis and Nictaux Rivers, which is supported by previous archaeological finds in these areas, the study area itself is of low potential for such resources. The rivers to the east and west of the study area which flow down from North Mountain to drain into the Annapolis River have been determined to be of elevated potential for First Nations archaeological resources, but are located well outside the expected impact areas for this project.

5.0 Conclusions and Recommendations

It has been determined through historic research and predictive modeling that the study area is of low potential for both European and First Nations resources. However, in order to clear the study area for development, the Department of Communities, Culture and Heritage requires that an archaeological reconnaissance by a qualified archaeologist is conducted prior to any ground disturbing activities.

6.0 References Cited

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Appendix A: Heritage Research Permit



Tourism, Culture and Heritage

Heritage Division

Special Places Protection Act, R.S.N.S. 1989

Heritage Research Permit (Archaeology)

(Original becomes Permit when approved by the Executive Director of the Heritage Division)

Office Use Only
Permit Number: A2012NS013
A2012NS013

<i>Greyed out fields will be made publically available. Please choose your project name accordingly</i>	
Surname MaIntyre	First Name April
Project Name Middleton Long Term Care Facility	
Name of Organization Davis MacIntyre & Associates Limited	
Representing (if applicable)	
Permit Start Date 25 January 2012	Permit End Date 31 March 2012
General Location: North Street, Middleton	
<p>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)</p> <p>PID 05297122</p>	
<p>Permit Category: Please choose one:</p> <p><input type="checkbox"/> Category A - Archaeological Reconnaissance</p> <p><input type="checkbox"/> Category B - Archaeological Research</p> <p><input checked="" type="checkbox"/> Category C - Archaeological Resource Impact Assessment</p> <p><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.</p> <p><input type="checkbox"/> I currently hold a treasure trove license or pending application for a licence related to this Heritage Research Permit.</p>	
Signature of applicant <i>Davis MacIntyre</i>	Date 17 January 2012
Approved by Executive Director <i>Bee Hendry</i>	Date <i>Jan 31/12</i>