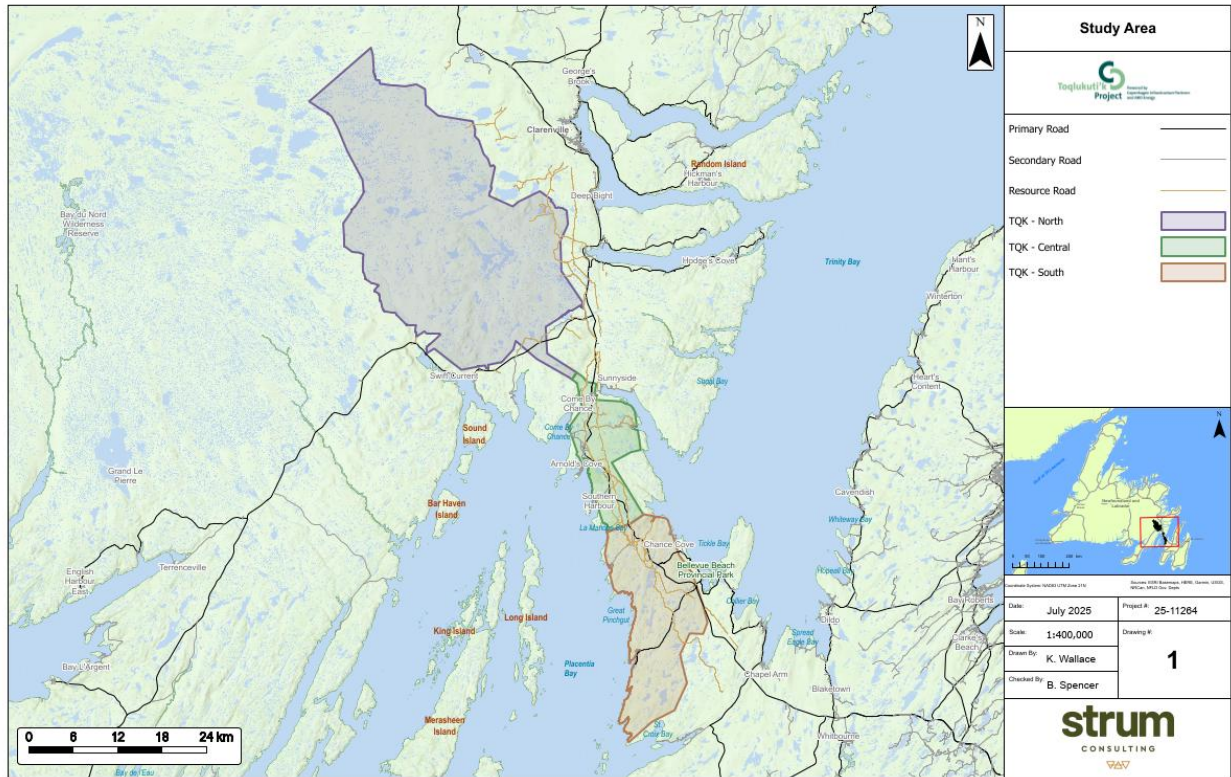


APPENDIX D

DESKTOP ARCHAEOLOGICAL REVIEW

Desktop Archaeological Review of the Project Toqlukuti'k Wind and Hydrogen Project



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Introduction

In the summer of 2023, the Province of Newfoundland and Labrador awarded ABO Energy and Copenhagen Infrastructure Partners the exclusive right to pursue development of its Toqlukuti'k Wind and Hydrogen Ltd. Project, a major wind and hydrogen development in the Isthmus of Avalon, extending westwards, on Newfoundland's east coast.¹ The project has the capacity for developing up to 3.2 gigawatts of onshore wind to produce competitive green hydrogen and ammonia for the domestic and global market. The focus of this report is the assessment of archaeological resources within the Study Area (Figure 1).

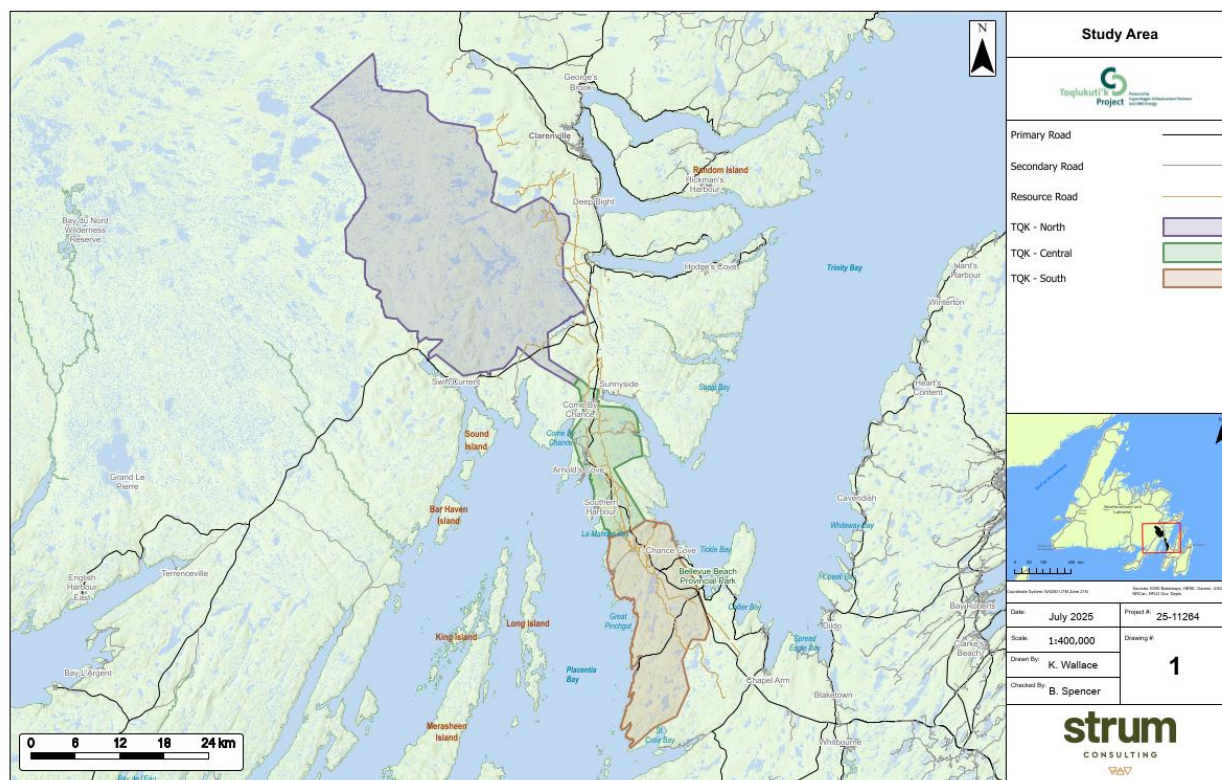


Figure 1 The Study Area

¹ https://www.aboenergy.com/en/media-center/press/2023/2023-08-30_newfoundland-hydrogen.html

The Isthmus of Avalon is the narrow neck of land linking the Avalon Peninsula to the rest of the island of Newfoundland. At about 2.5km wide at its narrowest place, it has long been used by various Indigenous populations, and later also non-Indigenous groups, to traverse between Trinity Bay to the north and Placentia Bay to the south. Archaeological sites at both sides of the isthmus date back thousands of years, suggesting this route was in use for millennia. As with the rest of Newfoundland, the cultural history of this region is close to 5000 years old. Members of every pre-contact Indigenous population who lived on the island of Newfoundland² utilized the rich marine and terrestrial resources of Trinity Bay and Placentia Bay. See Appendix A for a list of the archaeological sites along the coast adjacent to the Project Area. Additional evidence of ancient Indigenous habitations has also been recorded on the islands at the bottom of Placentia Bay, within 25km of the Project Area. It should be noted that the actual Project Area has not been surveyed archaeologically.

Until relatively recently, Newfoundland-based archaeologists limited their research to the coastline and on the nearby islands. This limitation has skewed the perception that Indigenous groups only lived along the water's edge. In recent decades, archaeologists working in the near interior (within 30km of the coast) uncovered Indigenous sites along major waterways and lakes, proving that there is potential for finding similar sites within the Project Area (Holly 2013 Schwarz 1984, also see Figure 2). One area of high potential for finding archaeological resources would be Piper's Hole River, which reaches over 30km from the coast, beginning at the head of Swift Current and continuing deep into the Project Area.

Indigenous Archaeological Research

Hunter-gatherer groups, such as all the pre-contact First Nations and Pre-Inuit people that lived in Newfoundland, engaged in a broad-based foraging subsistence strategy based on mobility between resource areas along the coast and in the interior (Holly 2015). In the warm months, all these groups lived on the coast, exploiting the rich marine resources. In the fall, they would often travel to the near interior (within a 1-2 day walk, or 30km) to spend the winter, hunting and trapping terrestrial resources. Some archaeologists ponder whether the Pre-Inuit dominance on the coasts, including Placentia Bay (where they lived as late 1100 AD), forced contemporaneous First Nations populations, in particular the Beaches and possibly the Little Passage complexes (ancestral Beothuk), to avoid the outer coast all together, choosing to live in the inner coastal area and, during winter, in the near interior (Schwarz 1984; Holly 2013).

Since the early 1970s, archaeologists working near the Project Area have recorded 48 sites and seven ethnographic sites, mostly between Bull Arm in Trinity Bay and in the inner reaches of Placentia Bay, particularly near Swift Current and on Long Island (Figure 2). Urve Linnamae,

² Maritime Archaic, Pre-Inuit, Cow Head, Beaches and Little Passage. Beothuk is the name given to the historic period Little Passage people.

working with the National Museum, was the first professional archaeologist to surveyed some of the islands at the north end of Placentia Bay in the summer of 1970. Linnamae recorded several pre-contact Indigenous sites associated with Pre-Inuit and First Nations groups. (Linnamae 1971, 1975) Since that time, several archaeological surveys have taken place in the region where seventeen Indigenous sites have been recorded within 25km of the Project Area, including nine Beothuk sites (Figure 2).³ Rising sea levels have obscured some of the older Maritime Archaic sites and every so often, their stone tools are retrieved from the tidal zone that once were on dry land (Rast 1999: 63 & 96). Pre-Inuit sites are often small and found on exposed locations on the islands in the bay and along the shoreline. At the northwest end of Placentia Bay, Indigenous and non-Indigenous sites were found deep in Swift Current, around the area known as Piper's Hole, less than a kilometre from the Project Area (McLean 2013).

There are several very significant Indigenous archaeological sites in Bull Arm, also within a kilometre of the Project Area, including the multi-component Stock Cove site (CkAl-03), with occupations dating back nearly 5000 years and continuing into the seventeenth century A.D. (Robbins 1986; Holly et. al. 2015). Stock Cove is about one half of a kilometer from the Project Area. Frenchman's Island, just a couple of kilometres from Sunnyside in another important multi-component site. Archaeological investigations on Frenchman's Island in the early 1980s uncovered Indigenous occupations spanning over 1800 years (Evans 1981, 1982).

Much of the interior of Newfoundland has not been investigated archaeologically, however, where surveys have occurred, along the rivers and lakes in Bonavista and Notre Dame Bays, Indigenous sites have been found. Aside from the path traversing the Isthmus of Avalon, which we know was used by Indigenous groups, there is a strong possibility that the navigable waterways were used to access the interior of Trinity Bay, near Random Island, where the Project Area extends off the Avalon Peninsula (see Figure 2).

Historical Significance

The area adjacent to the Project Area was significant in the historic period for several reasons. Some of the earliest references to Beothuk interactions with Europeans occurred near the Project Area and there are historic and archaeological evidence of fishers and their families overwintering in the region, beginning in the mid-seventeenth century. Non-Indigenous groups also used the Isthmus of Avalon as a transportation route, just as the Indigenous groups did.

A 1594 report of Beothuk cutting the moorings on two small boats belonging to the English fishing ship *Grace* in Pesmark (modern day Presque), on the west side of Placentia Bay, clearly records their presence in the area in the sixteenth century (von Gernet 2001: 90-92).

Undoubtably, the most significant recorded contact between Beothuk and Europeans also

³One of those was Hangman's Island, a Beothuk burial site, reported upon in Howley (1915:291-294).

occurred near the Project Area. In the fall of 1612, John Guy, governor of England's first colony at Cupids, had an amicable exchange with a party of Beothuk in 1612 near the bottom of Bull Arm. Guy's men later found a path cut through the forest near Frenchman's Island. They walked the path across the isthmus to its southern terminus near the current town of Come By Chance where they came upon several Beothuk mamateeks, but no Beothuk (Cell 1982).⁴ Guy and his men began to construct a trading post on Frenchman's Island but did not complete the work as winter set in and the bay began to freeze over.

The path was also used by the French military as a route to cross between the two bays. In the winter of 1697/98 Pierre le Moyne d'Iberville used the path to transport his English prisoners, captured from his raids along the English Shore, to the French capital at Plaisance, in Placentia Bay (Williams 1987).⁵

The passage was still in use in the nineteenth century. In 1835, the Anglican missionary Edward Wix took the path across the isthmus (Wix 1836). Wix's observations are of significance to this report for two reasons. First, he referenced places along the path where travellers previously used logs to make corduroy roads to slide their small boats across the wet areas. Secondly, and most important for this report, Wix met families living in their winterhouses near Frenchman's Island, and when he crossed over the isthmus, he met more families in their winterhouses on the Come By Chance River (Wix 1836:43)⁶. The earliest evidence for Newfoundlanders spending their winters deep into the bays was discovered next to Frenchman's Island where a winterhouse dating to the 1660s was recorded (Mills and Gaulton 2014).

Wix also visited several communities in the bottom of Placentia Bay and was surprised to learn they had all taken to their winter residences near Piper's Hole, deep into the Swift Current arm, on the northwest side of the bay. This last statement is important as the Project Area comes very close to Piper's Hole where archaeological surveys discovered several sites used by both pre-contact Indigenous groups and non-Indigenous Newfoundlanders in the nineteenth and early twentieth century.

⁴ John Guy wrote his description of his visit to Bull Arm and the discovery of the "way cut into the woodes (sic)". His description was published by Cell (1982: 72). See also Gilbert 1990.

⁵ 1697. 26 June 1696 to 27 May 1697. Journal of Monsieur Baudoin, missionary. "Journal of the voyage that I took with Monsieur d'Iberville, frigate captain, from France to Acadia and from Acadia to the island of Newfoundland." [Archives nationales de France, Colonies C11D/3, ff.27-40; National Archives of Canada Reel F-170 (transcript MG1/C11D/3, pp.55-142; Reel C-11359). Published in Auguste Gosselin, *Les Normands au Canada: Journal d'une expédition de d'Iberville* (Évreux, 1900), pp.31-69.] See also Williams, Alan F. 1987 "Father Baudoin's War D'Iberville's Campaigns in Acadia and Newfoundland 1696, 1697". Memorial University of Newfoundland.

⁶ Archaeologists recorded a number of historic and pre-contact sites along this stretch of river, see Appendix A for the Piper's Hole sites.

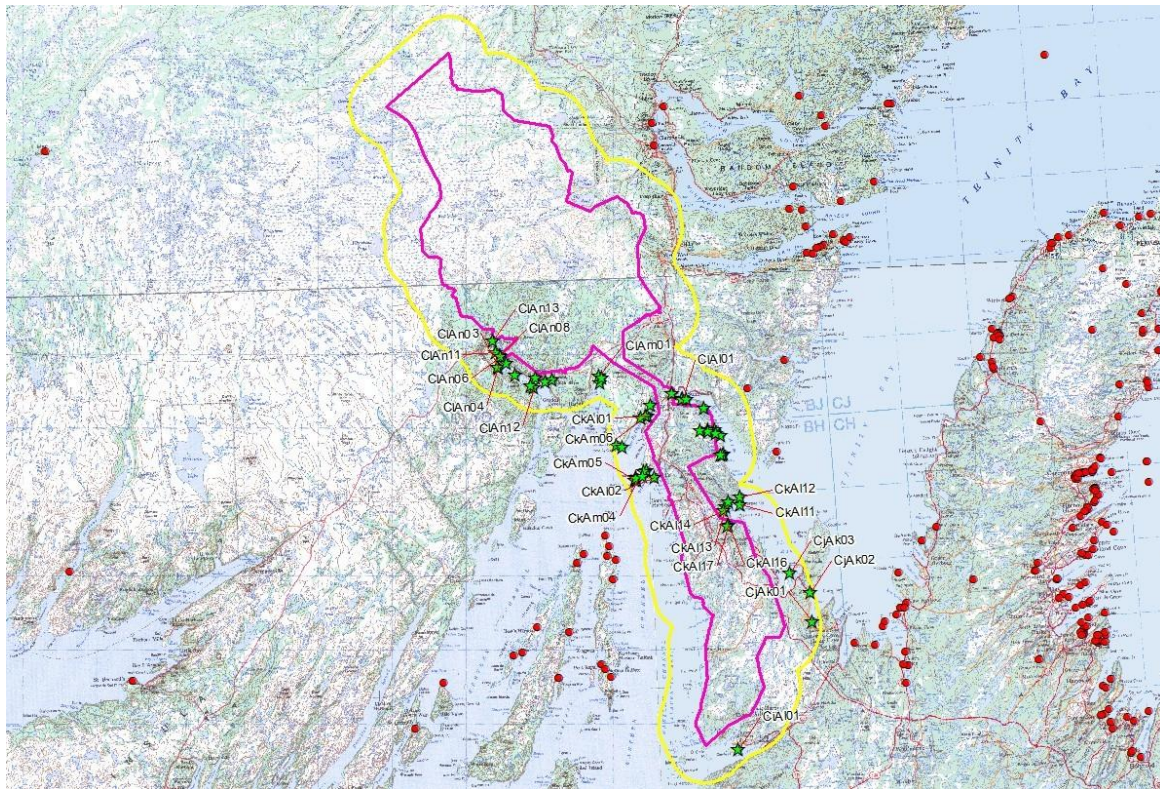


Figure 2 Map of the Project Area (outline in pink) with registered archaeological sites identified by green stars. The red dots are additional archaeological sites in adjacent bays.

Discussion

The Toqlukuti'k Wind and Hydrogen Ltd. Project proposed for the region east and west of, and including, the Isthmus of Avalon has the potential to negatively impact archaeological resources. Archaeologists, working in the region over the past five decades, have recorded dozens of sites, some dating back 5000 years. Most of these sites are located on the coast or on nearby islands, however, several very important Indigenous sites lie deep in the bays, less than a kilometre from the Project Area. Bull Arm and Swift Current are two areas of particular importance.

Archaeological research and historical documents, such as the report from Reverent Wix, have shown that, as early as the seventeenth century, Europeans have followed the same pattern of transhumance as the Indigenous population by moving deep into the bays or to the near interior in winter (Mills and Gaulton 2014; Smith 1987; Wix 1836). Evidence of more of these sites may be present in the Project Area.

Before the energy project can proceed, further work is needed to identify areas of high potential for locating archaeological resources in the Project Area. The area has been subjected to a LiDAR survey, which could be most helpful in developing a predictive model for where archaeological sites might be located. If the LiDAR data can be accessed, an archaeological

survey should then take place, to “ground truth” any areas of high potential for identifying sites within the Project Area. Information on any sites discovered during this survey should be incorporated into any plans for the construction of windmills and related infrastructure.

Acknowledgements

Thank-you to Steve Hull of the Provincial Archaeology Office for providing the map of archaeological sites and the Site Records Forms.

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Appendix A Archaeological Sites Near the Project Area

<i>Site Name</i>	<i>Culture</i>	<i>Date</i>	<i>Location</i>
Collier Bay 1	Maritime Archaic	Pre-Contact	Trinity Bay
Thornlea 1	Recent First Nations/European	Pre-Contact/17 th c.	Trinity Bay
Bellevue Beach 1	European	1650-1750 AD	Trinity Bay
Stock Cove	Pre-Contact/European	5000 BP-17 th c.	Trinity Bay
Stock Cove West 2	Maritime Archaic	Pre-Contact	Trinity Bay
Sampson's Hd. Cove	Pre-Contact	1500-800 BP	Trinity Bay
Peddle's Cove 1	European	20 th century	Trinity Bay
Bob Peddle's Cove	European	18 th -20 th century	Trinity Bay
Great Mosquito Cove	European	19 th century	Trinity Bay
Crout Site	Beothuk/Pre-Inuit	700 BP	Trinity Bay
Crossing Pond	Pre-Inuit	Pre-Contact	Trinity Bay
Stock Cove West	Pre-Contact	Pre-Contact	Trinity Bay
Chislett's Cove 1	Pre-Inuit	Pre-Contact	Trinity Bay
Fox Cove 1	Pre-Contact	Pre-Contact	Trinity Bay
George's Cove 1	Pre-Contact	Pre-Contact	Trinity Bay
Maurice's Hole 1	Precontact/European	Pre-Contact/Historic	Trinity Bay
Northeast Arm 1	Pre-Contact	Pre-Contact	Trinity Bay
Ranem 1	Historic	19 th -20 th century	Trinity Bay
Ranem 2	Pre-Contact	Pre-Contact	Trinity Bay
Frenchman's Island	Pre-Contact	1800BP-17 th c.	Trinity Bay
Bay Bull Arm			
Telegraph Station	European	19 th -20 th c	Trinity Bay
Sunnyside 1	European	17 th -c	Trinity Bay
Bull Arm 1	European	19 th -c	Trinity Bay
Bordeaux East	Pre-Inuit	Pre-Contact	Placentia Bay
Bordeaux West	Pre-Inuit	Pre-Contact	Placentia Bay
Crawleys Island	Little Passage	Pre-contact	Placentia Bay
Come by Chance	Pre-Contact	Pre-Contact	Placentia Bay
Come by Chance			
Beach West	European/Pre-Contact	Pre-Contact/Historic	Placentia Bay
Come-By-Chance			
River West	European	19 th century	Placentia Bay
Old Methodist Graveyard/			
Come by Chance	European	19 th -20 th c	Placentia Bay
North Harbour 1	European	19 th -c	Placentia Bay
North Harbour 2	European	19 th -c	Placentia Bay
North Harbour 3	European	19 th -c	Placentia Bay
Swift Current General	Maritime Archaic	Pre-Contact	Placentia Bay

<i>Site Name</i>	<i>Culture</i>	<i>Date</i>	<i>Location</i>
Black River Pulp Mill	European	19 th -20 th -c	Placentia Bay
Pipers Hole 1	Pre-contact/European	Pre-Contact/Historic	Placentia Bay
Pipers Hole 2	Pre-Contact	Pre-Contact	Placentia Bay
Pipers Hole 3	Pre-contact/European	Pre-Contact/Historic	Placentia Bay
Pipers Hole North	Pre-Contact	Pre-Contact	Placentia Bay
Pipers Hole East	Pre-contact/European	Pre-Contact/Historic	Placentia Bay
Pipers Hole West	Pre-Contact	Pre-Contact	Placentia Bay
Barington Residence	Mi'Kmaq	Historic	Placentia Bay
Hutchings	European	Historic	Placentia Bay
Piper's Hole Northwest	Pre-Contact	Pre-Contact	Placentia Bay
Grip's Nest	Pre-Contact	Pre-Contact	Placentia Bay
Pipers Hole River	Mi'Kmaq	Historic	Placentia Bay

Ethnographic Sites

<i>Site Name</i>	<i>Culture</i>	<i>Date</i>	<i>Location</i>
Grassy Point Garden 1	European	19 th – 20 th c	Placentia Bay
Grassy Point Garden 2	European	19 th – 20 th c	Placentia Bay
Grassy Point Garden 3	European	19 th – 20 th c	Placentia Bay
Grassy Point Garden 4	European	19 th – 20 th c	Placentia Bay
Grassy Point Garden 5	European	19 th – 20 th c	Placentia Bay
Doughboy Cove 1	European	19 th – 20 th c	Placentia Bay
Southern Head 1	European	19 th – 20 th c	Placentia Bay