

APPENDIX E
CULTURAL RESOURCE MANAGEMENT REPORT
(Cultural Resource Management Group Limited, 2020)

Environmental Assessment Registration Document:
Welshtown Quarry Expansion
Shelburne, Municipality of the District of Shelburne
Nova Scotia

DEXTER CONSTRUCTION COMPANY LIMITED

WELSHTOWN QUARRY EXPANSION
ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT 2020
WELSHTOWN, NOVA SCOTIA

FINAL REPORT [REVISED]

Submitted to:
Dexter Construction Company Ltd
and the
Special Places Program of the
Nova Scotia Department of Communities, Culture and Heritage

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Heritage Research Permit Number A2020NS044
CRM Group Project Number: 20-0006-01

AUGUST 2020



*The following report may contain sensitive archaeological site data.
Consequently, the report must not be published or made public without
the written consent of Nova Scotia's Coordinator of Special Places,
Department of Communities, Culture and Heritage.*

EXECUTIVE SUMMARY

Cultural Resource Management Group Limited was retained by Dexter Construction Company Limited to undertake an archaeological resource impact assessment of the proposed expansion of their Welshtown Quarry, located in Shelburne County. Involving Mi'kmaw engagement, background research, and field reconnaissance, the project makes management recommendations for potential cultural resources within the proposed impact area.

The archaeological investigation was conducted by CRM Group Archaeologist, Robert H. J. Shears, with assistance in the field by CRM Group Archaeologist, Emily Redden. The archaeological reconnaissance was conducted on May 5, 2020, according to the terms of Heritage Research Permit A2020NS044 (Category 'C'), issued to Shears through the Special Places Program of the Nova Scotia Department of Communities, Culture and Heritage. Based on the background study and field reconnaissance, the area was ascribed low potential for encountering archaeological resources. It is recommended that the study area be cleared of the need for further archaeological investigation.

PROJECT PERSONNEL

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ACKNOWLEDGEMENTS

**Special Places Program of the Nova Scotia
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Heritage**

Anna Cross
Acting Special Places Coordinator

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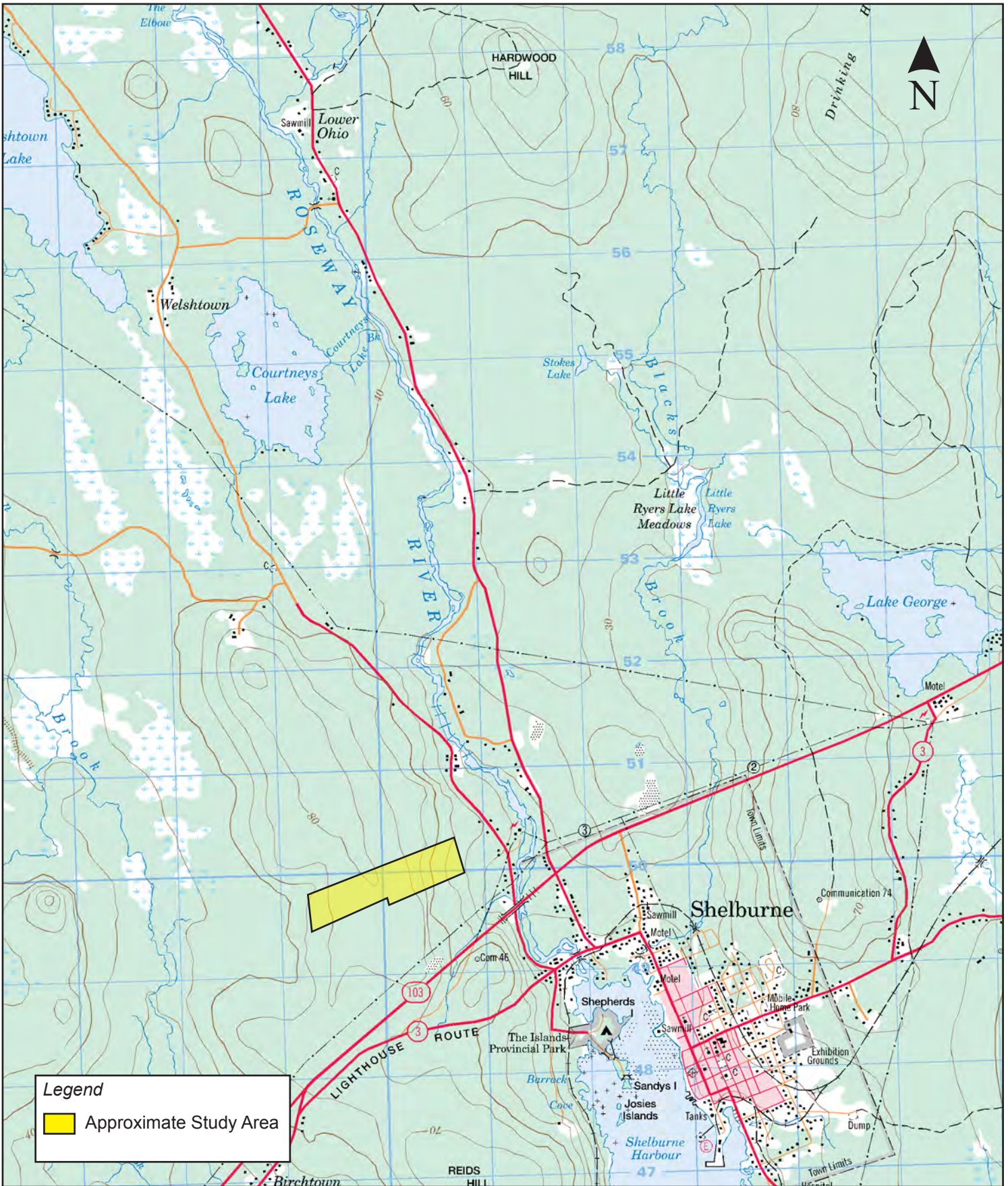
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**WELSHTOWN QUARRY EXPANSION
ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT 2020
SHELBURNE COUNTY, NOVA SCOTIA**

1.0 INTRODUCTION

Dexter Construction Company Limited (Dexter) is conducting an Environmental Assessment as part of their proposed expansion of the existing Welshtown Quarry in Shelburne County (**Figures I & 2**). Cultural Resource Management Group Limited (CRM Group) was retained by Dexter to undertake an archaeological resource impact assessment (ARIA) of the quarry expansion study area. Involving Mi'kmaw engagement, background research, and field reconnaissance, the project was designed to identify, document, interpret and make management recommendations for potential cultural resources within the proposed impact area.

The archaeological investigation was conducted by CRM Group Archaeologist, Robert H. J. Shears, with assistance in the field by CRM Group Archaeologist, Emily Redden. The archaeological reconnaissance was conducted on May 5, 2020, according to the terms of Heritage Research Permit A2020NS044 (Category 'C'), issued to Shears through the Special Places Program of the Nova Scotia Department of Communities, Culture and Heritage. This report describes the archaeological screening and reconnaissance of the Welshtown Quarry Expansion study area, presents the results of these efforts, and offers cultural resource management recommendations.



	Approximate Study Area	Figure 1
	WELSH TOWN QUARRY EXPANSION ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT 2020 SHELBURNE COUNTY, NOVA SCOTIA	
	May 2020 Scale 1:50 000	

WELSHTOWN QUARRY
EA STUDY AREA – UPDATED
APRIL 6, 2020

Legend

- Study Area
- Existing Quarry

53.8 HECTARE STUDY AREA

PID 80106826
ROBERT DAVIS

PID 80106875
ROBERT DAVIS

PID 80106867
ROBERT DAVIS

PID 80106925
MUNICIPAL ENTERPRISES LIMITED



Detailed Study Area

WELSHTOWN QUARRY EXPANSION
ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT 2020
SHELBURNE COUNTY, NOVA SCOTIA

Figure 2

May 2020

Scale Bar

2.0 STUDY AREA

The ARIA of the Welsh town Quarry expansion addressed a 53.8 hectare study area, located on Upper Clyde Road in Shelburne County on portions of PIDs 80106826, 80106875, 80106867, and 80106925 (*Figures 1 & 2; Plate 1*). The study area is situated approximately 950 metres north of Highway 103, 1.6 kilometres north-northwest of the head of Shelburne Harbour and 450 metres west of Upper Clyde Road. The study area is situated on a small, unnamed hill located between the Roseway River, situated approximately 760 metres to the east, and Birchtown Brook, situated approximately 1.5 kilometres to the west. Access to the study area was gained from the main quarry access road off Upper Clyde Road, located approximately 1.5 kilometres north of the intersection of Upper Clyde Road and Lighthouse Route 3.



Plate 1: Welsh town Quarry Study area, Shelburne County. Facing east; May 5, 2020.

3.0 METHODOLOGY

The objective of the ARIA was to evaluate archaeological potential within the area that may be disturbed by proposed quarry expansion activities. To address this objective, CRM Group developed a work plan consisting of the following components: Mi'kmaw engagement; a review of relevant site documentation and research material to identify areas of high archaeological potential; archaeological reconnaissance of the areas that may be impacted by quarry expansion activities; and, preparation of a report summarizing the results of the background research and field survey, as well as providing cultural resource management recommendations.

3.1 Mi'kmaw Engagement

There are no registered archaeological sites within the project study area. However, considering there is an Mi'kmaw archaeological site within 1 kilometre of the study area, as well as a number of others within a five kilometre radius, CRM Group contacted the Kwilmu'kw Maw-Klusuaqn Negotiation Office's Archaeological Research Division (KMKNO's ARD) and Acadia First Nation to inquire about any information they may have pertaining to traditional or historical Mi'kmaw use of the study area. Information provided by KMKNO's ARD has been incorporated into the background study portion of the report.

3.2 Background Study

The archival research component of the archaeological screening and reconnaissance was designed to explore the land-use history of the study area and provide information necessary to evaluate the area's archaeological potential. To achieve these goals, CRM Group utilized the resources of various institutions including documentation available through the Nova Scotia Archives, Nova Scotia Land Information Centre, the Department of Natural Resources, the Black Loyalist Heritage Society, the Shelburne County Archives and Genealogical Society and the Nova Scotia Museum. Due to the ongoing COVID-19 pandemic, access to a number of research repositories were limited to online resources only. Additionally, the background study involved an examination of documentation included in previous ARIAs in Shelburne County conducted by CRM Group while incorporating site-specific information available from our in-house archaeological library and research resources. Information such as legal survey records, historic maps, local and regional histories as well as topographic maps and aerial photographs, both current and historic, were used in the archaeological evaluation of the study area. Maritime Archaeological Resource Inventory (MARI) records were reviewed to identify both registered and reported archaeological sites in the vicinity of the study areas. Base mapping was reviewed to identify topographic or hydrological features that may have attracted human settlement and resource exploitation. Ultimately, the goal of the review was to reconstruct a general land-use history of the study area and to facilitate the interpretation of any archaeological features encountered within the study area.

3.3 Field Reconnaissance

The goal of the reconnaissance was to provide first-hand exposure to the geographical setting and topography of the study area. During the reconnaissance, CRM Group archaeologists followed up on any potential resources identified as a result of the background research. Visual assessment of the study area was conducted by walking a series of transects across the subject property and inspecting any trails or abandoned roads identified while in the field. Soil exposures (e.g. tree throws and recent soil disturbances) were searched for exposed artifacts and traces of archaeological features. Field geomatic data was recorded with handheld Garmin GPSmap 62s with +/- five-metre accuracy. Field observations were recorded through the combination of photographs, field sketches, and field notes.

4.0 RESULTS

4.1 Background Study

The following discussion details the environmental and cultural setting of the study area, including previous archaeological research conducted in the general area. This background study provides a framework for the evaluation of archaeological potential and the initial interpretation of any resources encountered during the field component of the assessment.

4.1.1 Environmental Setting

Several environmental factors such as water sources, physiographic features, soil types and vegetation have influenced settlement patterns and contribute to the archaeological potential of the area.

Water Sources

Proximity to water, for both drinking and transportation, is a key factor in identifying Pre-contact and historic Mi'kmaq, as well as early Euro-Canadian and African-Nova Scotian archaeological potential. There are no significant waterways located within the study area. The Roseway River, the primary watercourse flowing into the northeast branch of Shelburne Harbour, runs approximately 760 metres to the east. Birchtown Brook runs approximately 1.5 kilometres to the west (*Figure 1*).

Topography

The study area is located on the southern fringe of a lower elevation plain known as the *Sable Ecodistrict*, a part of the *Western Ecoregion* (Neilly et al. 2017: 206-210, Unit 760). The ecodistrict is characterized by gentle hills, hummocks and extensive poorly drained flats. Slow flowing rivers result in broad wetlands. Bedrock within the ecodistrict consists of Meguma Group rock (slate, greywacke/quartzite and schist) along with Devonian period granite, granodiorite and tonalite in the southwestern section. Elevation within the project study area ranges from a minimum of approximately 29 metres above sea level (asl), in the southeast corner to a maximum of approximately 84 metres asl in the north-central portion (*Figure 2*).

Soils

Soils within the study area belong to the Gibraltar series (forest ecosystem classification soil types ST2, ST2-G, ST1, ST15, ST15-G, in order of probability; Keys 2007: 34) ST2 is medium to coarse textured with near surface soils consisting of sandy loam. Stone content is typically low except in areas where soils are derived from granite or quartzite till (Keys 2007, 8). Drainage is moderately well to rapid, depending on slope. Soil type ST2-G is similar to ST2 soils but contains a high percentage of granite or granodiorite stones and boulders on the surface and a resultant high subsurface coarse fragment content. Soil type ST1 consists of dry, coarse-textured or very gravelly medium-textured soils. It contains greater than 50% gravel/cobble content in surface horizons, except in sandy outwash or glaciofluvial deposits. Stone content ranges from low to high. Drainage is typically well or rapid but can be moderately well in areas of low or level slope. Soil type ST15 is similar to ST2 but have formed a fully cemented B-Horizon at depths shallower than 30 centimetres. Soil type ST15-G is similar to ST15 but contains a high percentage of granite or granodiorite stones and boulders on the surface and a resultant high subsurface coarse fragment content.

Flora

Spruce-pine dominated forest accounts for over half of the forestation in the Sable ecodistrict. White pine and red oak mixed wood forests are more commonly found on very dry coarse-textured soils derived from granite till. These forest types can occur on a variety of slope conditions. Spruce

hemlock forests occur in the northern portion of the ecodistrict and on drumlins along the Roseway River. As drainage decreases, black spruce, tamarack and red maple dominate (Neily 2017: 208).

4.1.2 Mi'kmaw Land Use

The land within the study area is part of the greater Mi'kmaw territory known as Kespukwitk, meaning 'land eel territory' (Sable, Francis & Lewis 2012). Land surrounding the study area is dense with lakes and watercourses that would have been important transportation corridors, providing a resource base for the Mi'kmaq, their ancestors and predecessors for millennia prior to the arrival of European settlers. In particular, the Roseway River is part of an intricate system of waterways facilitating travel across the province from the Fundy Shore and Annapolis Basin to the Atlantic Ocean, as well as providing a significant source of fluvial resources (Robertson 1983). The Roseway River and Shelburne Harbour share the Mi'kmaq name "So'qmkiknuk", meaning "At the place where the pole is used to push (instead of paddling)" (Ta'n Weji-sqalia'tiek 2015).

In Nova Scotia, information regarding archaeological sites is stored in the Maritime Archaeological Resource Inventory (MARI), a provincial archaeological site database, maintained by the Nova Scotia Museum. This database contains information on archaeological sites registered with the province within the Borden system. The Borden system in Canada is based on a block of latitude and longitude. Each block is referenced by a four-letter designator. Sites within a block are numbered sequentially as they are recorded. The study area lies within Borden Block AkDi.

A review of the MARI database determined that, while there are no registered Pre-contact archaeological sites within the study area, there is a site within a one-kilometre radius (**Table 1**). The Roseway River Quartz Scatter Site (AkDi-34), as its name suggests, is a scattering of quartz flakes identified along the bank of the Roseway River, approximately 740 metres east of the study area. Three additional sites within a five-kilometre radius are also each associated with access to water. The Carlyle Bower Site (AkDi-01) is a general activity site registered in 1973, located approximately 1.9 kilometres north of the study area. The site occupies a terrace overlooking the Roseway River and, at the time of reporting, contained several broad soil stains revealed through ploughing, possibly representing the remains of a Mi'kmaq campsite. The Eel Weir Site (AkDi-03), also reported in the early 1970s, consisted of a v-shaped fishing weir located in the Roseway River, located approximately 4.7 kilometres north of the study area. Lastly, an unnamed site (AkDi-02) listed as a possible Pre-contact burial site consisting of several stone piles, is located approximately 1.9 kilometres to the southeast near the head of Shelburne Harbour. It is speculated in the site registration that the stone piles may be the result of historic field clearing and not related to burials, and that more investigation would be required to determine the nature of the site.

The importance of the area to the Mi'kmaq is recorded well into the historic period. Thomas Jeffrey's chart of 1775 labels the southwest portion of the province with "Mikmaks or C. Sable Indians". Long Island, in the Roseway River was occupied by Mi'kmaq into the nineteenth century. In 1818, a petition to the province for a land grant of 200 acres at Long Island was made by Joseph Luxey and four other Mi'kmaq men. The petition states that the families had been residing there for 25 years and had made many improvements. The men were issued a license of occupation for the 200 acres. This petition may have been in response to the potential loss of their land caused by the arrival of Welsh settlers who would form Welshtown (NSA RG 20 Ser. A; RG1, Vol. 228; Robertson 1983: 2). By 1838, there were a reported 72 Mi'kmaq residing in Shelburne County, and a government report produced in 1843 identifies Mi'kmaw land on the Roseway River (NSA RG1 Vol. 432, pp 17-25; Howe 1843: 6).

Table 1: Pre-contact archaeological sites within a 5 kilometre radius of the Welshtown Quarry Expansion Project study area.

BORDEN NUMBER	SITE	TRADITION / FUNCTION	APPROXIMATE LOCATION
AkDi-01	Carlyle Bower	Pre-contact/General Activity	1.9 kilometres to the north along the east bank of Roseway River
AkDi-02	-	Undetermined Pre-contact Burials or Historic Field Clearing	1.9 kilometres to the southeast near the head of Shelburne Harbour
AkDi-03	Eel Weir	Pre-contact/Fishing Weir	4.7 kilometres to the north along the Roseway River
AkDi-34	Roseway River Quartz Scatter	Pre-contact/Flake Scatter	740 metres to the east along the bank of the Roseway River

Prior to undertaking the fieldwork portion of the assessment, CRM Group contacted KMKNO-ARD requesting information regarding traditional or historic Mi'kmaq use of the study area. They provided information that was taken into consideration when preparing the archaeological assessment. This information is confidential in nature, however, and cannot be reproduced in this report.

4.1.3 Historic Land Use

Despite being well known to sixteenth-century European fishing operations and appearing on early maps of the region (*e.g.* Homem 1588; Champlain 1607), Shelburne Harbour was not settled by Europeans until the late seventeenth century (Robertson 1983). By 1693, a small number of Acadian fishing families established a settlement at the head of the harbour called Port Razoir, apparently named for razor clams found there or for its resemblance to a partially closed straight razor (Robertson 1983: 2; Nova Scotia Archives 1967). However, three separate raids by New England privateers between 1699 and 1708 resulted in the abandonment of the community (Robertson 1983; Acker & Jackson 2001).

Within a short period of time, New England fishermen began utilizing the large, natural harbour, anglicizing the French name to Port Roseway. In the spring of 1715, New England naval commander Cyprian Southack attempted to create a permanent fishing station there, however, within a few short months, the enterprise was raided and burned by the Mi'kmaq (Plank 2001, 76-77; McLennan 1979, 64). Still, seasonal use of the harbour by the New England fishing industry continued, such that in 1722 a raid by notorious pirate Ned Low resulted in the capture of nine fishing shallops (Acker and Jackson, 2001).

In 1783, at the conclusion of the American Revolutionary War, thousands of Empire Loyalist settlers moved to the Maritimes. Port Roseway, renamed Shelburne in honour of William Petty, British Prime Minister and 2nd Earl of Shelburne, was selected to become a major Loyalist settlement. On May 4, 1783, approximately thirty vessels transporting roughly 3,000 settlers arrived in Roseway (Shelburne) Harbour and began clearing lines for street and town blocks. Among the land grants issued to Loyalist settlers was a series of thirteen 50 acres lots located north of the town plot. The project study area is situated within portions of the four northernmost lots, issued to John Davis, Joseph English, John Bailey, and William Warden (*Figure 3*). The grant does not depict Upper Clyde Road, first laid out in 1785, but identifies 'Herring Falls' within the Roseway River at the northeast corner of the Davis Lot. This appears to match the approximate location of the Roseway Power Dam (Robertson 1983: 166).

New settlers continued to arrive and by its peak in 1786, the population of Shelburne was approximately 16,000, briefly making it the fourth-largest community in North America, following only Boston, New York, and Philadelphia. Included among the members of the boomtown were approximately 1,500 freed Black slaves, who had been issued land on the unnavigable northwest branch of Shelburne Harbour – creating the settlement of Birchtown – the largest community of freed Blacks in North America (Acker & Jackson, 2001).

By 1787, however, a cessation of government supplies along with taxes and duties imposed on the merchants of Shelburne resulted in rapid decline for the community. By 1816, only 374 people remained. In 1818, a small group of settlers from Wales formed the community of New Cambria, later called Welshtown, on the west bank of the Roseway River, situated roughly six kilometres north of the study area. This community, along with Upper, Middle, and Lower Ohio, helped open the interior north of Shelburne. Beginning in the 1820s, shipbuilding became Shelburne’s primary industry. By 1866, there were eleven shipyards along a one kilometre-long stretch of Shelburne’s shoreline. Shipbuilding began to decline following confederation, shifting instead to boatbuilding. At the end of the nineteenth century, the community boasted four shipyards and seven boat shops (Acker & Jackson, 2001).

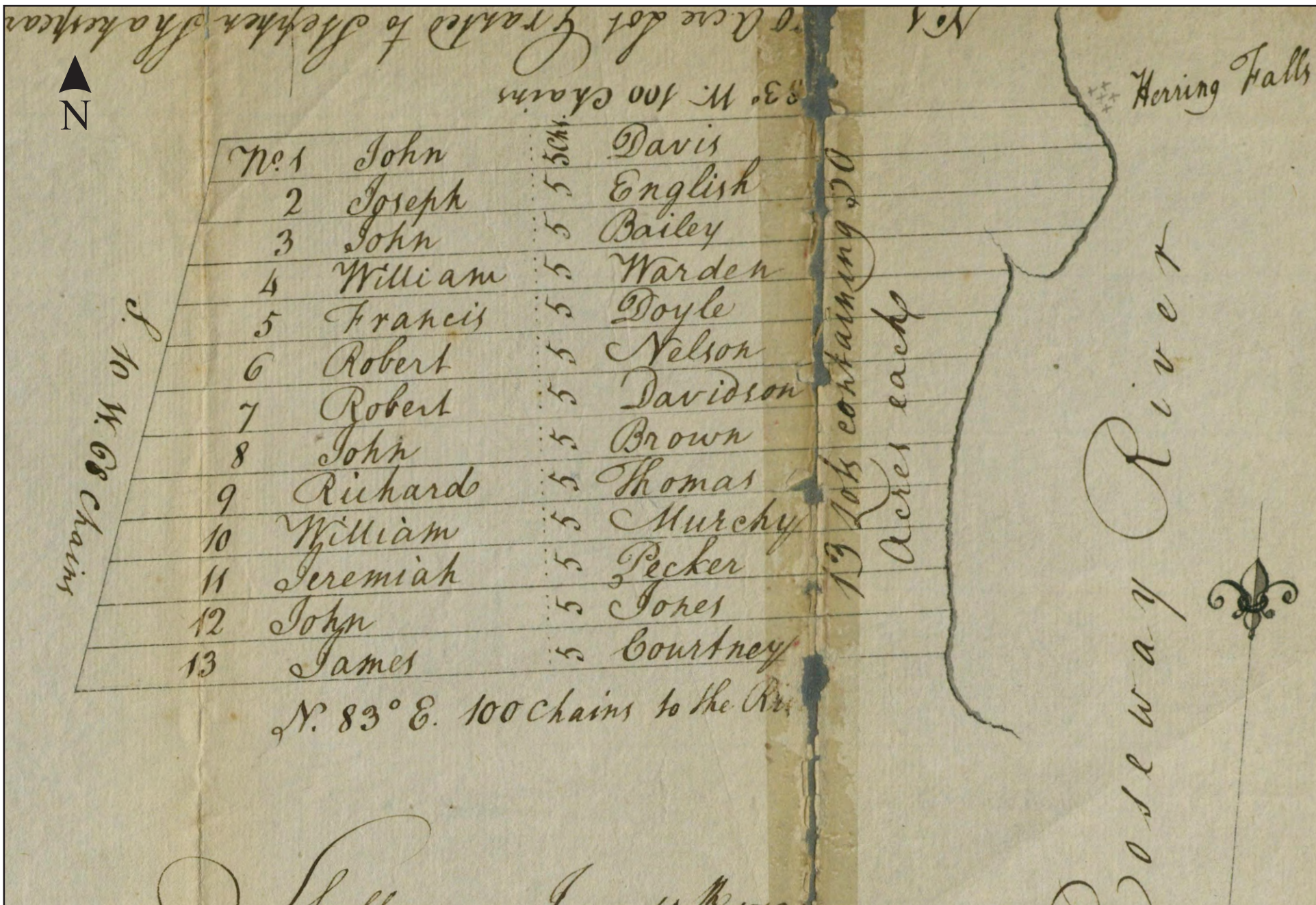
The 1882 A.F. Church map of Shelburne County depicts ‘the residence of J. Schultz opposite the study area, located on the west side of Upper Clyde Road (**Figure 4**). The study area appears undeveloped. Aerial photography from the middle of the twentieth century also shows the study area as undeveloped and wooded (**Figure 5**). Faint variation in vegetation cover along historic property boundaries is indicative of historic logging activity.

In 1993, the Birchtown Archaeological Survey, undertaken by the Shelburne County Cultural Awareness Society, resulted in the registration of the first 11 of an eventual 27 archaeological sites related to the history of Black Loyalist settlers in the community of Birchtown (Niven 1994). **Table 2** provides a brief summary of the registered historic period archaeological sites within five kilometres of the project study area. Sites AkDi-05 to AkDi-21 and sites AkDi-23 to AkDi-33 are domestic and/or agricultural sites, including cellar depressions and stone features related to the Black Loyalist community of Birchtown. They are situated approximately 3.1 to 4.9 kilometres southwest of the study area (MARI). The Sutherland Enclosure Site (AkDi-35) is located approximately one kilometre to the southeast of the study area and consists of a five-sided rock wall enclosure related to the early history of Shelburne.

Table 2: Historic Period Archaeological Sites within 5 kilometres of the Welshtown Quarry Expansion project study area.

BORDEN NUMBER	SITE	TRADITION / FUNCTION	APPROXIMATE LOCATION
AkDi-05 to AkDi-21; AkDi-23 to AkDi-33	Birchtown Complex	Historic Domestic and/or Agricultural Sites/Cellar Depressions in the vicinity of Birchtown	3.1 to 4.9 kilometres to the southwest
AkDi-35	Sutherland Enclosure	Historic/Domestic Site	1.0 kilometres to the southeast

Based on the research of the environmental setting and land-use history, including variable slope, thin soil, and distance from sources of water, historic roadways and occupation, the study area is ascribed low potential for encountering archaeological resources.





Legend

Approximate Study Area

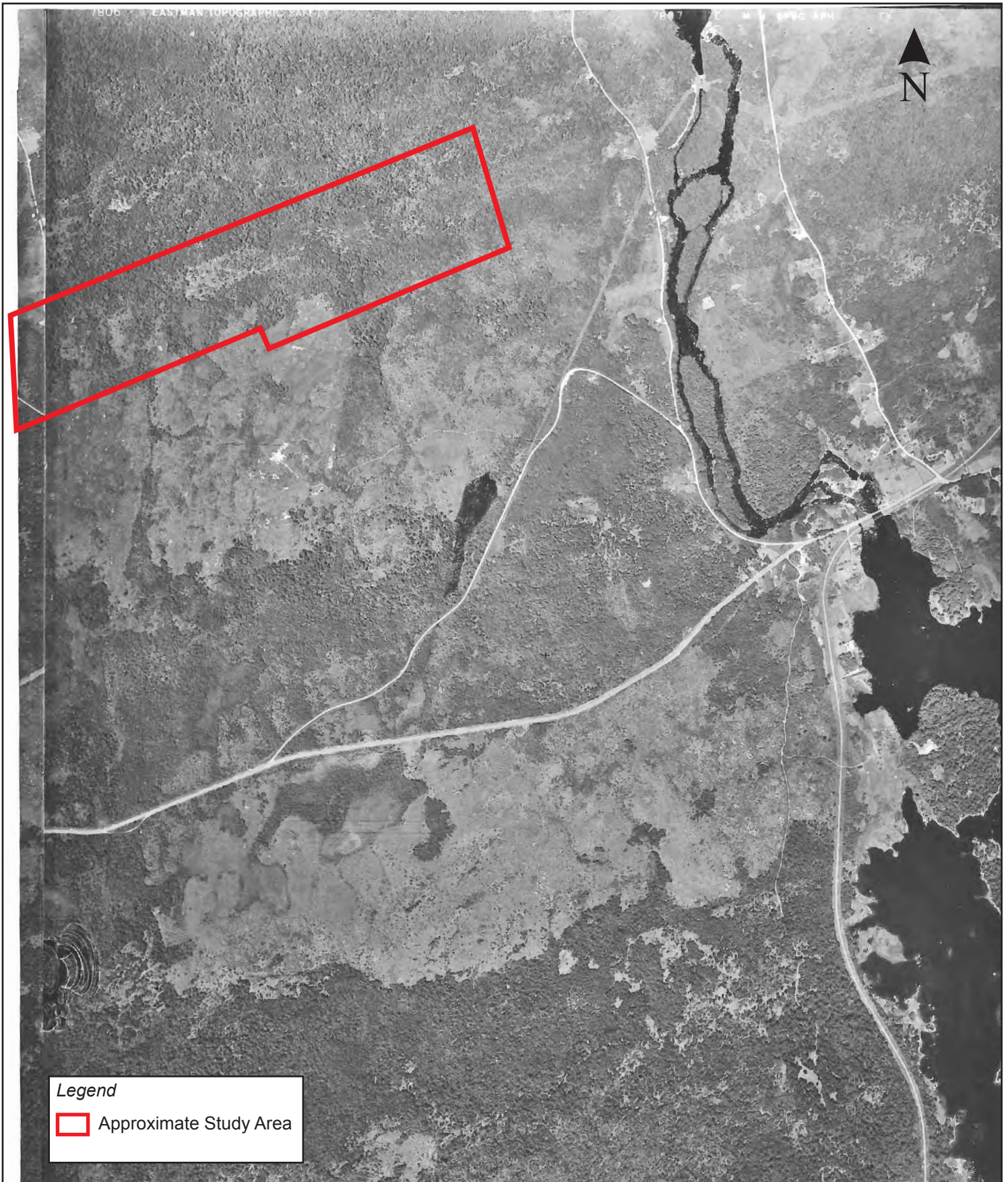
Church Map, 1882


Figure 4



WELSH TOWN QUARRY EXPANSION
 ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT 2020
 SHELburne COUNTY, NOVA SCOTIA

May 2020



	<i>Aerial Photograph, 1945</i>	<i>Figure 5</i>
	WELSHTOWN QUARRY EXPANSION ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT 2020 SHELBURNE COUNTY, NOVA SCOTIA	May 2020

4.2 Field Reconnaissance

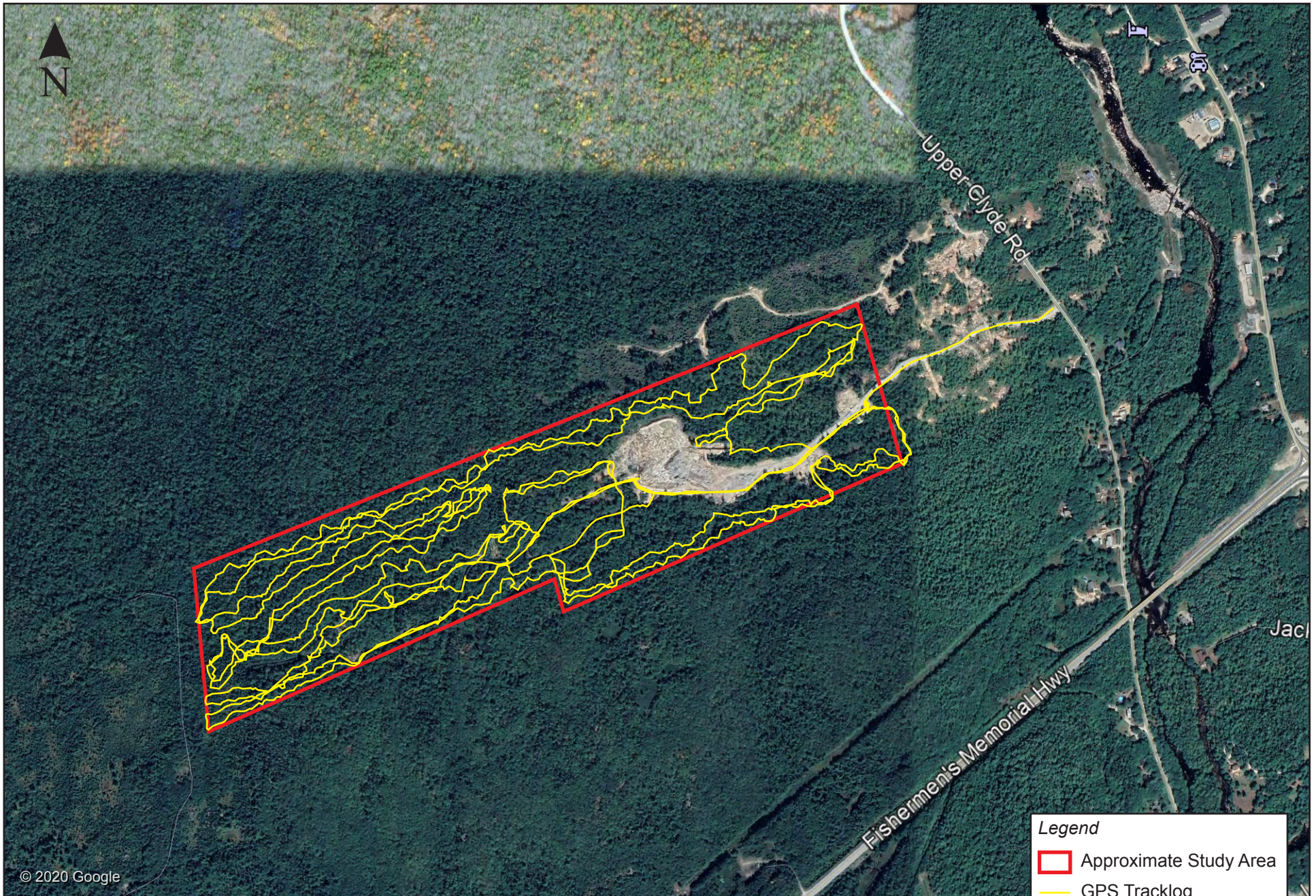
Fieldwork, consisting of archaeological reconnaissance, was undertaken May 5, 2020, under overcast but dry conditions (**Figure 6**). The primary purpose of the visit was to assess the area for archaeological potential and investigate any topographical and/or cultural features that had been identified as areas of elevated potential during the background research.

The terrain consisted primarily of a gentle to moderate (~8% grade), hummocky slope rising from the eastern end of the study area to the approximate midpoint before transitioning to a very gentle downward slope (~3% grade) across the western half of the study area (**Plate 2**). The topography was punctuated by numerous surface boulders and boulder piles, and brief sections of steep to very steep slope, including several rocky bluffs (**Plates 3 & 4**). Vegetation consisted primarily of Spruce-pine dominated forest with mixed hardwoods in well-drained areas. Tamarack was noted in wet locations. Areas of dense regenerating softwood were interspersed with moderately open mixed woods. Ground cover consisted of a mix of moss, shrubs and immature softwood. The thinness of the soil within the study area was evident by the numerous uprooted trees which exposed underlying cobbles and boulders (**Plate 5**). Ground conditions were primarily dry on sloped terrain with several wet areas containing dense sphagnum moss and/or standing water (**Plate 6**).



Plate 2: Area of moderate slope within the eastern half of the study area; facing north. May 5, 2020.

A small number of woods road/former logging roads bisect the study area extending primarily east to west (**Plate 7**). Evidence of historic forestry activity was present, with skidder tracks and the stumps of harvested trees encountered throughout the study area (**Plate 8**). No further evidence of land use, such as artificial levelling of land, field clearing, fencing, hunting blinds/camps, cellar depressions, or other forms of occupation was observed. No archaeological features or deposits were encountered. Based on the results of the field reconnaissance, the proposed Welshtown Quarry Expansion study area is ascribed low potential for encountering Pre-contact and/or historic Mi'kmaw, Euro-Canadian, or African-Nova Scotian archaeological resources.



Legend

- Approximate Study Area
- GPS Tracklog

500 m



GPS Tracklog

WELSH TOWN QUARRY EXPANSION
 ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT 2020
 SHELBURNE COUNTY, NOVA SCOTIA

Figure 6

May 2020



Plate 3: Surface boulder within eastern portion of the study area; facing south. May 5, 2020.



Plate 4: Rocky bluff within western half of study area; facing east. May 5, 2020.



Plate 5: Soil exposure caused by an uprooted tree in the eastern end of the study area; facing south. May 5, 2020.



Plate 6: Area of standing water within the Welsh town Quarry Expansion study area; facing south. May 5, 2020.



Plate 7: Wood road extending east-west across the western portion of the study area; facing west. May 5, 2020.



Plate 8: Evidence of historic logging within the Welshtown Quarry Expansion Study area. May 5, 2020.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The 2020 archaeological resource impact assessment of the Welshtown Quarry expansion study area consisted of a background study and site reconnaissance. It did not involve sub-surface testing. The background research and field reconnaissance conducted by CRM Group determined the study area exhibits low potential for encountering Pre-contact or historic Mi'kmaq and/or Euro-Canadian or African-Nova Scotian archaeological resources. This determination is based on the area being moderately sloped, thinly soiled, and relatively distant from significant sources of water and historic roadways and contained no evidence of occupation.

Based on these results, CRM Group offers the following management recommendations for the study area:

1. It is recommended that the study area, as defined and depicted in this report (**Figure 2**), be cleared of any requirement for future archaeological investigation.
2. In the unlikely event that archaeological deposits or human remains are encountered during activities associated with the development of the Welshtown Quarry, all work in the associated area(s) should be halted and immediate contact made with the Special Places Program (Anna Cross: 902-424-6475).

6.0 REFERENCES CITED

- Acker, Sarah and Lewis Jackson
2001 Historic Shelburne. Images of our Past Series. Halifax: Nimbus Publishing.
- Church, Ambrose F.
1882 *Topographical Township Map of Shelburne County, Nova Scotia*. Halifax: A.F. Church & Co.
- Davis, Derek & Sue Brown, eds.
1996 *The Natural History of Nova Scotia. Vol. 2. Theme Regions*. Halifax: Nimbus, Nova Scotia Museum.
- Department of Land and Forests
1946 *Crown Land Grant Index Sheet 18 – Shelburne County*. Nova Scotia Department of Natural Resources.
- Howe, Joseph
1843 Journal and Proceedings of the House of Assembly, 1843, Appendix No. 1, “Report on Indian Affairs”.
- Keys, Kevin
2007 *Forest Soil Types of Nova Scotia: Identification, Description, and Interpretation*. Nova Scotia Department of Natural Resources, Manual FOR 2007-2.
- Keys, Kevin, et. al.
2010 *Forest Ecosystem Classification for Nova Scotia, Part II: Soil Types (2010)*. Nova Scotia Department of Natural Resources Renewable Resources Branch, Report For 2011-3.
- McLennan, J. S.
1979 Louisbourg. The Bookroom Limited.
- Neily, Peter
2017 Ecological Land Classification for Nova Scotia. Report for 2017-23. Nova Scotia Department of Natural Resources.
- Niven, Laird
1994 Birchtown Archaeological Survey (1993) – The Black Loyalist Settlement of Shelburne County, Nova Scotia, Canada. Lockeport: The Roseway Publishing Company.
- Nova Scotia Archives
1819 Nova Scotia Department of Lands and Forests — Land grant registration books series Nova Scotia Archives RG 20 Ser. A - Luxey, Joseph & Four Other Indians

- 1836 Abstract of Letters addressed to the Provincial Secretary, in Reply to a Circular Requesting Information of the Number and Conditions of the Indians, in the Several Counties in Nova Scotia. RG1 Vol. 432, pp 17-25.
- 1967 *Place-names and Places of Nova Scotia*. Halifax: NSARM.
- Plank, Geoffrey
2003 *An Unsettled Conquest: The British Campaign Against the Peoples of Acadia*. University of Pennsylvania Press.
- Rand, Silas T.
1875 *A First Reading Book in the Micmac Language*. Halifax: Nova Scotia Printing Company.
- Robertson, Marion
1983 *King's Bounty – A History of Early Shelburne Nova Scotia*. Halifax: Nova Scotia Museum.
- Sable, Trudy, Bernard Francis and Roger J. Lewis
2012 *The Language of this Land, Mi'kma'ki*. Sydney: Cape Breton University Press.
- Ta'n Weji-sqalia'tiek: Mi'kmaw Place Names
2015 <http://gis.membertougeomatics.com/mpnmap/>



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August 20, 2020

Robert Shears
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Dear Robert Shears:

**RE: Heritage Research Permit Revised Report
A2020NS044 – Welshtown Quarry Expansion**

We have received and reviewed the revised report on work conducted under the terms of Heritage Research Permit A2020NS044 for an archaeological resource impact assessment of the Welshtown Quarry Expansion in Shelburne County.

The report details the ARIA of the proposed Welshtown Quarry expansion project area on the Upper Clyde Road, northwest of the Town of Shelburne, Shelburne County by CRM Group Ltd. in May 2020. The assessment included background and historical research, a review of Indigenous land use and prehistory, a review of the environmental context, and field reconnaissance with inspection of exposed soils and sediments. No archaeological resources were encountered or recorded. No shovel testing took place.

Based on the above, the reporter determined that the study area exhibits low potential for encountering Pre-contact or historic Mi'kmaq and/or Euro-Canadian or African-Nova Scotian archaeological resources. This determination is based on the area being moderately sloped, thinly soiled, and relatively distant from significant sources of water and historic roadways. The study area also contained no evidence of occupation. The reporter therefore recommends that the study area, as defined and depicted in this report (**Figure 2**), be cleared of any requirement for future archaeological investigation. Also, in the unlikely event that archaeological deposits or human remains are encountered during activities associated with the development of the Welshtown Quarry, all work in the associated area(s) should be halted and immediate contact made with the Special Places Program (Anna Cross: 902-424-6475).

CCH Staff agrees with the recommendations and finds the revised report acceptable with one amendment. Please do not hesitate to contact me should you have any questions or concerns.

Sincerely,

Anna Cross
Acting Coordinator, Special Places

APPENDIX F
PUBLIC CONSULTATION DOCUMENTATION

Environmental Assessment Registration Document:
Welshtown Quarry Expansion
Shelburne, Municipality of the District of Shelburne
Nova Scotia



April 24, 2020

Acadia First Nation
10526 Highway #3
Yarmouth, NS
B5A 5J7

Attn: Chief Deborah Robinson

**Re: Welshtown Quarry Expansion Project, Shelburne County
Class 1 Undertaking Under Section 9(1) of the Environmental Assessment Regulations**

This letter is intended to provide early notification regarding the proposed Welshtown Quarry Expansion Project (the Project) that Dexter Construction Company Limited (Dexter) intends to register for Environmental Assessment in the fall of 2020, in accordance with Part IV of the *Environment Act*. Through this letter Dexter is seeking early engagement to proactively identify and address potential First Nation's concerns regarding the Project.

Dexter currently operates an existing less than 4-hectare Nova Scotia Environment (NSE) approved aggregate quarry located off Upper Clyde Road near Welshtown, Shelburne County, Nova Scotia. The existing quarry has been operated since 2018 and is utilized periodically during the road construction season to provide construction aggregates for local projects as well as Nova Scotia Transportation and Infrastructure Renewal (NSTIR) projects in the area. It is the intent of Dexter to expand the existing quarry to provide additional aggregate reserves to support local infrastructure needs in the future. Other than a proposed increase in the quarry operating footprint, future quarry operations are not anticipated to change in scope or increase in frequency from past use.

Dexter and its environmental consultants are completing various desktop reviews and field studies in support of the Project. Cultural Resource Management Group Ltd. (CRM) has been contracted to undertake an Archaeological Resource Impact Assessment (ARIA) for the Project. The ARIA will include engaging the Kwilmu'lw Maw-klusuaq Negotiation Office's Archaeological Research Division as well as the local First Nation to request any information pertaining to traditional or historical Mi'kmaq use of the study area.

Attached is a plan showing the Study Area for this project. The nearest First Nation community to the Project is Acadia First Nation which is located approximately 57 kilometers west of the existing quarry.

Dexter will follow up with a second notification letter in the weeks leading up to Project registration with NSE. In the interim, we would be pleased to discuss this project with you at your convenience via conference call. Alternatively, we could schedule an in person meeting once COVID-19 restrictions have been eased. If you would like to discuss the Project further, please contact the undersigned.

Sincerely,

DEXTER CONSTRUCTION COMPANY LIMITED

Gary Rudolph, P.Eng
Director of Aggregates

grudolph@dexter.ca

902-832-6346

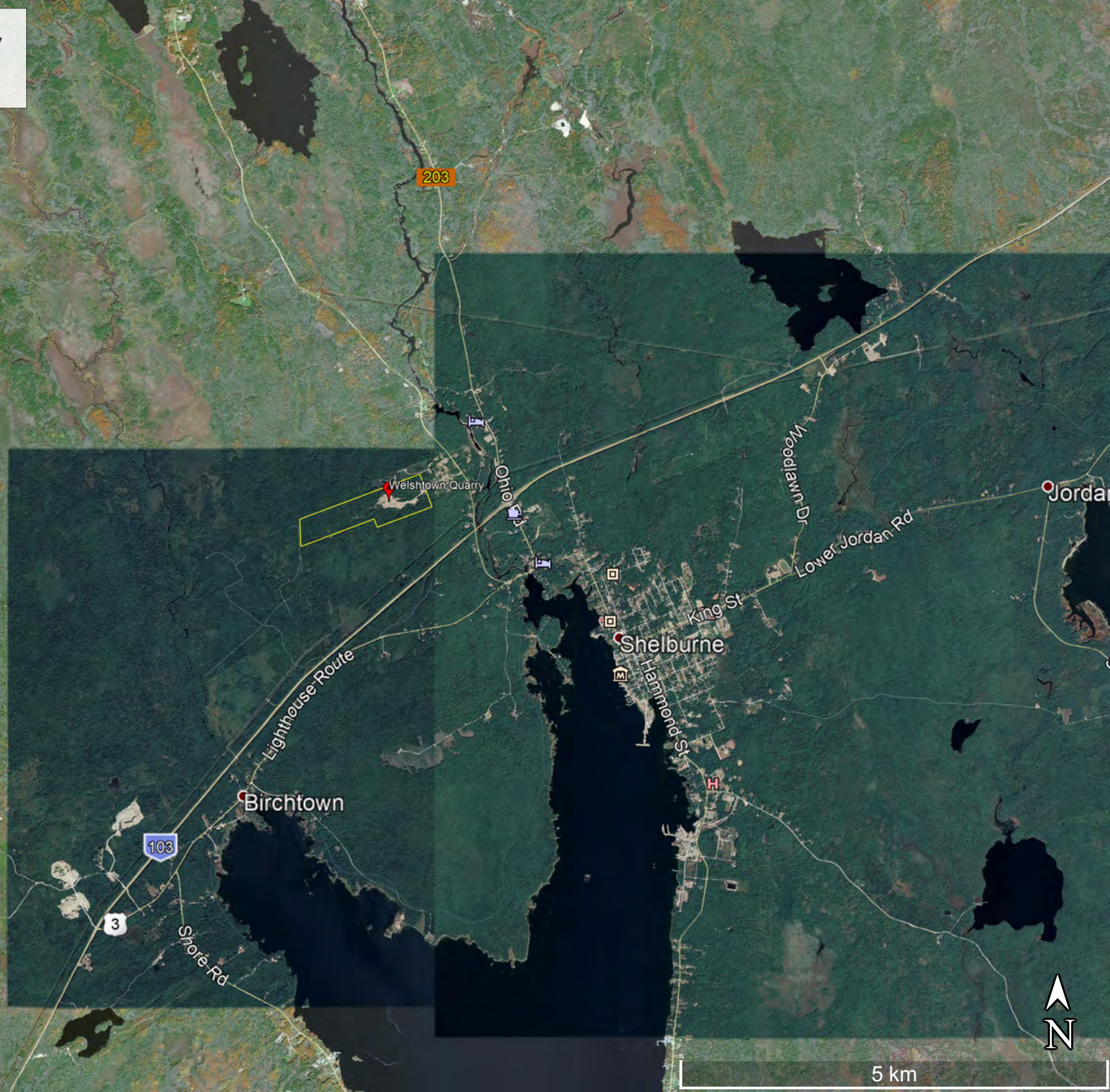
Copy: Twila Gaudet, Mi'kmaq Rights Initiative
Gillian Fielding, Office of Aboriginal Affairs

Welshtown Quarry

EA Study Area

Google Earth

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Image © 2020 Province of Nova Scotia
Image © 2020 Maxar Technologies
Image © 2020 CNES / Airbus



Welshtown Quarry

203

103

3

Birchtown

Shelburne

Jordan

5 km





October 20, 2020

Acadia First Nation
10526 Highway #3
Yarmouth, NS
B5A 5J7

Attn: Chief Deborah Robinson

**Re: Welshtown Quarry Expansion Project, Shelburne County
Class 1 Undertaking Under Section 9(1) of the Environmental Assessment Regulations**

Further to our letter of April 24, 2020 regarding the proposed Welshtown Quarry Expansion Project (the Project), this letter is to inform you that Dexter Construction Company Limited (Dexter) will be officially registering the Project for Environmental Assessment (EA) on November 3, 2020. Public Notices accompanying the registration will appear in the Chronicle Herald on November 3, 2020 (copy of the draft Notice attached). Hard copies of the EA Registration Document will be available for review at the Shelburne Municipal Office and the Nova Scotia Environment (NSE) Regional Office in Yarmouth, Nova Scotia. An electronic copy of the document will be available through the NSE website (<https://www.novascotia.ca/nse/ea/>).

Any questions or comments regarding the Project can be forwarded to Dexter or Mr. Jeremy Higgins, NSE EA Coordinator, until December 3, 2020. In the interim, we would be pleased to meet with you to discuss the Project should you have any questions or concerns. If you would like to schedule a meeting, please contact the undersigned at your convenience.

Sincerely,

DEXTER CONSTRUCTION COMPANY LIMITED

Gary Rudolph, P.Eng
Director of Aggregates

grudolph@dexter.ca

902-832-6346

Copy: Twila Gaudet, Mi'kmaq Rights Initiative
Gillian Fielding, Office of Aboriginal Affairs



April 24, 2020

Native Council of Nova Scotia
129 Truro Heights Road
Truro, NS
B6L 1X2

Attn: Chief Lorraine Augustine

**Re: Welshtown Quarry Expansion Project, Shelburne County
Class 1 Undertaking Under Section 9(1) of the Environmental Assessment Regulations**

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DEXTER CONSTRUCTION COMPANY LIMITED

Gary Rudolph, P.Eng
Director of Aggregates

grudolph@dexter.ca

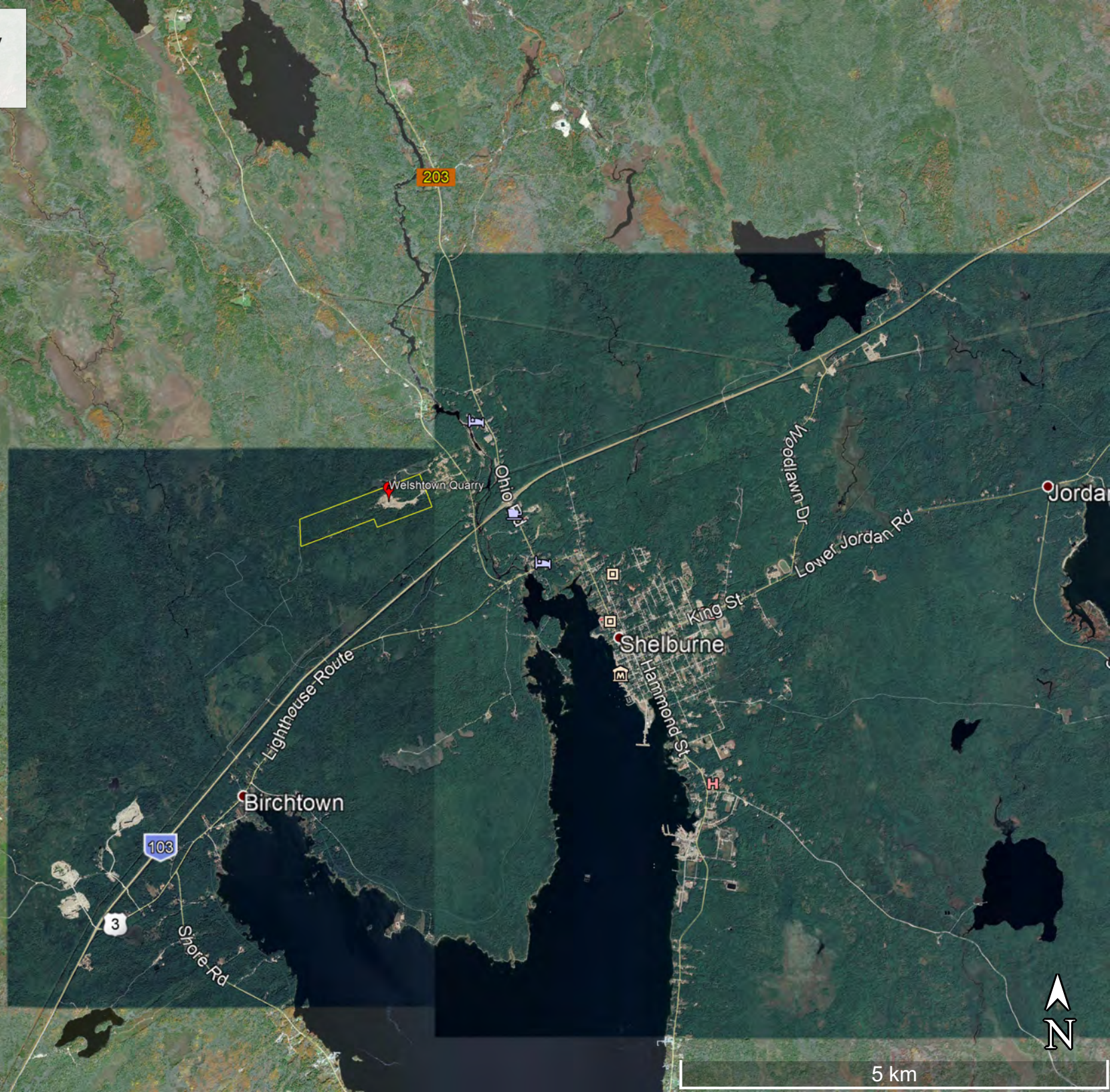
902-832-6346

Welshtown Quarry

EA Study Area

Google Earth

© 2020 Google
Image © 2020 Province of Nova Scotia
Image © 2020 Maxar Technologies
Image © 2020 CNES / Airbus



Welshtown Quarry

203

103

3

Lighthouse Route

Shore Rd

Birchtown

Shelburne

King St

Hammond St

Woodlawn Dr

Lower Jordan Rd

Jordan

5 km





October 20, 2020

Native Council of Nova Scotia
129 Truro Heights Road
Truro, Nova Scotia
B6L 1X2

Attn: Chief Lorraine Augustine

**Re: Welshtown Quarry Expansion Project, Shelburne County
Class 1 Undertaking Under Section 9(1) of the Environmental Assessment Regulations**

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Sincerely,

DEXTER CONSTRUCTION COMPANY LIMITED

Gary Rudolph, P.Eng
Director of Aggregates

grudolph@dexter.ca

902-832-6346

NOTICE

Registration of Undertaking for Environmental Assessment ENVIRONMENT ACT

This is to advise that on November 3, 2020, Dexter Construction Company Limited registered the Welshtown Quarry Expansion Project for environmental assessment, in accordance with Part IV of the *Environment Act*.

The purpose of the proposed undertaking is to expand an existing quarry located at 10740 Upper Clyde Road, Welshtown, Shelburne County, Nova Scotia. The existing quarry has been in operation for approximately 5 years. The land associated with the expanded quarry will occupy a maximum of 35.3 hectares, which includes the existing quarry footprint. A project life of up to 40 years is expected. The expanded quarry will support continued extraction and production of aggregate products used primarily in the road construction industry in Shelburne County. It is expected that the continued use of the quarry will be identical, or very similar, to historic use at the site. The project is anticipated to commence during the 2021 construction season with production volumes of approximately 50,000 tonnes per year during years in which the quarry is active.

Copies of the environmental assessment registration information may be reviewed at the following locations:

- Municipal Office, 136 Hammond Street, Shelburne, NS
- Nova Scotia Environment, Yarmouth Office: 55 Starrs Road, Unit 9, Yarmouth, NS
- NSE EA website (when available) <https://www.novascotia.ca/nse/ea/>

The public is invited to submit written comments to:

Environmental Assessment Branch, Nova Scotia Environment
P.O. Box 442, Halifax, Nova Scotia B3J 2P8

on or before December 3, 2020 or contact the Department at 902-424-3600, 902-424-6925 (Fax), or e-mail at EA@novascotia.ca.

All comments received from the public consultation will be posted on the department's website for public viewing. In the case of an individual, the address, email and contact information will be removed before being placed on the website. By submitting your comments, you are consenting to the posting of your comments on the department's website.

Published by: Dexter Construction Co Ltd, 927 Rocky Lake Dr, PO Box 48100, Bedford, NS, B4A 3Z2