



# Phase I Environmental Site Assessment

Former US Military Mid Canada Line Radar Site 206  
Harbour Lake, NL

Department of Environment and Conservation

1118 Topsail Road, PO Box 8353 Station A St. John's NL A1B 3N7 Canada  
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## **EXECUTIVE SUMMARY**

GHD Limited (GHD, formally Conestoga Rovers & Associates (CRA)) were retained by the Government of Newfoundland & Labrador, Department of Environment and Conservation (ENVC) to complete a Phase I Environmental Site Assessment (ESA) of the former United States (US) Military Mid Canada Line (MCL) Radar Site 206 known as Harbour Lake (Site or Property) located approximately 97 kilometres west of the Town of Hopedale, Newfoundland and Labrador (NL). The Harbour Lake facility operated as a Doppler Detection Station. Each Doppler location consisted of an upper Site containing radar equipment and ancillary support services and a lower Site, several kilometers away, situated on the shores of a lake. The lower Site is essentially a fuel storage facility from which fuel was hauled in winter to the upper Site. The Sites were remote and accessible only by helicopter at the upper Site and by fixed wing or helicopter at the lower Site. Based on the information provided to GHD as part of the initial call-up for services under the Impacted Sites Liability Assessment Program, the Site was part of the MCL.

The MCL was a series of radar stations located along the 55<sup>th</sup> parallel between Alaska and Newfoundland built to supplement the less-advanced Pinetree Line, which was located further south. Around 1951, the US military began construction of the Pinetree Line that was a network of Aircraft Control and Warning (AC&W) stations that acted as a radar curtain to detect Soviet aircraft flying toward potential US and Canadian targets during the Cold War. Construction of the Pinetree Line had only just begun when there were concerns about its capabilities and the fact it would be possible for Soviet bombers to evade detection by flying lower. They would eventually be seen as they approached the stations, but possibly so late that there would be no possibility of intercepting them. The MCL Doppler detection radar system was built to avoid this problem by using a transmitter and receiver, separated by approximately 90 km. Any aircraft flying between the antennas would be detected when it entered the beam, causing the received signal to change, thus allowing the identification and interception of enemy aircraft. Around 1953, the MCL had been approved; however, unlike the jointly-operated Pinetree Line and future Distant Early Warning Line (DEW Line), the MCL would be funded and operated entirely by the Royal Canadian Air Force (RCAF).

Construction of the MCL began in 1956, and was declared fully operational on January 1, 1958. The Harbour Lake facility formerly contained a one story operations building housing the radio equipment, a heating and power plant, sleeping area, and a kitchen. The station was also equipped with four Communication Antennae towers linked by a cable trough and wood trestle, an emergency shelter, nine aboveground storage tanks (ASTs), and a helicopter pad, all of which were connected via gravel access roads. In

addition to the Harbour Lake station facilities on top of the hill, a lower Site was located several kilometers away, situated on the shores of a lake. The lower Site was essentially a fuel storage facility from which fuel was hauled in winter to the upper Site. The lower Site formally contained a one story accommodations building, a fuel pump house, a storage shed and seven ASTs.

It was not long before the RCAF started to have reservations about the costs of maintaining the Line. The extra time offered by the MCL was not considered worth the trouble of keeping the line operational. Even before the line became operational, a new and more capable line was already under study that would combine the plotting capability of the Pinetree system with the line-breaking capabilities of the MCL, and located much further north to dramatically improve the detection and response times, known as DEW Line, which became operational in 1957. The entire MCL including the Harbour Lake station was shut down in April 1965.

The former buildings and equipment remained abandoned until the Provincial government tendered a contract to dismantle and decommission the remaining structures at the Site in 1987. The concrete foundations of the former structures still remain at the Site.

The purpose of the Phase I ESA was to identify, through a non-intrusive investigation, the existence of any significant actual or potential areas of environmental impairment associated with the Property. The Phase I ESA was conducted in general accordance with the Canadian Standard Association (CSA) Standard Z768-01 for conducting ESAs that included a review of Site history, document review, interviews with individuals knowledgeable of the Site operations, and correspondence with regulatory agencies. As indicated in the request for proposal, and given the location and time of year, a Site visit was not completed as part of the Phase I ESA. Based on the Phase I ESA findings, the following potential environmental impairment issues were identified with respect to the Site:

- **Historic Handlings, Use, and Storage of Petroleum Hydrocarbons:** As a self-sufficient Doppler detection station in a remote location, significant quantities of fuel was formerly stored at the Site in ASTs, as well as in thousands of Petroleum, Oils and Lubricants (POL) drums. The Site also formerly contained a helicopter landing pad that contained drum storage. The potential for petroleum hydrocarbon impacts exist as a result of the historical petroleum storage and distribution activities conducted at the Site. The main areas of concern would include the former main Site (in the area of the former ASTs), the lower Site (in the area of the former ASTs),

along the former product pipelines, and the former helicopter landing area, as well as in the former landfill area.

- **Solid Waste/Recyclables:** During the operation of the facility from 1957 to 1965 solid waste was historically disposed in an unlined landfill (unknown location). Based on historical activities at the Site, the landfill may contain former asbestos containing materials (ACMs); material with painted surfaces containing lead and/or mercury based paint, former electrical equipment containing polychlorinated biphenyls (PCBs), mechanical equipment debris, motor repair wastes and/or drums formerly containing POLs as well as other solvents. The Site decommissioning program was completed under the approval of ENVC in 1987, and included the razing of all remaining structures and the burning of all materials on Site, followed by the burying and covering of the debris and other remaining materials. It is noted that the contractor typically buried the debris in at least two locations when the Site contained an upper and lower site. This was completed due to the distance and effort required to transport metal/other debris from the lower Site to the upper Site. Although not documented, it can be assumed this was the case during the Site decommissioning at the Harbour Lake station. The location of the burial sites was not identified in the documents review. As a Site visit was not part of the scope, it is unknown if these areas remain covered as reported in the 1987 field program.
- **Heavy Metals:** Possible sources of heavy metals may be associated with past operations. The former on-Site buildings were constructed in the 1950s; therefore, the potential exists that lead/mercury based paint was used on the interior and exterior surfaces which may have potentially impacted the surface soils.
- **Polychlorinated Biphenyls (PCBs):** Past uses of PCBs were identified through the records review and regulatory responses. PCBs were historically used as an insulator and coolant in electrical transformers and capacitors at the Site. PCBs were commonly used because they were chemically inert, not affected by acids and corrosive chemicals, did not conduct electricity and would not burn (only at extremely high temperatures). Although the US banned the use of PCBs in 1972, the Harbour Lake station was in operation from approximately 1957 to 1965.

## TABLE OF CONTENTS

	Page
1.0 INTRODUCTION.....	1
2.0 BACKGROUND.....	2
3.0 HISTORICAL RECORDS.....	3
3.1 REGULATORY CORRESPONDENCE.....	3
3.2 PROPERTY TITLE SEARCH.....	4
3.3 AERIAL PHOTOGRAPHS.....	5
3.4 PREVIOUS ENVIRONMENTAL REPORTS.....	5
3.5 INTERVIEWS.....	6
4.0 ENVIRONMENTAL PROPERTY ASSESSMENT.....	6
4.1 PROPERTY OVERVIEW.....	6
4.2 ENVIRONMENTAL SETTING/ADJACENT LAND USE.....	8
4.3 UNDERGROUND STORAGE TANKS (USTs).....	8
4.4 ABOVEGROUND STORAGE TANKS (ASTs).....	8
4.5 UTILITY SERVICES.....	9
4.6 CHEMICAL USE AND STORAGE.....	10
4.7 SOLID WASTE/RECYCLABLES.....	10
4.8 HAZARDOUS WASTE.....	10
4.9 WASTEWATER.....	10
4.10 STORMWATER.....	11
4.11 ASBESTOS-CONTAINING MATERIALS (ACM).....	11
4.12 POLYCHLORINATED BIPHENYLS (PCBs).....	11
4.13 HEAVY METALS.....	11
4.14 OZONE-DEPLETING SUBSTANCES (ODS).....	12
4.15 AIR EMISSIONS.....	12
4.16 IONIZING RADIATION.....	12
4.17 CHEMICAL SPILLS/RELEASES.....	12
4.18 OTHER ISSUES OF POTENTIAL ENVIRONMENTAL CONCERN.....	12
5.0 CONCLUSIONS.....	13

LIST OF FIGURES  
(Following Text)

FIGURE 1	SITE LOCATION MAP
FIGURE 2	SITE PLAN – LOWER SITE
FIGURE 3	SITE PLAN – UPPER SITE

LIST OF APPENDICES

APPENDIX A	QUALIFICATIONS OF SITE ASSESSORS
APPENDIX B	REGULATORY CORRESPONDENCE
APPENDIX C	PROPERTY TITLE SEARCH INFORMATION
APPENDIX D	AERIAL PHOTOGRAPHS

## 1.0 INTRODUCTION

GHD Limited (GHD, formally Conestoga Rovers & Associates (CRA)) were retained by the Government of Newfoundland & Labrador, Department of Environment and Conservation (ENVC) to complete a Phase I Environmental Site Assessment (ESA) of the former United States (US) Military Mid Canada Line (MCL) Radar Site 206 known as Harbour Lake (Site or Property) located approximately 97 kilometres west of the Town of Hopedale, Newfoundland and Labrador (NL). The Harbour Lake facility operated as a Doppler Detection Station. Each Doppler location consisted of an upper Site containing radar equipment and ancillary support services and a lower Site, several kilometers away, situated on the shores of a lake. The lower Site is essentially a fuel storage facility from which fuel was hauled in winter to the upper Site (See Figure 1). The Sites were remote and accessible only by helicopter at the upper Site and by fixed wing or helicopter at the lower Site. Based on the information provided to GHD as part of the initial call up for services under the Impacted Sites Liability Assessment Program, the Site was part of the MCL.

The purpose of the Phase I ESA was to identify, through non-intrusive investigation, the existence of any significant actual or potential areas of environmental impairment associated with the Property. A Site Location Map is included as Figure 1, and a Site Plan of the Lower Site, and Upper Site are included as Figure 2, and 3; respectively.

The Phase I ESA was conducted in general accordance with the Canadian Standard Association (CSA) Standard Z768-01 for conducting ESAs. The qualifications of the GHD personnel who completed the Phase I ESA are provided in Appendix A. The Phase I ESA included a review of Site history, document review, interviews with individuals knowledgeable of the Site operations, and correspondence with regulatory agencies. As indicated in the request for proposal, and given the location and time of year, a Site visit was not completed as part of the Phase I ESA. The following tasks were conducted during this assessment:

- Review of an electronic environmental database search
- Review of available fire insurance plans and aerial photographs
- Review of any available previous environmental reports and company files
- Review of past and current Property usage and adjacent property occupancy
- Observations of any conditions that represented potential environmental concerns
- Review of chemical usage and storage and spill/release incidents
- Review of underground and aboveground storage tank records

- Review of air emissions and wastewater discharges
- Review of waste handling, storage, and disposal practices
- Review of equipment that potentially contains polychlorinated biphenyls (PCBs)
- Observations of potential asbestos-containing materials (ACM)
- Inquiries with regulatory agencies and discussions with persons knowledgeable of the Site and Site operations

GHD relied on information received from all parties as accurate, unless contradicted by field observations or written documentation.

The following report summarizes the information gathered by GHD during the Phase I ESA and identifies any significant actual or potential environmental impairment issues associated with the related Property.

This Phase I ESA has been prepared for the use of ENVC and may not be relied upon by others without the written concurrence of GHD and ENVC.

## **2.0 BACKGROUND**

The MCL was a series of radar stations located along the 55<sup>th</sup> parallel between Alaska and Newfoundland built to supplement the less-advanced Pinetree Line, which was located further south. Around 1951, the US military began construction of the Pinetree Line that was a network of Aircraft Control and Warning (AC&W) stations that acted as a radar curtain to detect Soviet aircraft flying toward potential US and Canadian targets during the Cold War. Construction of the Pinetree Line had only just begun when there were concerns about its capabilities and the fact it would be possible for Soviet bombers to evade detection by flying lower. They would eventually be seen as they approached the stations, but possibly so late that there would be no possibility of intercepting them. The MCL Doppler detection radar system was built to avoid this problem by using a transmitter and receiver, separated by approximately 90 km. Any aircraft flying between the antennas would be detected when it entered the beam, causing the received signal to change, thus allowing the identification and interception of enemy aircraft. Around 1953, the MCL had been approved; however, unlike the jointly-operated Pinetree Line and future Distant Early Warning Line (DEW Line), the MCL would be funded and operated entirely by the Royal Canadian Air Force (RCAF).

Construction of the MCL began in 1956, and was declared fully operational on January 1, 1958. The Harbour Lake facility formerly contained a one story operations building housing the radio equipment, a heating and power plant, sleeping area, and a kitchen.



The station was also equipped with four Communication Antennae towers linked by a cable trough and wood trestle, an emergency shelter, nine aboveground storage tanks (ASTs), and a helicopter pad, all of which were connected via gravel access roads. In addition to the Harbour Lake station facilities on top of the hill, a lower Site was located several kilometers away, situated on the shores of a lake. The lower Site was essentially a fuel storage facility from which fuel was hauled in winter to the upper Site. The lower Site formally contained a one story accommodations building, a fuel pump house, a storage shed and seven ASTs.

It was not long before the RCAF started to have reservations about the costs of maintaining the Line. The extra time offered by the MCL was not considered worth the trouble of keeping the line operational. Even before the line became operational, a new and more capable line was already under study that would combine the plotting capability of the Pinetree system with the line-breaking capabilities of the MCL, and located much further north to dramatically improve the detection and response times, known as DEW Line, which became operational in 1957. The entire MCL including the Harbour Lake station was shut down in April 1965.

The former buildings and equipment remained abandoned until the Provincial government tendered a contract to dismantle and decommission the remaining structures at the Site in 1987. The concrete foundations of the former structures still remain at the Site.

### **3.0 HISTORICAL RECORDS**

Historical land use of the Property was investigated by GHD through a review of regulatory correspondence, Property title documents, aerial photographs, and available documents or reports pertaining to the Site.

#### **3.1 REGULATORY CORRESPONDENCE**

The Government of Newfoundland and Labrador – Service NL (Service NL) were requested to undertake a search of their records for documentation pertaining to environmental issues at the Site. In their letter response dated March 4, 2015, Service NL indicated to the best of their knowledge and on a search of the files they have reviewed, they are not aware of any outstanding environmental concerns with regards the property.

The ENVC completed a file review and provided the following relevant information:

- Report on “*PCB Spills and General Environmental Mismanagement at EX-USAF Bases in Labrador*”, Resource Program Division, Intergovernmental Affairs Secretariat, Government of Newfoundland and Labrador, dated April 15, 1981.
- Correspondences between the Government of Newfoundland & Labrador and the Government of Canada regarding the clean up and funding of the abandoned radar sites.
- Demolition and Site Restoration, Former Radar Sites Contract Package, February 2, 1987.
- Correspondence between the Government of Newfoundland & Labrador and the sub-contractor (Titan Holdings Ltd) awarded the contract to decommission the Site.
- Site restoration status report, July 31, 1987.
- Report on “*Environmental Inspection Abandoned Military Sites in Labrador*”, Environmental Management Division, Department of Environment and Labour, NL, dated October, 1996.

Environment Canada (EC) was requested to undertake a search of their records with respect to documentation of environmental issues regarding the subject Property. Receipt acknowledgement letters were issued by EC (received by GHD on March 11 and April 7, 2015), indicating the request was being processed and a response will be provided as soon as possible.

Copies of the requests by GHD along with relevant correspondence from Service NL, ENVC, and EC are provided in Appendix B.

### **3.2 PROPERTY TITLE SEARCH**

Property title information was obtained from the Government of Newfoundland and Labrador Crown Land Division. In addition, a review of ENVC archived files (most notably the 1981 report on “*PCB Spills and General Environmental Mismanagement at EX-USAF Bases in Labrador*”) provided some supplemental information regarding title of the Property, which is included below.

To Canada:	Minute of Council (M.C.) 20 - '57 (M. & R. 3 -'57)	1957 (1957)
To NL:	(M.A. & R. 3 (c) - '65 Privy Council (P.C.) 1965-1125	(1965)

Conveyed to Department of National Defence (DND) in connection with the Mid Canada Line negotiation. The lots were transferred back to the Province on June 18, 1965 by federal P.C. (See M.A. &R. 3(C) –'65) and approved 29-10-1965 but no M.C. has been found for any of the lots. Conditions of original transfer were that the lands of all times had to be used for the purposes of and in connection with Mid Canada Line and were to revert to Newfoundland in the event that they ceased to be used for that purpose.

Reference is in Federal Reservation Book (FRB) Vol. 1, Folio 50.

The results of the Property title search are included in Appendix C.

### **3.3 AERIAL PHOTOGRAPHS**

Aerial photographs from 1968 and 2010 were reviewed during the Phase I ESA. It is noted that only aerial photographs of the lower Site were available for review. The observations of the aerial photograph review are presented below. Copies of the aerial photographs are included as Appendix D.

Although not quite clear due to the scale the 1968 aerial photograph shows the lower part of the Site is cleared and developed with structures (buildings, and ASTs, etc.) present.

The 2010 aerial photograph shows the lower Site as decommissioned with only the concrete foundations from the former structures remaining.

### **3.4 PREVIOUS ENVIRONMENTAL REPORTS**

The following historical reports were provided regarding the general issues associated with the former military sites in Labrador. The following details the reports reviewed pertaining to the Site.

The Government of Newfoundland and Labrador (Resource Program Division, Intergovernmental Affairs Secretariat) completed a report entitled: "*PCB Spills and General Environmental Mismanagement at EX-USAF Bases in Labrador*", dated April 15, 1981. The report discusses the history of the former US military installations (including Site 206 – Harbour Lake), details of land transfers for the various sites, the potential for PCB impacts at these former radar locations, inventories of ASTs, PCBs

and equipment completed during a 1980 Site inspection, as well as provides a discussion on responsible parties for the impacts at the sites.

The Government of Newfoundland and Labrador (Environmental Management Division, Department of Environment and Labour) also completed a report in 1996 entitled: “*Environmental Inspection Abandoned Military Sites in Labrador*”. The purpose of this report was to conduct a file review and preliminary site assessment at selected former US military sites. The inspection of these sites provided an update to the 1986 cleanup contracts and to respond to media and public concerns. Based on a review of the report, the following information was obtained for the Harbour Lake station:

- Site closed in 1965
- Infrastructure was decommissioned in 1986
- Residual fuel in the ASTs was burned off during the decommissioning program
- All debris (cut barrel/tanks, demolished buildings, garbage, etc.) was buried on-Site in various locations
- Only concrete foundations remain in the upper Site
- Two rusted drums were noted near the former upper Site
- The lower Site was not inspected as it could not be identified after an extensive surveillance flyover of the area.

### **3.5 INTERVIEWS**

GHD was unable to contact anyone to interview regarding the former US Military Mid Canada Line Radar Site 206 known as Harbour Lake.

## **4.0 ENVIRONMENTAL PROPERTY ASSESSMENT**

At the request of ENVC, a Site visit was not be completed as part of the Phase I ESA; the efforts of the environmental assessment was to complete a desk-top review of available documents and summarize the findings in a stand-alone report.

### **4.1 PROPERTY OVERVIEW**

The Site is located approximately 97 kilometers west of the Town of Hopedale, NL. The Harbour Lake facility formerly contained a one story operations building housing the radio equipment, a heating and power plant, sleeping area, and a kitchen. The station was also equipped with 4 Communication Antennae towers linked by a cable trough and

wood trestle, an emergency shelter, 9 aboveground storage tanks (ASTs), and a helicopter pad, all of which were connected via gravel access roads.

In addition to the Harbour Lake station facilities on top of the hill, a lower Site was located several kilometers away, situated on the shores of a lake. The lower Site was essentially a fuel storage facility from which fuel was hauled in winter to the upper Site. The lower Site formally contained a one story accommodations building, a fuel pump house, a storage shed and seven ASTs.

Following the installation of the new DEW Line further north in 1957, which improved the detection and response times dramatically there was no longer a need for the MCL. The Harbour Lake Doppler Detection Station closed in April, 1965 along with the other MCL Stations. The former buildings and equipment remained abandoned until the Provincial government tendered a contract to dismantle and decommission the remaining structures at the Site in 1987. The concrete foundations of the former structures still remain at the Site. A Site Location Map is included as Figure 1, and a Site Plan of the Lower Site, and Upper Site are included as Figure 2, and 3; respectively.

The total area of the Property is unknown as the information was not available. The Site is predominantly covered in vegetation/gravel/exposed bedrock (approximately 99 percent), and concrete from the former building structures (approximately less than 1 percent). Both surface and groundwater at the upper Site are anticipated to follow the surface contours in the area and flow north and south depending on your location on the site. Surface and groundwater at the lower site are anticipated to follow the surface contours and flow west toward Harbour Lake, which is located adjacent to and west of the lower portion of the Site. The elevation at the upper portion of the Site is approximately 435 metres above sea level (masl), while the elevation at the lower is approximately 205 masl.

The Site is not currently serviced with water or sewer, historically domestic drinking water was imported to the Site and septic was discharged via an above ground pipeline to a septic tank. Surrounding properties are not serviced by municipal water or sewer systems.

Based on existing land use, the Site is classified under the Atlantic RBCA as a commercial property with non-potable groundwater and coarse-grained soil.

## **4.2 ENVIRONMENTAL SETTING/ADJACENT LAND USE**

The Site is not zoned as such as it is not located within municipal boundaries; however, would be considered commercial in nature. The upper portion of the Property is bordered to the north and south by undeveloped land and to the east and west by a small pond followed by undeveloped land. The lower portion of the Property is bordered to the west by Harbour Lake and to the north, south, and east by undeveloped land (see Figure 1).

A review of the “Geological Map of Labrador”, Geology Survey Branch, Department of Mines and Energy, Government of Newfoundland and Labrador (Map 97-07) and the “Geology of the Pants Lake Intrusions and Surrounding Area, Labrador”, issued by the Geology Survey Branch, Department of Natural Resources, Government of Newfoundland and Labrador (Map 2012-18) indicates that the bedrock in the vicinity of the Site consists of granitic orthogneiss coarse-grained leucocratic granitic gneiss, typically containing biotite and garnet. Igneous textures are well-preserved locally, suggesting the protolith was a megacrystic monzogranite to granite. Cataclastic to mylonitic fabric is variably developed and locally intense. Also containing tonalitic to granodioritic orthogneiss fine to coarse grained, grey, quartzfeldspathic orthogneiss, typically containing biotite and hornblende with relict pyroxenes. Typically banded with a complex history of migmatization and deformation. Numerous bands and inclusions of mafic gneiss. Interlayered with paragneiss of the metamorphic, granitoid, and anorthositic rocks of the Grenville, Southern Churchill and Nain Provinces.

A review of the “Geology of the Pants Lake Intrusions and Surrounding Area, Labrador”, as described above, indicates that the Site surficial geology consists of coarse grained granitic gneiss and fine to coarse grained, grey, quartzfeldspathic orthogneiss.

## **4.3 UNDERGROUND STORAGE TANKS (USTs)**

With the exception of septic tanks associated with the former station, past use of USTs was not revealed during the records review, historical searches, or regulatory responses.

## **4.4 ABOVEGROUND STORAGE TANKS (ASTs)**

Evidence of ASTs was revealed during the records review, historical searches, photo searches, and regulatory responses.

The following ASTs were previously located on-Site:

- Five steel 6,819 Litres (L) ASTs (listed as 1,500 gallon), located at the upper Site (exact locations unknown), which contained diesel fuel.
- Four steel 9,547 L ASTs (listed as 2,100 gallon), located at the upper Site (exact locations unknown), which contained diesel fuel.
- Two steel 909 L ASTs (listed as 200 gallon), located in the mechanical room of the former operations building.
- Seven steel 9,547 L ASTs (listed as 2,100 gallon), located at the lower Site (exact locations unknown), which contained diesel fuel.

Based on the 1981 report entitled: *“PCB Spills and General Environmental Mismanagement at EX-USAF Bases in Labrador”* the 1980 Site inspection revealed approximately 950 litres of diesel fuel remaining in the ASTs at the upper Site and approximately 17,000 litres of diesel fuel remaining in the ASTs/fuel drums at the lower Site.

In addition to the ASTs noted above, Site records also indicate the supply and use of Petroleum, Oils and Lubricants (POL) drums for the storage of fuel. Below are known locations in which drums were used/stored to supply fuel:

- Drums for refueling of helicopters at the former helicopter pad
- Upper Site
- Lower Site

The 1980 Site inspection discussed above also revealed approximately 150 - 45 gallon fuel oil drums scattered throughout the upper Site and approximately 55 - 45 gallon drums full of fuel oil at the lower Site (see Appendix B).

Past use of other ASTs was not revealed from the records review, historical searches, or regulatory responses.

#### **4.5 UTILITY SERVICES**

The Site is no longer serviced with water or sewer; nor is any of the surrounding properties. The on-Site latrine was equipped with a septic tank (unknown location). Historically electricity was supplied by on-Site diesel generators.

#### **4.6 CHEMICAL USE AND STORAGE**

Past use of chemicals and storage may have existed with past operations; however, were not revealed from the records review, historical searches, or regulatory responses. Based on the historical activities at the Site, it is assumed that various petroleum lubricants, cleaners, degreasers, solvents, etc. were used and stored at the facility.

#### **4.7 SOLID WASTE/RECYCLABLES**

During the operation of the facility from 1957 to 1965 solid waste was historically disposed in an unlined landfill (unknown location). Based on historical activities at the Site, the landfill may contain former ACM building materials; material with painted surfaces containing lead and/or mercury based paint, former electrical equipment containing PCBs, mechanical equipment debris, motor repair wastes and/or drums formerly containing POLs as well as other solvents. The Site decommissioning program was completed under the approval of ENVC in 1987, and included the razing of all remaining structures and the burning of all materials on Site, followed by the burying and covering of the debris and other remaining materials. It is noted that the contractor typically buried the debris in at least two locations when the Site contained an upper and lower site. This was completed due to the distance and effort required to transport metal/other debris from the lower Site to the upper Site. Although not documented, it can be assumed this was the case during the Site decommissioning at the Harbour Lake station. The location of the burial sites was not identified in the documents review. As a Site visit was not part of the scope, it is unknown if these areas remain covered as reported in the 1987 field program.

#### **4.8 HAZARDOUS WASTE**

Past use/disposal of hazardous wastes may have existed with past operations; however, use/disposal of these substances was not revealed from the records review, historical searches, or regulatory responses.

#### **4.9 WASTEWATER**

Past disposal of wastewater existed during the operation of the Site from 1957 to 1965. A washroom with a toilet and sink was present in the former building that produced wastewater, which were discharged into the on-Site septic tank. Other wastewater disposal activities were not revealed from the records review, historical searches, or regulatory responses.



#### **4.10 STORMWATER**

Stormwater run-off from the upper Site would follow local topography and would flow north or south, depending on your location on the Site. Stormwater run-off from the lower Site is mainly directed west by overland flow toward Harbour Lake, which is located adjacent to and west of the lower portion of the Site. Sources of adverse impacts from stormwater run-off were not revealed from the records review, historical searches, or regulatory responses.

#### **4.11 ASBESTOS-CONTAINING MATERIALS (ACM)**

Past use/disposal of ACM may have existed with historic operations at the Site; however, with the exception of the concrete foundations, no visible building materials remain on-Site. Possible ACM containing building materials may include floor tiles, roofing materials, piping insulation, and ceiling tiles. ACMs would also be expected to be in the boilers and piping associated with the former heating plant. As a result, potential ACM in the form of discarded building materials may be present in the former landfill and/or debris pits completed during the 1987 Site decommissioning program.

No other sources of ACM were revealed from the records review, historical searches, or regulatory responses.

#### **4.12 POLYCHLORINATED BIPHENYLS (PCBs)**

Past use of PCBs were identified through the records review and regulatory responses. PCBs were historically used as an insulator and coolant in electrical transformers and capacitors at the Site. PCBs were commonly used because they were chemically inert, not affected by acids and corrosive chemicals, did not conduct electricity and would not burn (only at extremely high temperatures). Although the US banned the use of PCBs in 1972, the Harbour Lake station was in operation from approximately 1957 to 1965.

Other sources of adverse impacts from PCBs were not revealed from the records review, historical searches, or regulatory responses.

#### **4.13 HEAVY METALS**

Past use/disposal of heavy metals wastes may have existed with past operations. Possible sources of heavy metals (lead) may be associated with all terrain vehicle (ATV)

and helicopter repairs. In addition, the former on-Site buildings were constructed in the 1950s; therefore, the potential exists that lead/mercury based paint on the interior and exterior surfaces may have potentially impacted the surface soils.

#### **4.14 OZONE-DEPLETING SUBSTANCES (ODS)**

Past use/disposal of ODS may have existed with past operations; however, were not revealed from the records review, historical searches, or regulatory responses.

#### **4.15 AIR EMISSIONS**

Air emissions may have existed with past operations; however, were not revealed from the records review, historical searches, or regulatory responses.

#### **4.16 IONIZING RADIATION**

Based on the geology of the area, sources of ionizing radiation are not suspect at the Site and were not revealed from the records review, historical searches, or regulatory responses.

#### **4.17 CHEMICAL SPILLS/RELEASES**

Past chemical spills/releases may have occurred with past operations; however, no past spills/releases were revealed from the records review, historical searches, or regulatory responses.

#### **4.18 OTHER ISSUES OF POTENTIAL ENVIRONMENTAL CONCERN**

Other issues of potential environmental concern were not identified through the record reviews, historical searches, or regulatory responses.

## 5.0 CONCLUSIONS


Based on the Phase I ESA, including the historical records review, and interviews, the following potential environmental impairment issues were identified with respect to the Site:

- **Historic Handlings, Use, and Storage of Petroleum Hydrocarbons:** As a self-sufficient Doppler detection station in a remote location, significant quantities of fuel was formerly stored at the Site in ASTs, as well as in thousands of Petroleum, Oils and Lubricants (POL) drums. The Site also formerly contained a helicopter landing pad that contained drum storage. The potential for petroleum hydrocarbon impacts exist as a result of the historical petroleum storage and distribution activities conducted at the Site. The main areas of concern would include the former main Site (in the area of the former ASTs), the lower Site (in the area of the former ASTs), along the former product pipelines, and the former helicopter landing area, as well as in the former landfill area.
- **Solid Waste/Recyclables:** During the operation of the facility from 1957 to 1965 solid waste was historically disposed in an unlined landfill (unknown location). Based on historical activities at the Site, the landfill may contain former ACM building materials; material with painted surfaces containing lead and/or mercury based paint, former electrical equipment containing PCBs, mechanical equipment debris, motor repair wastes and/or drums formerly containing POLs as well as other solvents. The Site decommissioning program was completed under the approval of the ENVC in 1987, and included the razing of all remaining structures and the burning of all materials on Site, followed by the burying and covering of the debris and other remaining materials. It is noted that the contractor typically buried the debris in at least two locations when the Site contained an upper and lower site. This was completed due to the distance and effort required to transport metal/other debris from the lower Site to the upper Site. Although not documented, it can be assumed this was the case during the Site decommissioning at the Harbour Lake station. The location of the burial sites was not identified in the documents review. As a Site visit was not part of the scope, it is unknown if these areas remain covered as reported in the 1987 field program.
- **Heavy Metals:** Possible sources of heavy metals may be associated with past operations. The former on-Site buildings were constructed in the 1950s; therefore, the potential exists that lead/mercury based paint was used on the interior and exterior surfaces which may have potentially impacted the surface soils.
- **Polychlorinated Biphenyls (PCBs):** Past use of PCBs was identified through the records review and regulatory responses. PCBs were historically used as an

insulator and coolant in electrical transformers and capacitors at the Site. PCBs were commonly used because they were chemically inert, not affected by acids and corrosive chemicals, did not conduct electricity and would not burn (only at extremely high temperatures). Although the US banned the use of PCBs in 1972, the Harbour Lake station was in operation from approximately 1957 to 1965.

All of Which is Respectfully Submitted,

GHD Limited

  
James O'Neill, P. Eng.

  
Hubert Anderson

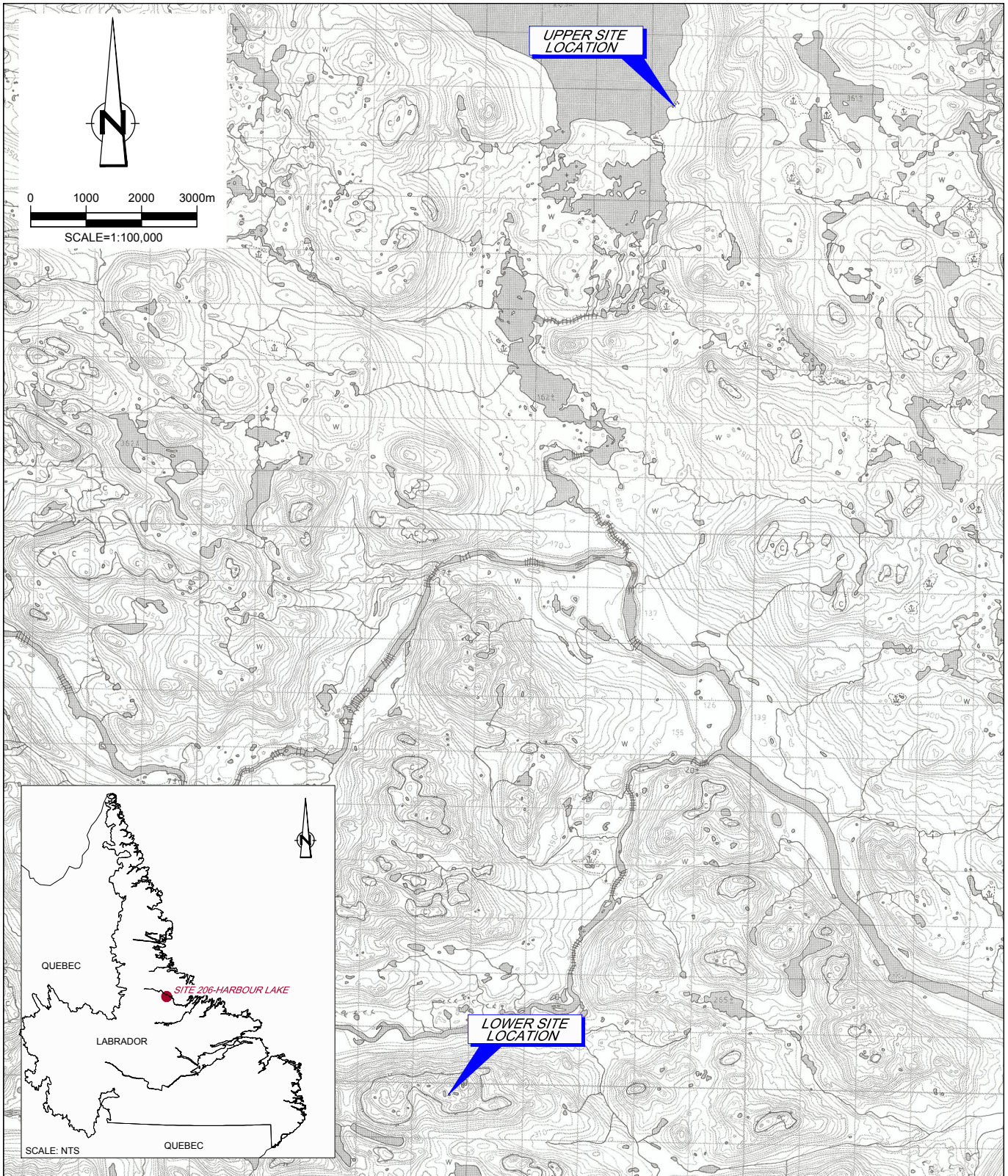


figure 1

**SITE LOCATION MAP**  
**PHASE I ENVIRONMENTAL SITE ASSESSMENT**  
**FORMER UNITED STATES MILITARY SITE**  
*Site 206-Harbour Lake, Labrador, NL*



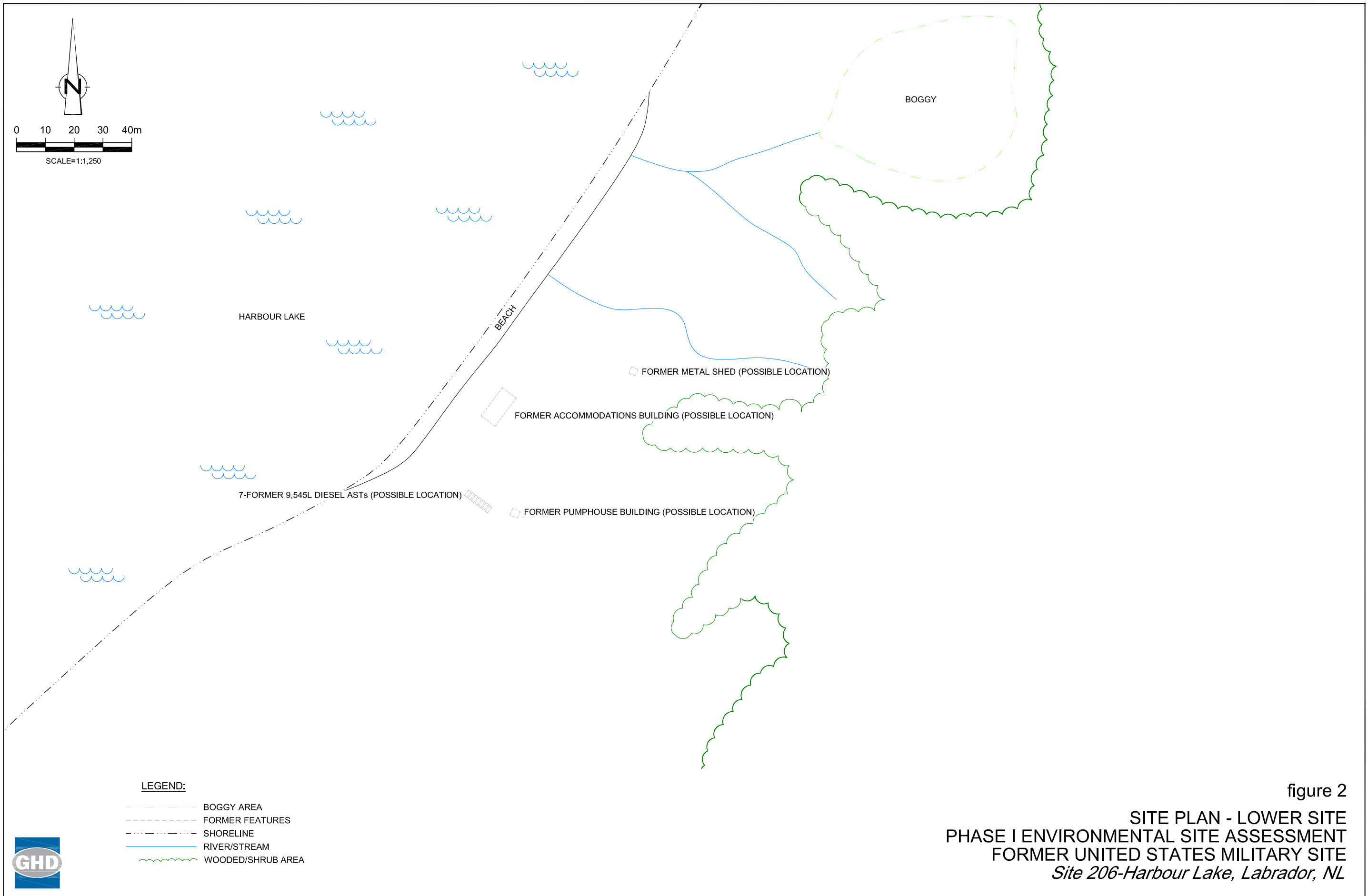
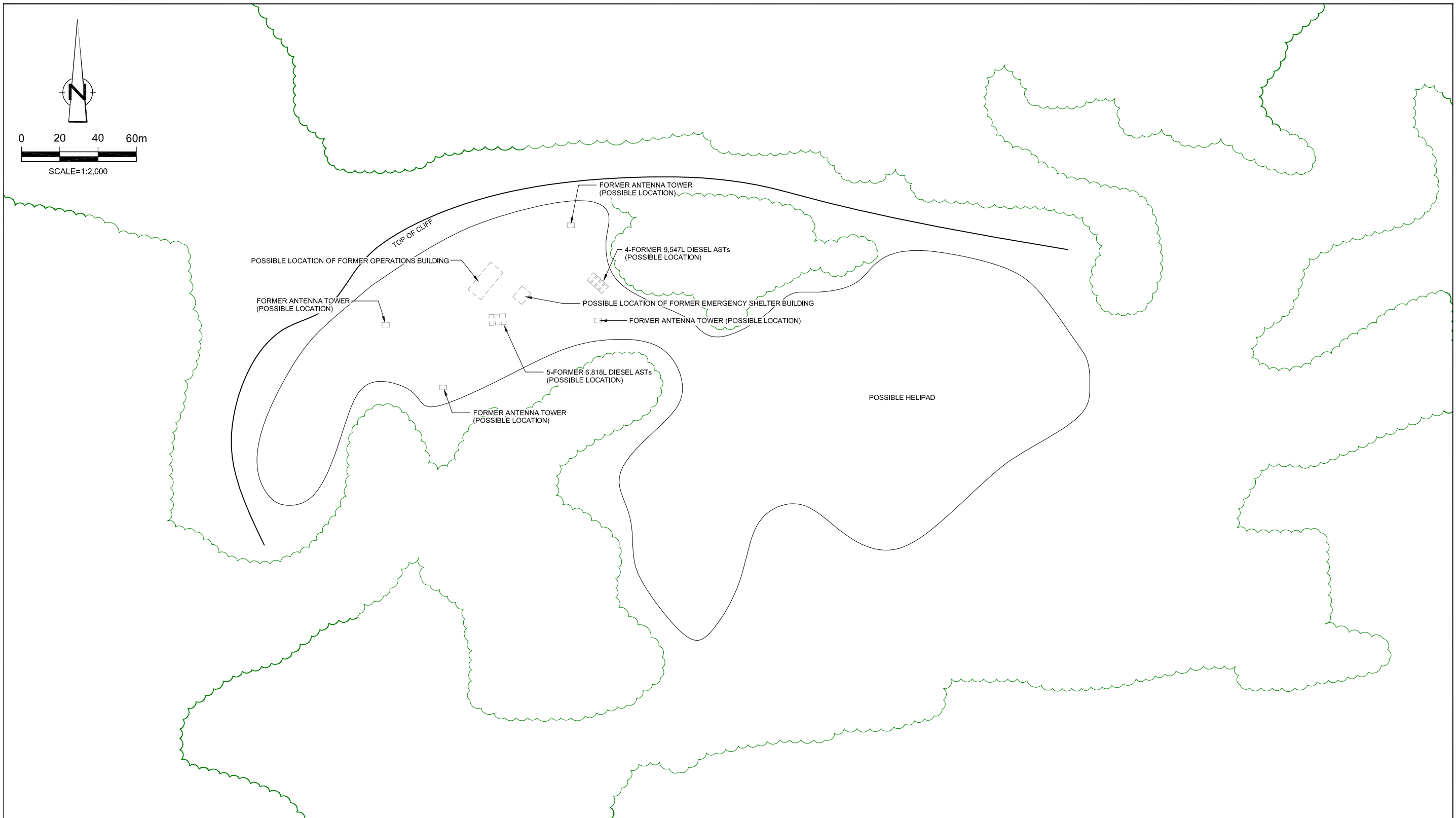


figure 2  
 SITE PLAN - LOWER SITE  
 PHASE I ENVIRONMENTAL SITE ASSESSMENT  
 FORMER UNITED STATES MILITARY SITE  
 Site 206-Harbour Lake, Labrador, NL





**LEGEND:**  
 - - - - - FORMER FEATURES  
 ~~~~~ WOODED/SHRUB AREA

figure 3  
 SITE PLAN - UPPER SITE  
 PHASE I ENVIRONMENTAL SITE ASSESSMENT  
 FORMER UNITED STATES MILITARY SITE  
 Site 206-Harbour Lake, Labrador, NL



# Appendices



# Appendix A

## Qualifications of Site Assessors

## QUALIFICATIONS OF SITE ASSESSOR

**Name:** James O’Neill, P. Eng.

**Position:** Engineer

**Education:** B.Eng. (Civil Engineering), Memorial University (1997)

**Experience:**

James P. O’Neill, P.Eng. is a Senior Project Manager/Engineer with GHD Limited (GHD). He has performed or overseen environmental site assessments at residential, commercial, industrial and public facilities. Mr. O’Neill has completed courses in environmental engineering, hydrology, geology, project management, asbestos awareness, indoor air quality, Standard First Aid/CPR Level C, Automated External Defibrillator, WHMIS, 40-hour HAZWOPER, Powerline Hazards, Leadership in Safety Excellence, and other miscellaneous training. Mr. O’Neill is also a member of the Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL) as a Professional Engineer and is registered with the NL Department of Environment and Conservation as a Site Professional. Mr. O’Neill has been directly involved in numerous environmental site assessment and remediation projects concerning hydrocarbon and PCB impacts on residential and/or commercial sites, and is knowledgeable of the current environmental legislation regarding contaminants and hazardous materials.

## QUALIFICATIONS OF SITE ASSESSOR

**Name:** Peter Gillingham, P. Tech.

**Position:** Environmental Technologist

**Education:** Environmental Technology (Co-op) Diploma; College of the North Atlantic, Corner Brook, NL, 2007

Fish & Wildlife Technician Diploma; College of the North Atlantic, Bonavista, NL, 2003

**Experience:**

Peter Gillingham, P. Tech., is an Environmental Technologist with GHD Limited (GHD). Mr. Gillingham has over eight years of experience in various aspects of the environmental sector that included review of environmental site assessments, investigations and remediation of hydrocarbon impacts, hazardous building materials surveys, asbestos management and abatement, drinking water quality, oil storage tank management, and indoor air quality investigations. Mr. Gillingham has also conducted numerous field investigations and projects involving contractor oversight and coordination. He has completed courses in Environmental Site Assessment, Water Quality Analysis, Solid Waste Management, and Air Pollution. Mr. Gillingham is certified in WHMIS, Standard First Aid, Leadership in Safety Excellence, and has completed the 40-hour HAZWOPER course. Mr. Gillingham is also a member of the Association of Engineering Technicians and Technologist of Newfoundland and Labrador (AETTNL). He has completed various environmental site assessments, monitoring programs and site remediation projects where his duties included site supervision, health and safety, soil sampling of excavation boundaries, and groundwater sampling and monitoring. Mr. Gillingham has been a supervisor on numerous petroleum hydrocarbon sites (retail and bulk storage facilities) and supervised drilling, test pitting and soil excavation for various clients in the Province. This Phase I was conducted under the direct supervision of senior staff at GHD.

# Appendix B

## Regulatory Correspondence

# Service NL Responses



**CONESTOGA-ROVERS  
& ASSOCIATES**

1118 Topsail Road, P.O. Box 8353, Station A  
St. John's, NL, Canada A1B 3N7  
Telephone: (709) 364-5353 Fax: (709) 364-5368  
www.CRAworld.com

## FACSIMILE

**DATE:** March 4, 2015 **REFERENCE NO.:** 089758  
**TO:** Mr. George Blackwood **FACSIMILE NO.:** 709-896-4340  
Service NL  
**FROM:** Mr. Peter Gillingham

Total Pages (Including Cover Page) 3

Original Will Follow By:

Facsimile is Receiver's Original

Mail  
 Overnight Courier  
 E-mail

**Re: Phase I Environmental Site Assessment, Former United States Military Site  
206 - Doppler Detection Station, (Harbour Lake), NL**

## MESSAGE

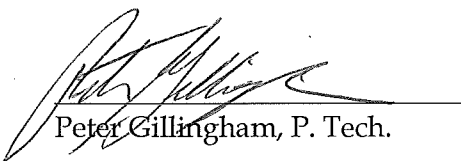
Conestoga-Rovers & Associates Ltd. (CRA) is currently conducting a Phase I Environmental Site Assessment of the former United States Military Site 206 - Doppler Detection Station (Harbour Lake), NL.

Please review your records for the Site and provide us with any available information, such as the following:

1. underground storage tank registration, or records of tank decommissioning;
2. knowledge or records of past environmental infractions; and/or,
3. any known existing environmental concerns.

I have attached a letter from Ms Christa Curnew, a representative of the Government of Newfoundland & Labrador - Department of Environment and Conservation that provides permission for the release of this information to CRA, along with a Site Location Map to help with your search. Thank-you for your time and please call if you have any questions.

Regards,



Peter Gillingham, P. Tech.

Attachments: Permission Letter  
Site Location Map



Government of Newfoundland and Labrador  
Department of Environment & Conservation

Pollution Prevention Division  
(Environment)

March 3, 2015

**RE: Phase I Environmental Site Assessment  
Government of Newfoundland & Labrador  
Former United States (US) Military Site  
Site 206 – Doppler Detection Station, Harbour Lake, NL**

To Whom It May Concern:

As a representative of the primary owner of the above listed property, I certify that Conestoga-Rovers & Associates (CRA) has been contracted to complete a Phase I Environmental Site Assessment on the above-noted property.

The site was established as part of the Mid-Canada Line, a network of communication posts across Canada funded by the United States Air Force. The Site was activated in the late 1950's and continued to operate until the mid 1960's.

The property was originally transferred from the Province of Newfoundland and Labrador to the Government of Canada in the 1950's after which permission was granted to the US Government for their use. Operations ceased in 1965 when the property reverted back to the Government of Canada. It is my understanding the Site was transferred back to the Province of Newfoundland & Labrador in 1986.

The former Site is located at 55° 26.5' North Latitude and 61° 45.5' West Longitude. A site location map illustrating the approximate location of the property is attached.

Please release any information pertaining to this property to CRA.

Sincerely,

A handwritten signature in cursive script that reads "Christa Curnew".

Ms. Christa Curnew, M.Env. Sci., P.Eng.  
Project Manager – Impacted Sites  
Pollution Prevention Division  
Department of Environment and Conservation  
Government of Newfoundland & Labrador

c.c. Brian Luffman, CRA

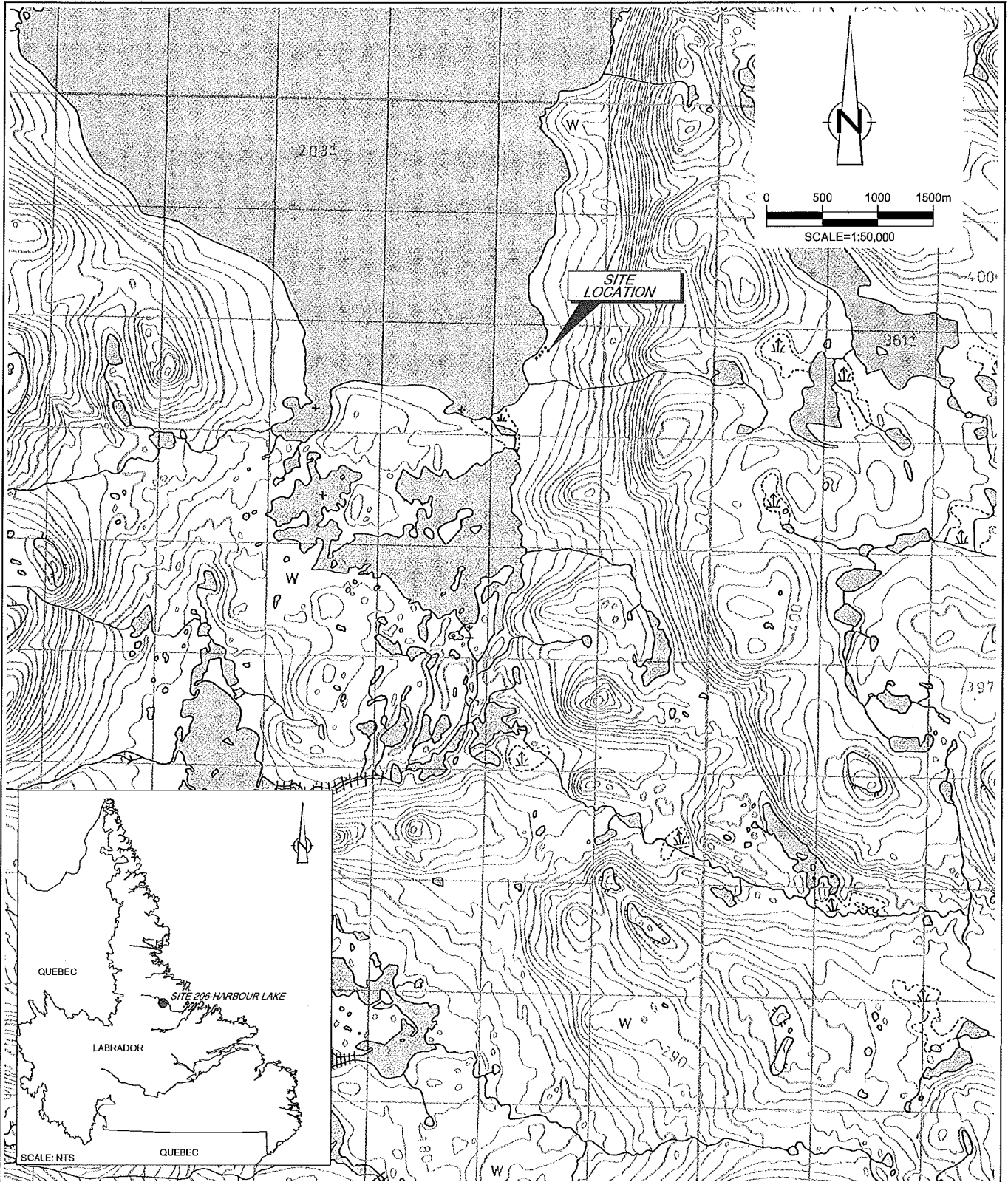


figure 1

SITE LOCATION MAP  
 PHASE I ENVIRONMENTAL SITE ASSESSMENT  
 DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
*Site 206-Harbour Lake, Labrador, NL*







Government of Newfoundland and Labrador  
Service NL

March 4, 2015

Peter Gillingham, P. Tech.  
Conestoga-Rovers & Associates  
1118 Topsail Road, P.O. Box 8353, Stn A,  
St. John's, NL  
A1B 3N7

Attention: Mr. Peter Gillingham

**RE: File/Record Search – Former United States Military Site 206, Harbor Lake, NL**

This refers to your request dated March 4, 2015, requesting information of an environmental nature on the above-mentioned property.

As we do not possess a departmental central registry of activities affecting the environment on properties in the province, we state that to the best of our knowledge and on a search of the files that we have reviewed, that there is no information contained on file and we are not aware of any outstanding environmental concerns with the above noted property.

In addition, we would like to point out that the information on the above property may be obtained by contacting the Department of Environment and Conservation by telephoning (709) 729-5782. Information on an environmental nature for Labrador, prior to 1990, is located at the Department of Environment and Conservation in St. John's, NL.

The Department makes no representations or warranties on the accuracy or completeness of the information provided.

If you have any questions, please do not hesitate to contact me at (709) 896-5473 or at the address below.

Sincerely,

George Blackwood  
Environmental Protection Officer

# ENVC Responses

CONFIDENTIAL

REPORT ON PCB SPILLS AND GENERAL  
ENVIRONMENTAL MISMANAGEMENT AT  
EX-USAF BASES IN LABRADOR

Resource Programs Division  
Intergovernmental Affairs Secretariat  
Government of Newfoundland and Labrador

April 15, 1981

Hunt River 203: - The upper site is comprised of two buildings on top of a hill. In the main building were found: -

- 1, Gyro-Flo (125) generators on the ground near the fallen tower
- 3, diesel generators (Dorman) in good condition with associated electrical equipment
- 1, kitchen area
- 1, all-terrain vehicle
- 1, felled tower

Contaminants include:

- 80, 45-gal. drums jet B fuel, some full and some empty. Total is estimated at 800 gals
  - 4, 2100-gal. capacity diesel tanks are 5/8 full. Total is estimated at 5250 gals.
  - 5, 1500-gal. capacity diesel tanks are 3/4 full
- Total is estimated at 5,625 gals.

The lower site is located on the shore of a lake. There are no buildings left. The area is littered with an estimated 350 empty 45-gal. drums which are rusted. 7, 2100-gal. capacity diesel tanks with a few inches of fuel in each (the tanks are inter-connected) totalling about 750 gallons are left. This lower site is a hazard to the aquatic environment if drums do leak.

Site 206: - The upper site has two buildings similar to site 203 at Hunt River. The main building contains 3 diesel generators and associated electrical equipment in excellent condition. A smaller building contains a large diesel heater. On the site, towers have been felled and approximately 150, 45-gal. empty drums litter the upper site. A diesel generator lies on the ground near the towers. Contaminants at the upper site include 4, 2100-gal. capacity diesel tanks which are 1/4 full or less. Total capacity is estimated at 1800 gallons. Also 5 diesel tanks of about 1500 gals. capacity are present. Each tank has a few inches of fuel in the bottom for an estimated total of 250 gals.

At the lower site there are two cabins and a metal frame building (8 ft. by 8 ft.). Contaminants include 7, 2100 gal. empty fuel tanks and 55, 45-gal. full drums of Jet B fuel (total is 4475 gals.).

The local aquatic environment is also threatened if the tanks or drums leak. Disposal is recommended, preferably by burning fuels.

Site 209: - The upper site's main building contains electronic (radio) equipment in good condition. (The site is similar to the 203 and 206 sites) Three diesel generators with associated equipment including batteries in series are noted. One of the generators is scrapped. One other diesel generator is on the ground outside the building. A second small building is located on the upper site.

In the main building are six capacitors (capacity is one pint) containing Aerowax Hyvol Oil (PCBs). They are on a beach in the building and are not leaking. Also there are:

- 4, 2100-gal. diesel tanks, 1/2 to 1/3 full (total is estimated 2800-4200 gals.)
- 1, 1 lb. tin alkali "R" cannister in small building next to the main facility at the upper site
- 5, 1500 gal (approx.) diesel tanks which are 1/3 full (Total is estimated at 2500 gals.)
- 1, 100 lb. compressed gas fire extinguisher, dry chemical 1500 psi, full

SAGLEK:

|                   |                                 |                |
|-------------------|---------------------------------|----------------|
| <u>To Canada:</u> | M.C. 163-'65<br>(M.A.&R. 8-'65) | 1965<br>(1965) |
| <u>To Nfld:</u>   | P.C. 1976-2983<br>M.C. 1111-'77 | 1976<br>1977   |

Conveyed along with Hopedale to the Department of National Defense. Conditions included mineral and gas rights for the Province and a return clause stating that when lands no longer used by DND, they will be assumed by Newfoundland.

Reference is in Federal Reservation Book (FRB), Vol. 2 Folio 46/49.

HUNT RIVER - BORDER BEACON (INLAND HOPEDALE):

|                   |                                      |                |
|-------------------|--------------------------------------|----------------|
| <u>To Canada:</u> | M.C. 20-'57<br>(M.&R. 3-'57)         | 1957<br>(1957) |
| <u>To Nfld:</u>   | (M.A.&R. 3(c)-'65)<br>P.C. 1965-1125 | (1965)<br>1965 |

Conveyed to DND in connection with Mid Canada Line Negotiation on Lot 212 indicates it was transferred to the control of the Department of Transport (Federal). The other lots were transferred back to the Province on June 18, 1965 by federal P.C. (See M.A.&R. 3(c)-'65) and approved 29-10-1965 but no M.C. has been found for any of the lots. Conditions of original transfer were that the lands of all times had to be used for the purposes of an in connection with mid Canada Line and were to revert to Newfoundland in the event that they ceased to be used for that purpose.

Reference is in FRB Volume 1, Folio 50.

HOPEDALE

|                   |                                 |                |
|-------------------|---------------------------------|----------------|
| <u>To Canada:</u> | M.C. 163-'65<br>(M.A.&R. 8-'65) | 1965<br>(1965) |
| <u>To Nfld:</u>   | P.C. 1976-2983<br>M.C. 111-'77  | 1976<br>1977   |

Conveyed along with Saglek to DND. Conditions are same as for Saglek.

Reference is in FRB Volume 2, 46/49.

CHURCH ISLAND: No records available.

CAPE AILLIK (MAKKOVIR):

|                   |                                  |                |
|-------------------|----------------------------------|----------------|
| <u>To Canada:</u> | M.C. 697-'57<br>(M.&R. 39(c)'57) | 1957<br>(1957) |
| <u>To Nfld:</u>   | M.C. 203-'63                     | 1963           |

Two pieces of land transferred to Canada for use by DND in connection with mid Canada Line. Area A is 16.64 acres; Area B is 104.23 acres. Use and conditions the same as for Inland Hopedale.

Reference is in FRB Volume 1, Folio 60.

10/05/95 18:30 204 833 5492

AIRCOM DCOS CR GOOSEBAY WCBO 0003/004

EXECUTIVE COUNCIL  
NEWFOUNDLAND AND LABRADOR



Sous-Ministre de la  
Défense Nationale  
JAN 30 1986  
Deputy Minister of  
National Defence

600444

CONFEDERATION BLDG.  
ST. JOHNS. NFLD.  
AIC 577

January 28, 1986

NORM/SCDM 03-2  
Referred to  
Transmis & *W. H. Big*

JAN 31 1986

File No.  
Dossier No. *1266-3-2*  
Charged to/Chargé à *TD 6031*

Mr. D. B. Dewar,  
Deputy Minister,  
Department of National Defence,  
National Defence Headquarters,  
101 Colonel By Drive,  
Ottawa, Ontario.  
K1A 0K2

Dear Mr. Dewar:

You will recall our previous correspondence concerning the abandoned military sites in Labrador and our decision to arrange a meeting in St. John's to finalize a mutually acceptable settlement.

The offer of five million dollars to assist in the clean-up of the abandoned sites plus a contingency allowance, not to exceed five hundred thousand dollars, to provide for possible undetected contamination at any site, was informally accepted by the Province on 13 August 1985. I am hereby advising that the Province has now authorized formal acceptance of that offer.

The Government of Newfoundland and Labrador, by acceptance of the payment, will absolve the Government of Canada of any further responsibility and liability for the clean-up of sites identified on the attached list.

Environmental restoration of these sites will be undertaken in a timely manner, bearing in mind the short construction season in Labrador.

Yours truly,

*H. H. Stanley*  
H. H. Stanley,  
Deputy Minister.

07/15/96 16:05 709 772 5097  
07/15/96 MON 15:22 FAX 709 772 5974

BRIAN-EPB/NF  
WING CONST. ENG.

+++ NDEL ST. JOHN'S

2000.000  
21003

OCT 23 '95

08:31AM NDHG

CEEM NWSO DCC

WING CONST. ENG.

AIRCOR DCCS CE

GOOSEBAY WCEO

P.3

WWSJ

004/004

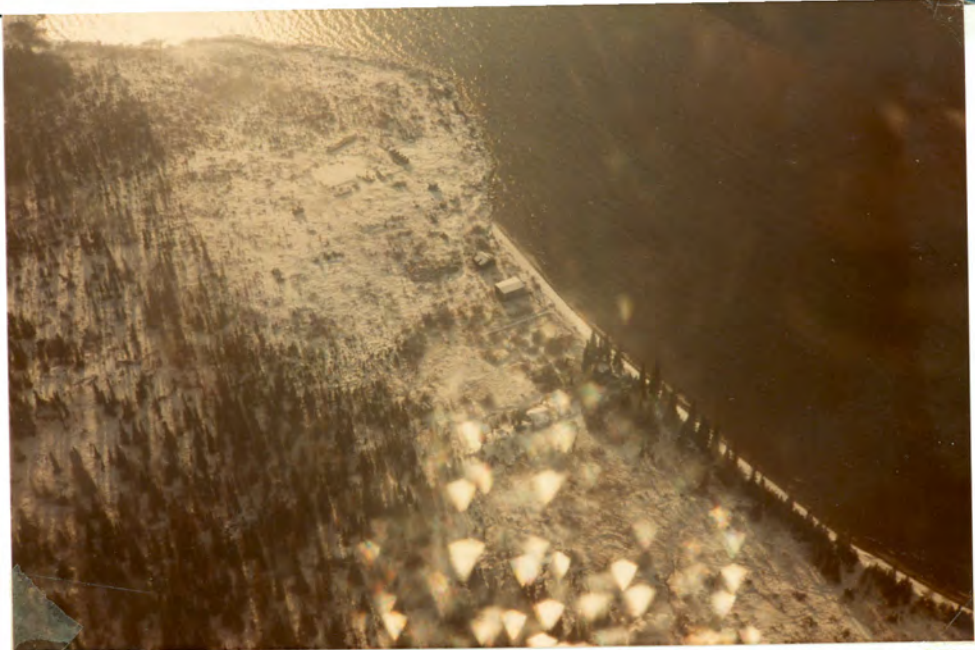
(4)

ABANDONED MILITARY SITES

1. ✓ Cartwright
2. ✓ Hopedale
3. ✓ Spotted Island<sup>x</sup>
4. Hopedale Island<sup>?</sup>
5. ✓ Cape Makhovik (Allik) <sup>no/ht</sup>
6. ✓ Cutthroat Island
7. ✓ Cape Harrison
8. N.W. Point (2 sites)<sup>x</sup>
9. Boar<sup>?</sup>
10. Harbour Lake<sup>?</sup>
11. Wild Boar<sup>?</sup>
12. ✓ Border Beacon
13. ✓ St. Anthony







DEMOLITION AND SITE RESTORATION  
FORMER DEW LINE RADAR SITES  
CONTRACT PACKAGE - CP4  
DOPLER SITES, LABRADOR  
86096 - CP#4

FOR APPROVALS ONLY  
NOT FOR CONSTRUCTION

SPECIFICATIONS FOR  
DEMOLITION AND SITE RESTORATION  
FORMER DEW LINE RADAR SITES  
CONTRACT PACKAGE - CP4  
DOPLER SITES, LABRADOR

PROJECT TEAM

OWNER: Department of Environment  
Government of Newfoundland and Labrador  
Confederation Building  
P.O. Box 4750  
St. John's, Newfoundland  
A1C 5T7

ENGINEER: Bond Architects and Engineers Limited  
P.O. Box 6900  
53-55 Bond Street  
St. John's, Newfoundland  
A1C 6H3

DATE: March 28, 1987

JOB NO.: 86096

SPECIFICATIONS FOR  
DEMOLITION AND SITE RESTORATION  
FORMER DEW LINE RADAR SITES  
CONTRACT PACKAGE - CP4  
DOPLER SITES - LABRADOR

LIST OF DRAWINGS

| <u>Project No.</u> | <u>Sheet No.</u> | <u>Description</u>                     | <u>Date</u>    |
|--------------------|------------------|----------------------------------------|----------------|
| 86096              | SK-203-1         | Site Location Plan<br>Dopler Site 203  | November, 1986 |
| 86096              | SK-203-2         | Operatons Building<br>Dopler Site 203  | November, 1986 |
| 86096              | SK-206-1         | Site Location Plan<br>Dopler Site 206  | November, 1986 |
| 86096              | SK-206-2         | Operations Building<br>Dopler Site 206 | November, 1986 |
| 86096              | SK-209-1         | Site Location Plan<br>Dopler Site 209  | November, 1986 |
| 86096              | SK-209-2         | Operations Building<br>Dopler Site 209 | November, 1986 |
| 86096              | SK-212-1         | Site Location Plan<br>Dopler Site 212  | November, 1986 |
| 86096              | SK-212-2         | Operations Building<br>Dopler Site 212 | November, 1986 |

- .12 Removal and burial of all former above ground utilities, power conductors, utility poles, pipe lines and pipe supports.
  - .13 Removal and disposal of all wood post foundations. Concrete foundations, if incurred, to remain however, steel baseplates are to be removed and anchor bolts cut flush with top of concrete foundations.
  - .14 Removal and disposal of seven (7) fuel storage tanks at the Lower Site on the shore of Hunt River, along with associated fuel piping and supports, valves and fittings. Two (2) tanks measure approximately 1.75 m in diameter by 2.75 m long and five (5) tanks measure approximately 1.4 m in diameter by 2.75 m long.
  - .15 Collect and dispose of abandoned fuel oil drums located at the lower site. Cleanup zone to encompass an area of 100 m radius from the lower site primary fuel storage tankage.
  - .16 Complete burial with suitable fill material, suitably graded to facilitate without significant surface erosion, of all debris and rubbish gathered for disposal from the defined cleanup zones.
- 1.2 Work Included for Dopler Site 206
- .1 Purpose of clean-up work is to bring the upper and lower sites as close as possible to its original condition within the defined cleanup areas.
  - .2 Demolition, removal and burial of all building structures located at upper site.
  - .3 Removal and disposal of by burial of all building contents.
  - .4 Collection and disposal by burial of all loose scattered debris, fuel drums, small tanks, scrapped materials and equipment within 150 m radius measured from any point of the Operations Building foundation walls located at the upper site.

- .5 Dismantling and disposal of cable trough and wood trestle, linking to the former antenna towers.
- .6 Dismantling and disposal of two antenna towers, approximately 16 m and 47 m in length, including dish antenna affixed to the top of the towers.
- .7 Dismantling and disposal of two smaller antenna towers, approximately 15 m in length.
- .8 Demolition, removal and disposal of structural steel framed Operations Building, measuring approximately 18 m long by 8.4 m wide.
- .9 Demolition, removal and disposal of wood framed Emergency Shelter, measuring approximately 7.4 m long by 6.1 m wide.
- .10 Removal and disposal of nine (9) 1.25 m diameter by 2.75 m long fuel oil storage, and associated piping, valves and fittings.
- .11 Removal and disposal of ventilated and non-ventilated pressure gas cylinders and ancillary equipment.
- .12 Removal and burial of all former above ground utilities, power conductors, utility poles, pipe lines and pipe supports.
- .13 Removal and disposal of all wood post foundations. Concrete foundations, if incurred, to remain however, steel baseplates are to be removed and anchor bolts cut flush with top of concrete foundations.
- .14 Removal and disposal of seven (7) fuel storage tanks at the Lower Site on the shore of BOA Lake along with associated fuel piping and supports, valves and fittings. Two (2) tanks measure approximately 1.75 m in diameter by 2.75 m long, and five (5) tanks measure approximately 1.4 m in diameter by 2.75 m long.
- .15 Collect and dispose of abandoned fuel oil drums located at the Lower Site. Cleanup zone to encompass an area of 100 m radius from the primary fuel storage tankage and 100 m radius from Accommodations Building.

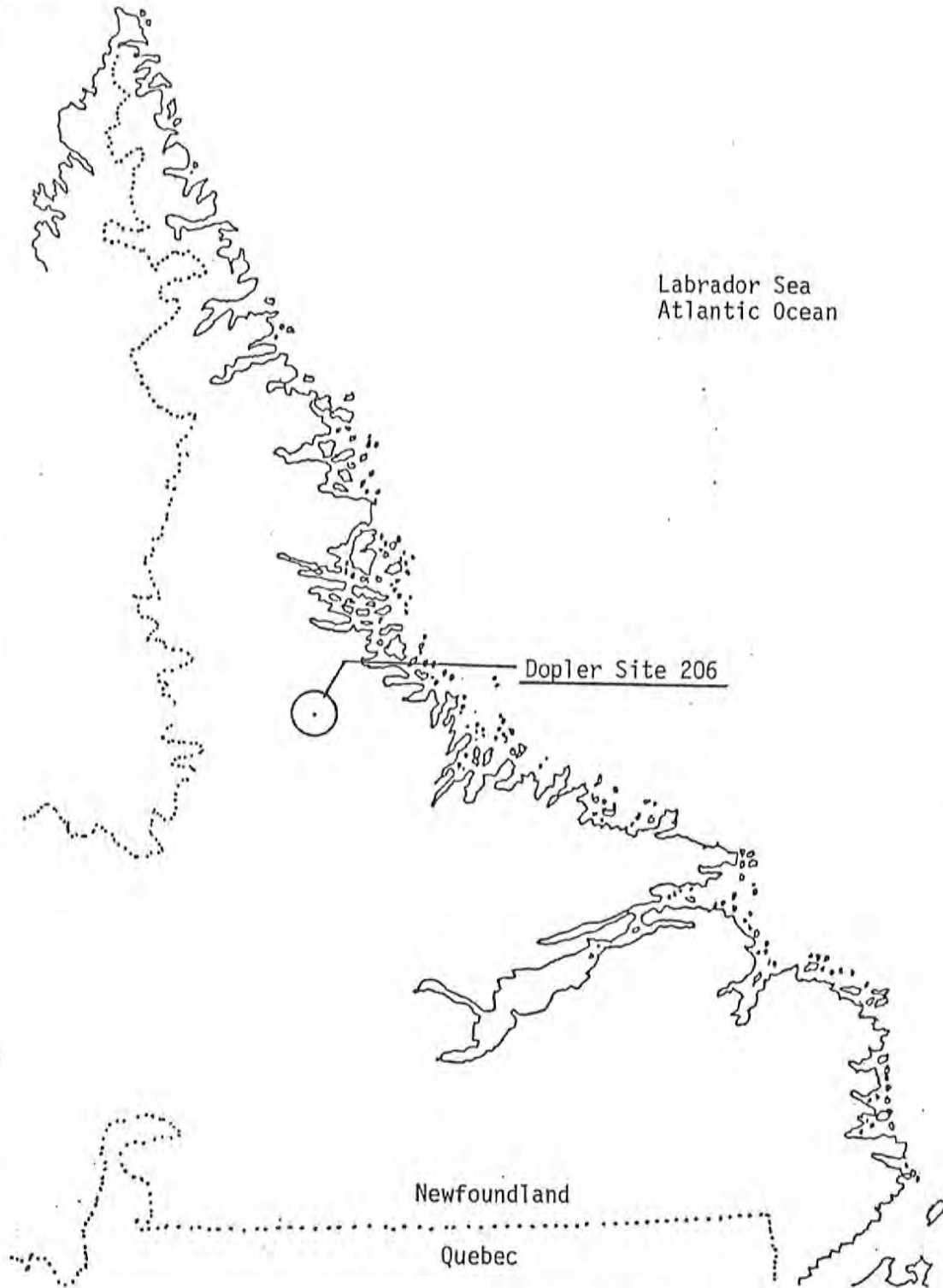
- .16 Removal and disposal of two (2) wood frame buildings and their contents at the lower site; a fuel pumphouse measuring 2.5 m by 2.85 m and the Accommodations Building measuring approximately 12.3 m by 6.0 m.
- .17 Complete burial with suitable fill material, suitably graded to facilitate without significant surface erosion, of all debris and rubbish gathered for disposal from the defined cleanup zones.

1.3 Work Included  
for Dopler Site 209


- .1 Purpose of clean-up work is to bring the upper and lower sites as close as possible to its original condition within the defined cleanup areas.
- .2 Demolition, removal and burial of all building structures located at upper site.
- .3 Removal and disposal of by burial of all building contents.
- .4 Collection and disposal by burial of all loose scattered debris, fuel drums, small tanks, scrapped materials and equipment within 150 m radius measured from any point of the Operations Building foundation walls located at the upper site.
- .5 Dismantling and disposal of cable trough and wood trestle, linking to the former antenna towers.
- .6 Dismantling and disposal of two antenna towers, approximately 18 m and 63 m in length, including dish antenna affixed to the top of the towers.
- .7 Dismantling and disposal of two smaller antenna towers, approximately 15 m in length.
- .8 Demolition, removal and disposal of structural steel framed Operations Building, measuring approximately 18 m long by 8.4 m wide.
- .9 Demolition, removal and disposal of wood framed Emergency Shelter, measuring approximately 7.4 m long by 6.1 m wide.

- 1.5 Work Excluded
- .1 Removal of reinforced concrete footings, piers, beams, structural slabs and slabs on grade.
  - .2 Collection and removal of all incidental debris outside boundary of clean-up areas.
  - .3 Three (3) log cabins at lower site for Dopler Site No. 206 are to remain as is.
  - .4 No clean-up work is required for the lower site of Dopler Site No. 212, located at Border Beacon.
- 1.6 Salvaged Items
- .1 Any salvaged items must be removed from the project work sites no later than September 30, 1987.
- 1.7 Fires
- .1 Fires and burning of combustible rubbish on site is permitted, subject to the requirements and restrictions of the burning permit issued by the Department of Forest Resources and Lands.
  - .2 Provide supervision, attendance and fire protection measures as directed by authorities having jurisdiction.
- 1.8 Environmental Protection
- .1 Provide work in an environmentally acceptable manner. Comply with requirements of Section 01560.
- 1.9 Burial Sites
- .1 Contractor is to propose sites for consideration and approval by the Engineer and authorities having jurisdiction. State proposed burial sites in Contractor's statement of methodology.
  - .2 Development and operations of burial sites, quarries and borrow pits are to be governed by land use permits issued by the authorities having jurisdiction.
  - .3 It is anticipated that burial sites will be remote from the project cleanup sites requiring the support of aircraft for transport of scrap materials for disposal.



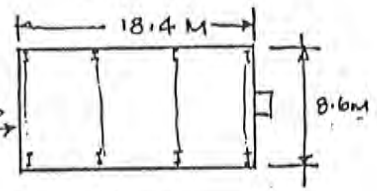


|                                                                                |            |               |                     |
|--------------------------------------------------------------------------------|------------|---------------|---------------------|
| PROJECT Demolition & Site Restoration of Former Dew Line Radar Sites, Labrador |            | JOB NO. 86096 |                     |
| TITLE Site Location Plan - Dopler Site 206                                     |            | PAGE SK-206-1 |                     |
| DIVISION Civil                                                                 | DRAWN G.L. | CHECKED       | DATE November, 1986 |

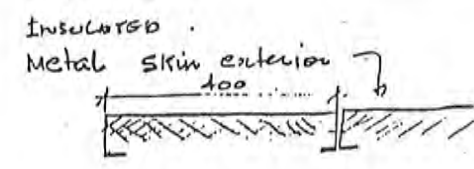
**THE BAE GROUP** 

BONO ARCHITECTS and ENGINEERS LIMITED  
 BONO STREET P O BOX 8900 ST JOHN'S NF  
 AIC-8H3 TLX 016-4676 TEL (709) 722-4822

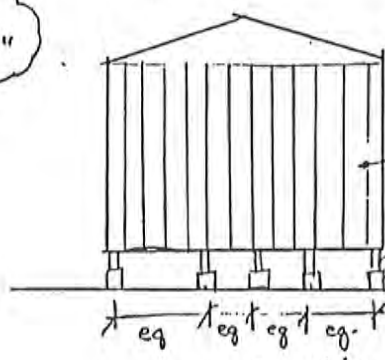
STRUCTURAL  
STEEL FRAME  
BUILDING



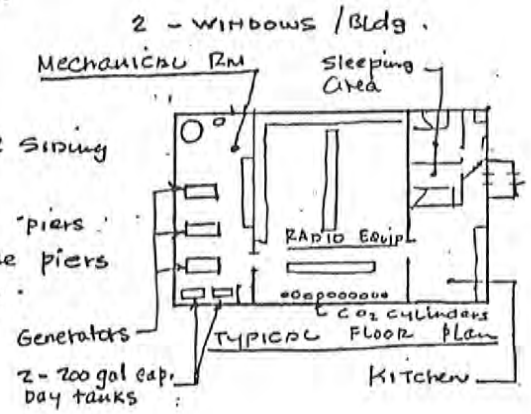
Plan



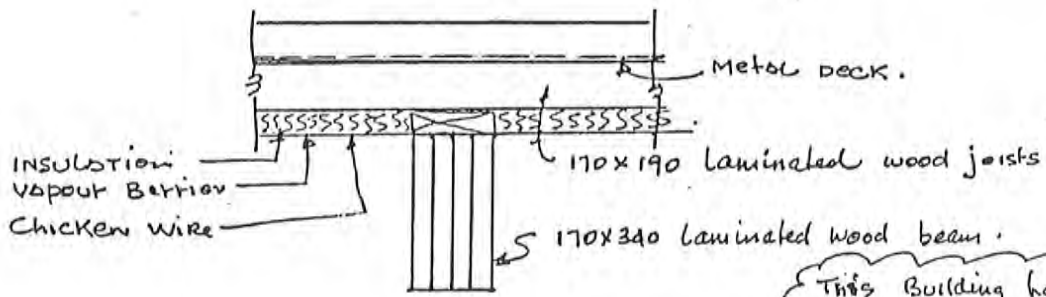
Ceiling height  
approx - 10'-0"



End Elevation

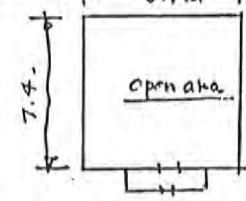


TYPICAL FLOOR PLAN



TYPICAL SECTION THRU FLOOR

This Building has been  
torn down on site 2/2.



EMERGENCY SHELTER Bldg

Building plumbing system was under the floor  
Heating system was from heat reclaim system  
on the generator exhaust.

NOTE  
This building is all  
Wood frame construction.

|                                                                                |       |               |                     |
|--------------------------------------------------------------------------------|-------|---------------|---------------------|
| PROJECT Demolition & Site Restoration of Former Dew Line Radar Sites, Labrador |       | JOB NO. 86096 |                     |
| TITLE Dopler Site 206 - Operations Building                                    |       | PAGE SK-206-2 |                     |
| DIVISION Civil                                                                 | DRAWN | CHECKED       | DATE November, 1986 |

**THE BAE GROUP**

BOND ARCHITECTS and ENGINEERS LIMITED  
BOND STREET P O BOX 8900 ST JOHN'S NF  
A1C-6H3 TLX 016-4676 TEL (709) 722-4622

F. Project Construction Costs

Contract: Dopler Sites - CP-4

| Contract Description           | Contract Amount | Change Orders Approved | Anticipated Change Orders | Const. Cost This Month | Const. Cost Month Ending | Percent Complete | Amount to Finish | Total Estimated to Completion |
|--------------------------------|-----------------|------------------------|---------------------------|------------------------|--------------------------|------------------|------------------|-------------------------------|
| 1. Site 212 <i>Early start</i> | \$103,020.00    | \$12,066.00            | -                         | \$ 12,066.00           | \$112,926.00             | 98.1             | \$ 2,160.00      | \$115,086.00                  |
| 2. Site 209 <i>Wind Gen</i>    | \$195,030.00    | \$ 6,418.66            | \$3,614.30                | \$201,448.66           | \$201,448.66             | 98.2             | \$ 3,614.30      | \$205,062.96                  |
| 3. Site 206 <i>Harbor Lake</i> | \$218,600.00    | -                      | -                         | \$ 27,950.00           | \$ 27,950.00             | 12.8             | \$190,650.00     | \$218,600.00                  |
| 4. Site 203 <i>1600</i>        | \$150,750.00    | -                      | -                         | -                      | -                        | 0                | \$150,750.00     | \$150,750.00                  |
| <b>TOTAL</b>                   | \$667,400.00    | \$18,484.66            | \$3,614.30                | \$241,464.66           | \$342,324.66             | 49.7             | \$347,174.30     | \$689,498.96                  |



OFFICE OF THE MINISTER

GOVERNMENT OF NEWFOUNDLAND & LABRADOR

Department of Environment

P. O. BOX 4750  
ST. JOHN'S, NEWFOUNDLAND  
A1C 5T7



1987 05 25

Titan Holdings Limited  
P.O. Box 7306  
St. John's, NF  
A1B 3Y5

Attention: Mr. B. Imhoff, P. Eng.

Dear Sir:

RE: Demolition and Site Restoration  
Former Dew Line Radar Sites  
Contract Package - CP4  
203-Upper & Lower, 206-Upper & Lower, 209-Upper &  
Lower, 212-Upper Only.

Further to our review of tenders submitted for the captioned tender package, I am pleased to inform you that your tender, in the amount of \$667,400.00 has been accepted.

Please forward the specified bonding and insurance policies to our consultant, The BAE Group, for review. Your bid security will be retained until these documents are received. Upon receipt of bonding and insurances a contract will be executed and a copy forwarded to you. Work will not be permitted to start until the bonding and insurances are received and formally approved by my Department and The BAE Group.

Yours truly,

John C. Butt  
Minister

cc: Workmen's Compensation Board

cc: The BAE Group

# TITAN HOLDINGS LTD.

July 1, 1987

Canadian Forces Station Goose Bay  
Postal Station "A"  
Goose Bay, Labrador  
Newfoundland  
AOP 150



ATTENTION: Major D. J. Ghyselinks  
Station Operations Officer

Dear Sir:

RE: Contract Work Within Low Flying Area #1

Titan Holdings Limited has been awarded a contract to rehabilitate and otherwise restore a number of abandoned Dew Line Radar Sites at the following locations:

| <u>SITE #</u> | <u>LATITUDE</u>       | <u>LONGITUDE</u>      |
|---------------|-----------------------|-----------------------|
| 212           | 55 <sup>0</sup> 21' N | 63 <sup>0</sup> 15' W |
| 209 (upper)   | 55 <sup>0</sup> 25' N | 63 <sup>0</sup> 20' W |
| 209 (lower)   | 55 <sup>0</sup> 32' N | 62 <sup>0</sup> 38' W |
| 206 (upper)   | 55 <sup>0</sup> 19' N | 61 <sup>0</sup> 50' W |
| 206 (lower)   | 55 <sup>0</sup> 28' N | 61 <sup>0</sup> 41' W |
| 203 (upper)   | 55 <sup>0</sup> 27' N | 60 <sup>0</sup> 55' W |
| 203 (lower)   | 55 <sup>0</sup> 27' N | 60 <sup>0</sup> 55' W |

We expect the work to be taking place over the next three months with two work crews proceeding from west to east (site #212 to #203 upper & lower). I have attached a copy of the work schedule that has been developed for the project and that we expect to follow. This schedule will be updated periodically and you will be sent a copy of each new issue. You will also be informed in advance of our mobilization and demobilization between sites and any other flying we may undertake.

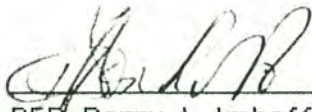
P. O. BOX 416  
STATION A,  
GOOSE BAY, NEWFOUNDLAND  
AOP 150

P. O. Box 7306  
ST. JOHN'S, NEWFOUNDLAND  
A1E 3Y5

We have an HF radio assigned to each work crew capable of broadcasting and receiving at 5111.5 and 4826.0 KHZ. The former frequency provides us with network access through Newfoundland Telephone's Operator in Goose Bay. The latter frequency is continuously monitored and is licensed to LabAir with whom we communicate daily. Should you attempt and fail to reach the work crews at either of these frequencies, you will be able to access them through Warwick Pike at LabAir in Goose Bay at 896-2646 or the undersigned in St John's at 722-9780.

It is our intention to always keep you up to date as to our movements and location. I trust the above arrangements will be to your satisfaction.

Yours Very Truly,  
Titan Holdings Limited



---

PER: Barry A. Imhoff, P.Eng.

File: Lab Rehab CP4

Attach

cc: R. Vallis      Department of Environment  
R. Coombs      Department of Environment  
W. Oakley      BAE Group  
D. Holly      BAE Group  
G. Davis      Titan Holdings Limited  
W. Pike      Titan Holdings Limited

SITE RESTORATION  
FORMER DEW LINE RADAR SITES  
LABRADOR  
STATUS REPORT #1  
PERIOD ENDING JULY 31, 1987

SITE RESTORATION  
FORMER DEW LINE RADAR SITES  
LABRADOR  
STATUS REPORT #1  
PERIOD ENDING JULY 31, 1987

PROJECT TEAM

PREPARED FOR: Department of Environment  
P. O. Box 4750  
St. John's, Newfoundland  
A1C 5T7

PREPARED BY: Bond Architects & Engineers Limited  
(The BAE Group)  
P.O. Box 6900  
Third Floor  
Baine Johnston Centre  
10 Fort William Place  
St. John's, Newfoundland  
A1C 6H3

DATE: August 17, 1987

PROJECT NO. 86096



SECTION VI

Contract No. CP-4  
- Dopler Sites

MONTHLY STATUS REPORT

Project No. 86096  
Report No. 1  
From: June 22, 1987  
To: July 31, 1987

Client: Department of Environment      Date Submitted: August 15, 1987

Project: Demolition and Site Restoration - Former Dew Line Radar Sites  
Dopler Sites, Labrador - Contract Package CP-4

Consultant: Bond Architects & Engineers Limited (The BAE Group)

A. Tender Data:

|                                            |                                              |
|--------------------------------------------|----------------------------------------------|
| Tender Closing Date: <u>April 21, 1987</u> | Contract Award Date: <u>May 25, 1987</u>     |
| Contractor: <u>Titan Holdings Limited</u>  | Contract Amount: <u>\$667,400.00</u>         |
| Completion Date: <u>September 30, 1987</u> | Change Order Amount: <u>\$ 18,484.66</u>     |
|                                            | Revised Contract Amount: <u>\$685,884.66</u> |
|                                            | Revised Completion Date: <u>Sept. 15/87</u>  |

B. Construction Equipment Resources Deployed During Month:

- Site 212: Complete
- Site 209:
  - (1) 2 - K18 Kobuta
  - (2) 2 - ATV Quad Runners
  - (3) 4 - Trailers
  - (4) Miscellaneous small tools, equipment and pumps.
- Site 206: Not mobilized to date.
- Site 203: Not mobilized to date.

C. Construction Work Force Deployed During Month:

- Site 212: Complete
- Site 209:
  - (1) 1 - Foreman
  - (2) 3 - Labourers
  - (3) 1 - Cook/Labourer

Work Force demobilized on July 28, 1987 awaiting final inspection.  
remobilization of work force scheduled for August 5, 1987.

- Site 206: Not mobilized to date.
- Site 203: Not mobilized to date.

**ENVIRONMENTAL INSPECTION  
ABANDONED MILITARY SITES IN LABRADOR**

Prepared by: Toby Matthews  
Environmental Management Division  
Department of Environment and Labour  
October 1996

## 1.0 INTRODUCTION

### 1.1 Purpose

To conduct files review and preliminary site assessment at selected former military sites in Labrador. U.S. and Canadian governments formerly operated the sites. The inspection of sites provides an update to 1986 cleanup contracts and to respond to media and public concerns over contamination identified at two of these sites.

### 1.2 Previous Work in the Area

In January 1986 as part of a Reversion of Land Letter of Agreement, the province accepted a \$5.5 million offer from the Government of Canada for 13 listed sites. The Province in accepting these monies absolved the GOC of any further responsibility and liability for the cleanup of 13 sites identified.

In 1986, the province contracted cleanup of these sites. The BAE Group for the Province provided project management and to oversee two cleanup contractors, Titan and Eastern Demolition.

### 1.3 Selected Sites List

- (1) Cartwright
- (2) Hopedale
- (3) Spotted Islands
- (4) Hopedale Island
- (5) Cape Makkovik (Allik)
- (6) Cutthroat Island
- (7) Cape Harrison
- (8) North West Point (2 sites)
- (9) BOA (Doppler Site 203, Upper and Lower)
- (10) Harbour Lake (Doppler Site 206, Upper and Lower)
- (11) Wild Boar (Doppler Site 209, Upper and Lower)
- (12) Border Beacon (Doppler Site 212, Upper and Lower)
- (13) St. Anthony

*Border Beacon still active  
1) out better  
2) possibility by how ground  
level flying  
used*

## 2.0 INSPECTION

### 2.1 Doppler Sites

The sites located inland Hopedale range from Border Beacon on the west to Hunt River on the east. They were operated as part of the Department of National Defence "Mid Canada Line" sites throughout northern Canada. Changes in frequency of electronic waves generated by the stations enabled Canada (DND) to detect domestic

and foreign aircraft into Canadian airspace. The sites were strategically located on high elevations and made use, of ponds and lakes for bases areas. Each station had an upper and lower area:

|          |               |                   |
|----------|---------------|-------------------|
| Site 212 | Border Beacon | (Upper and Lower) |
| Site 209 | Wild Boar     | (Upper and Lower) |
| Site 206 | Harbour Lake  | (Upper and Lower) |
| Site 203 | Boa           | (Upper and Lower) |

Doppler sites land transfers are summarized in Attachment, (IGA File 160.16.03 refers).

Doppler sites represent four of the list of thirteen sites and area that reverted to the Province of Newfoundland arising from negotiations with the Government of Canada in 1986. (January 28, 1986 correspondence from H.H. Stanley, DM, Executive Council to D.B. Dewar, DM, Department of National Defence refers).

**2.1.1 Doppler Site 212: Border Beacon**  
**Situated 55° 20" 01" (Lat) 63 degrees 16' 15" (Long)**

The Government of Canada reportedly deactivated the site part of the Mid Canada Line in 1965. The site was operated as a weather station and had an airstrip (a gravel surface).

**(a) Upper 212**

TITAN, a cleanup contractor, under supervision of the BAE Group (the project manager) was contracted by the Department of Environment to carry out clean up of the site in 1986. At Upper 212, a wood and metal frame building was burned before the site cleanup contract.

Under the contract, Titan:

- (1) Removed and buried the survival shack.
- (2) Buried all garbage at the area garbage dump site.
- (3) All residual fuel on site was burned off under a controlled burn.
- (4) All fuel barrels were buried.
- (5) Within the defined limits of the contract there were no items or objects left exposed.

In 1987, the BAE Group did a follow up inspection and observed minor soil settling in areas that were backfilled (to cover wastes).

### **2.1.3 Doppler Site 206 - Harbour Lake**

**Situated 55° 18' 45"; 61° 49' 28"**

The Site 206 on the Mid Canada Line was closed in 1965 by the Government of Canada. As with Site 209, the site had upper and lower areas. In 1986, the cleanup contractor, TITAN, burned off residual fuels, cut and buried oil barrels and tanks, demolished buildings and buried all residual debris and garbage.

#### **Inspection**

The September 4, 1996 inspection revealed only concrete footings and two empty, rusted barrels near the site.

Lower 206 site could not be identified after an extensive surveillance flyover of the area.

#### **Recommendation**

No action required.

It is noted that the BAE Group indicated only a wooden shack was left standing in 1986 at site 206. It was not found.

### **2.1.4 Doppler Site 203 -BOA, Hunt Lake**

**Situated 55° 25' 48"; 60° 58' 50" (Upper Site)**

**55° 27.93'N; 60° 57.55' W (Lower Site)**

The Site 203 on the Mid Canada Line of sites is also called Hunt River. It was closed in 1965 by the government of Canada. This site has two components; upper and lower areas.

As with other sites on the Doppler Line, TITAN burned off residual fuels, cut barrels, demolished buildings and buried all garbage and debris in designated areas of the site. Only concrete footings remained. In 1987 the cleanup contractor was recalled to additional disposal of up to 900 barrels. These were found some 190 metres east of the helipad at Site 203.

#### **Inspection**

On September 4 there was evidence of a recent major forest fire that engulfed the region at Site 203. Only footings remain at upper site 203. At lower 203 and in the

| FACILITY LOCATION                                                                                                                | SYSTEM                            | FINANCED & MANNED | DEACTIVATED | DOCUMENTATION                                                   | BUYER                                                                                                                                                                                                                                          | CLEAN-UP PROBLEM                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------|-------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Cutthroat Island<br>Lat 54-30 Long 57-07                                                                                         | NEAC Terminal<br>NCL (Gap Filler) | USAF              | 1962        | Properties CCE/Prop to CADC 716 dated 8 Jan 62. File No. 10-F26 | Buildings sold to Newfoundland Construction and Development Corp. Ltd. This company was to make arrangements with the Newfoundland Gov't for use of buildings on site.                                                                         | Structures in various states of disrepair, 45 gallon and solid waste fuel dump and large fuel tank. Transformer with possible PCB liquid. |
| Cape Harrison                                                                                                                    | Radar & Communications            |                   |             |                                                                 |                                                                                                                                                                                                                                                | Felled towers, machinery, thousands of 45 gallon drums (empty) and one half-full drum.                                                    |
| North West Point (Lake Melville)<br>2 sites                                                                                      |                                   | USAF              | 1966        | CADC S.O. 323890 and 333104 (1972)                              | Land was returned to province by D Prop letter 7830-066 TD 105P (D Prop 4) 2 May 84. Buildings sold to Lincoln Construction of Happy Valley and Transport Canada.                                                                              | Single felled tower plus 30 rusted 45 gallon drums (empty).                                                                               |
| St. Anthony                                                                                                                      | Radar & Communications            | USAF              | 1970        | CADC S.O. 329148 17 May 72 and CADC S.O. 329498                 | Ministry of Transport (Canadian National Telecommunications) acquired some of the buildings on the site and the rest were sold by CADC to the Newfoundland Dept. of Public Works. Land transferred to Newfoundland by PC 1971-1922, 14 Sep 71. |                                                                                                                                           |
| Fox Harbour                                                                                                                      | NEAC Terminal<br>NCL (Gap Filler) | USAF              | 1962        | Properties CCE/Prop to CADC 716 dated 8 Jan 62. File No. 10-F26 | Buildings sold to Newfoundland Construction and Development Co. This company was to make arrangements with the Newfoundland Gov't for use of the buildings on site.                                                                            | Debris, sewage tanks, dykes.                                                                                                              |
| J203 Sea<br>55-25-48 60-58-50                                                                                                    | NCL                               | Canada            | 1965        |                                                                 | Land reverted to Newfoundland. Facilities sold to Newfoundland and Labrador Power Commission.                                                                                                                                                  | Buildings, generators, large quantities of fuel in tanks and drums.                                                                       |
| J204<br>Harbour Lake<br>55-18-45 61-49-28                                                                                        | NCL                               | Canada            | 1965        | S.O. 208753 9 Mar 65                                            | Land reverted to Newfoundland. Facilities sold to Newfoundland and Labrador Power Commission.                                                                                                                                                  | Buildings, generators, large quantities of fuel in tanks and drums.                                                                       |
| J209<br>4220 Boar<br>55-24-22 62-25-00                                                                                           | NCL                               | Canada            | 1965        | S.O. 209753 9 Mar 65                                            | Land reverted to Newfoundland. Facilities sold to Newfoundland and Labrador Power Commission.                                                                                                                                                  | Buildings, generators, large quantities of fuel in tanks and drums.                                                                       |
| 4220 Boar<br>55-20-01 63-16-15                                                                                                   | NCL                               | Canada            | 1965        |                                                                 | Facilities at site transferred to Transport Canada 31 Mar 64. Transport Canada to cancel provincial reservation on land.                                                                                                                       | Buildings, generators, large quantities of fuel in tanks and drums.                                                                       |
| Typical Doppler Site: - Living quarters, equipment room, diesel room<br>- Helipad and diesel fuel in above ground storage tanks. |                                   |                   |             |                                                                 |                                                                                                                                                                                                                                                |                                                                                                                                           |

diff/203

diff/206

diff/207



Doppler Site 206 "Harbour Lake"



# Environment Canada Responses



Government of Newfoundland and Labrador  
Department of Environment & Conservation

Pollution Prevention Division  
(Environment)

March 3, 2015

**RE: Phase I Environmental Site Assessment  
Government of Newfoundland & Labrador  
Former United States (US) Military Site  
Site 206 – Doppler Detection Station, Harbour Lake, NL**

To Whom It May Concern:

As a representative of the primary owner of the above listed property, I certify that Conestoga-Rovers & Associates (CRA) has been contracted to complete a Phase I Environmental Site Assessment on the above-noted property.

The site was established as part of the Mid-Canada Line, a network of communication posts across Canada funded by the United States Air Force. The Site was activated in the late 1950's and continued to operate until the mid 1960's.

The property was originally transferred from the Province of Newfoundland and Labrador to the Government of Canada in the 1950's after which permission was granted to the US Government for their use. Operations ceased in 1965 when the property reverted back to the Government of Canada. It is my understanding the Site was transferred back to the Province of Newfoundland & Labrador in 1986.

The former Site is located at 55° 26.5' North Latitude and 61° 45.5' West Longitude. A site location map illustrating the approximate location of the property is attached.

Please release any information pertaining to this property to CRA.

Sincerely,

Ms. Christa Curnew, M.Env. Sci., P.Eng.  
Project Manager – Impacted Sites  
Pollution Prevention Division  
Department of Environment and Conservation  
Government of Newfoundland & Labrador

c.c. Brian Luffman, CRA





Environment Environnement  
Canada Canada

*Terrasses de la Chaudière  
10 Wellington Street, 4<sup>th</sup> Floor  
Gatineau, Québec K1A 0H3*

Your File Votre référence

ID: 252831

Our File Notre référence

E-2014-01729 / MM

March 11, 2015

Mr. Peter Gillingham  
Conestoga-Rovers & Associates Limited  
1118 Topsail Road  
P.O. Box: 8353  
Mt. Pearl, Newfoundland and Labrador A1B 3N7

Dear Mr. Gillingham,

This is to acknowledge receipt on March 9, 2015 of your request under the *Access to Information Act* for:

“Owner: Government of Newfoundland and Labrador

Address: The former United States Military Site 206, Doppler Detection Station,  
Harbour Lake, NL

Please review your records and provide any available information pertaining to the environmental status of the property, such as: 1. storage tank registration, or records of tank decommissioning; 2. knowledge or records of past environmental infractions; and/or, 3. any known existing environmental concerns.

Authorization: {Christa Curnew}”

We have started processing your request and will contact you as soon as possible. Please find enclosed our principles for assisting your request.

If you have any questions regarding this request, do not hesitate to contact me at 819-934-2817. Please quote the above file number on all future correspondence concerning this request.

Yours sincerely,

Meghan McCourt  
Access to Information and Privacy Secretariat

Enclosure

Canada

## Our principles for assisting your request

In processing your request under the *Access to Information Act* or *Privacy Act*, we will:

1. Process your request without regard to your identity.
2. Offer reasonable assistance throughout the request process.
3. Provide information on the *Access to Information Act* or *Privacy Act*, including information on the processing of your request and your right to complain to the Information Commissioner of Canada or Privacy Commissioner of Canada.
4. Inform you as appropriate and without undue delay when your request needs to be clarified.
5. Make every reasonable effort to locate and retrieve the requested records/personal information under the control of Environment Canada.
6. Apply limited and specific exemptions to the requested records/personal information.
7. Provide accurate and complete responses.
8. Provide timely access to the requested information/personal information.
9. Provide records/personal information in the format and official language requested, as appropriate.
10. Provide an appropriate location to examine the requested information/personal information.



Environment Environnement  
Canada Canada

*Terrasses de la Chaudière  
10 Wellington Street, 4<sup>th</sup> Floor  
Gatineau, Québec K1A 0H3*

Your File Votre référence

ID: 252831

Our File Notre référence

E-2014-01729 / MM

Rec'd CPA  
APR 13 2015

April 7, 2015

Mr. Peter Gillingham  
Conestoga-Rovers & Associates Ltd.  
1118 Topsail Road  
P.O. Box: 8353  
Mt. Pearl, NL A1B 3N7

Dear Mr. Gillingham,

This is further to your request under the *Access to Information Act* (the Act) for:

**“Owner: Government of Newfoundland and Labrador**

**Address: The former United States Military Site 206, Doppler Detection Station, Harbour Lake, NL**

**Please review your records and provide any available information pertaining to the environmental status of the property, such as: 1. storage tank registration, or records of tank decommissioning; 2. knowledge or records of past environmental infractions; and/or, 3. any known existing environmental concerns.**

**Authorization: {Christa Curnew}”**

Pursuant to paragraphs 9(1)(a) and (c) of the Act (copy attached), an extension of 150 days is required beyond the statutory 30-day limit allowed for the processing of your request. Due to the large number of records and significant search of records involved, meeting the original time limit would unreasonably interfere with the operations of the Department. Notifications to third parties pursuant to subsection 27(1) of the Act are also required and cannot reasonably be completed within the original time limit.

Please note that the notification process pursuant to paragraph 9(1)(c) of the Act approximately takes 60 days but it could be much more if a third party challenges the release of the records in court.

Please be advised that you are entitled to complain to the Information Commissioner concerning the processing of your request within sixty days of the receipt of this notice. In the event you decide to avail yourself of this right, your notice of complaint should be addressed to:

Information Commissioner of Canada  
30 Victoria Street  
Gatineau, Québec K1A 1H3

Canada

## *Access to Information Act*

### EXTENSION OF TIME LIMITS

9.(1) The head of a government institution may extend the time limit set out in section 7 or subsection 8(1) in respect of a request under this Act for a reasonable period of time, having regard to the circumstances, if

(a) the request is for a large number of records or necessitates a search through a large number of records and meeting the original time limit would unreasonably interfere with the operations of the government institution,

(b) consultations are necessary to comply with the request that cannot reasonably be completed within the original time limit, or

(c) notice of the request is given pursuant to subsection 27(1)

by giving notice of the extension and, in the circumstances set out in paragraph (a) or (b), the length of the extension, to the person who made the request within thirty days after the request is received, which notice shall contain a statement that the person has a right to make a complaint to the Information Commissioner about the extension.

#### Notice of extension to Information Commissioner

(2) Where the head of a government institution extends a time limit under subsection (1) for more than thirty days, the head of the institution shall give notice of the extension to the Information Commissioner at the same time as notice is given under subsection (1).

# Appendix C

## Property Title Search Information



SAGLEK:

|                   |                                 |                |
|-------------------|---------------------------------|----------------|
| <u>To Canada:</u> | M.C. 163-'65<br>(M.A.&R. 8-'65) | 1965<br>(1965) |
| <u>To Nfld:</u>   | P.C. 1976-2983<br>M.C. 1111-'77 | 1976<br>1977   |

Conveyed along with Hopedale to the Department of National Defense. Conditions included mineral and gas rights for the Province and a return clause stating that when lands no longer used by DND, they will be assumed by Newfoundland.

Reference is in Federal Reservation Book (FRB), Vol. 2 Folio 46/49.

HUNT RIVER - BORDER BEACON (INLAND HOPEDALE):

|                   |                                      |                |
|-------------------|--------------------------------------|----------------|
| <u>To Canada:</u> | M.C. 20-'57<br>(M.&R. 3-'57)         | 1957<br>(1957) |
| <u>To Nfld:</u>   | (M.A.&R. 3(c)-'65)<br>P.C. 1965-1125 | (1965)<br>1965 |

Conveyed to DND in connection with Mid Canada Line Negotiation on Lot 212 indicates it was transferred to the control of the Department of Transport (Federal). The other lots were transferred back to the Province on June 18, 1965 by federal P.C. (See M.A.&R. 3(c)-'65) and approved 29-10-1965 but no M.C. has been found for any of the lots. Conditions of original transfer were that the lands of all times had to be used for the purposes of an in connection with mid Canada Line and were to revert to Newfoundland in the event that they ceased to be used for that purpose.

Reference is in FRB Volume 1, Folio 50.

HOPEDALE

|                   |                                 |                |
|-------------------|---------------------------------|----------------|
| <u>To Canada:</u> | M.C. 163-'65<br>(M.A.&R. 8-'65) | 1965<br>(1965) |
| <u>To Nfld:</u>   | P.C. 1976-2983<br>M.C. 111-'77  | 1976<br>1977   |

Conveyed along with Saglek to DND. Conditions are same as for Saglek.

Reference is in FRB Volume 2, 46/49.

CHURCH ISLAND: No records available.

CAPE AILLIK (MAKROVIK):

|                   |                                  |                |
|-------------------|----------------------------------|----------------|
| <u>To Canada:</u> | M.C. 697-'57<br>(M.&R. 39(c)'57) | 1957<br>(1957) |
| <u>To Nfld:</u>   | M.C. 203-'63                     | 1963           |

Two pieces of land transferred to Canada for use by DND in connection with mid Canada Line. Area A is 16.64 acres; Area B is 104.23 acres. Use and conditions the same as for Inland Hopedale.

Reference is in FRB Volume 1, Folio 60.

# Appendix D

## Aerial Photographs



figure D1

AERIAL PHOTOGRAPH - 1968  
PHASE I ENVIRONMENTAL SITE ASSESSMENT  
FORMER UNITED STATES MILITARY SITE  
*Site 206-Harbour Lake, Labrador, NL*



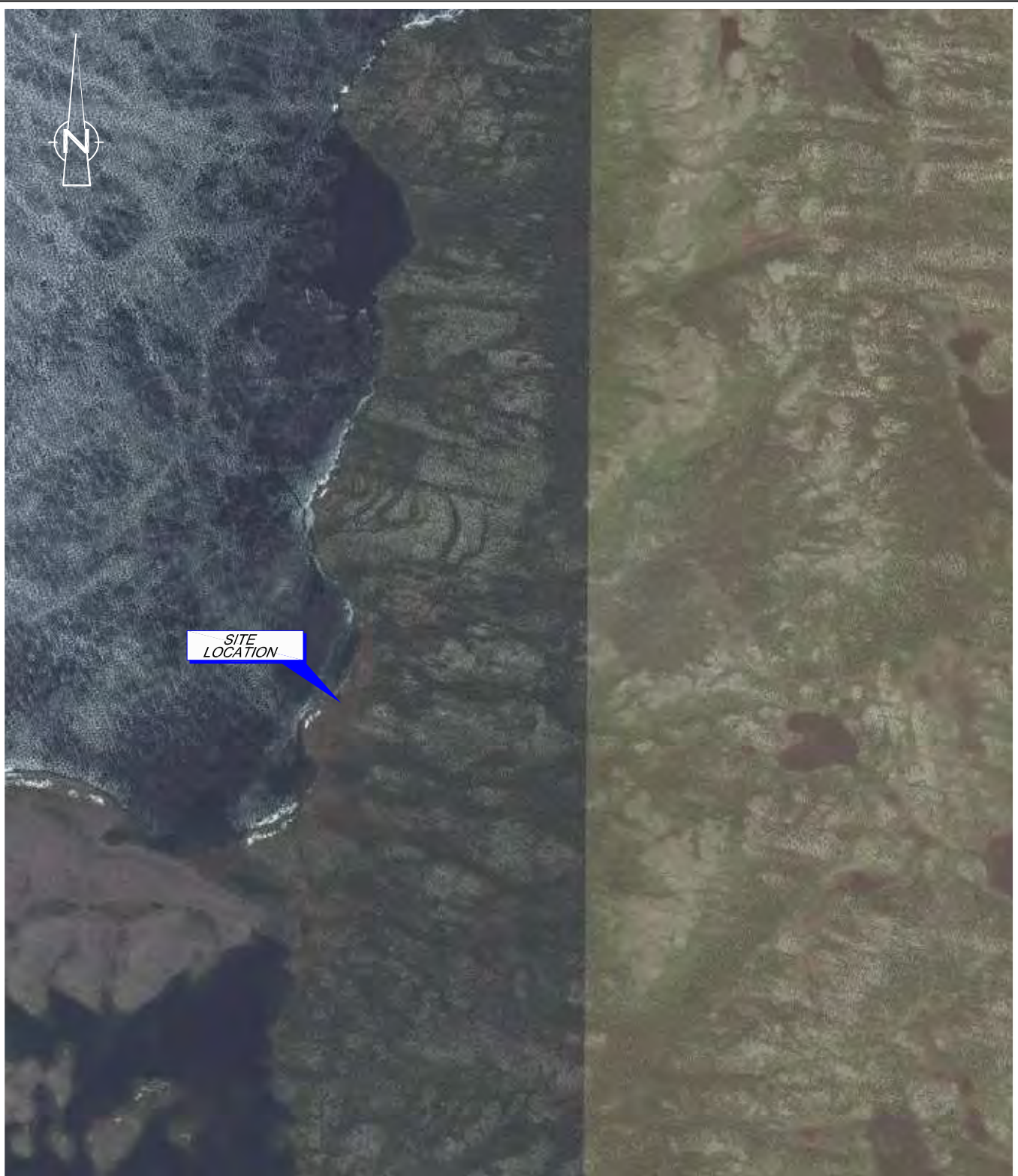


figure D2

AERIAL PHOTOGRAPH - 2010  
PHASE I ENVIRONMENTAL SITE ASSESSMENT  
FORMER UNITED STATES MILITARY SITE  
*Site 206-Harbour Lake, Labrador, NL*

