

# International Boundary Commission Canada and United States Joint Annual Report 2021









## **Cover photos:**

**Top:** Survey instrument and a view of the Sweetgrass Hills (Montana and Alberta)

**Bottom Left:** IBC Team on the Highland, South-West Section (Québec and Maine)

Bottom Center: View of Lac de l'Est on the South and South-West Line (Québec and Maine)

Bottom Right: Reference Monument C43-75 near Rivière Verte, New Brunswick along the Saint John

River (New Brunswick and Maine)

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## **EXECUTIVE SUMMARY**

In compliance with the International Boundary Treaty of 1925, we are pleased to submit the 2021 Joint Annual Report of the International Boundary Commission to our respective countries.

In 2021, more than 15 projects were undertaken to maintain the international boundary between the United States and Canada. Overall, 214.5 km (134 mi) of vista were cleared of brush, trees and other obstructions to permit a clearly defined boundary line between our two countries. Individual projects were managed by either the U.S. Section or the Canadian Section of the IBC.

The two IBC sections plan and conduct their operations under the guidance of a mutually agreed upon 15-year maintenance plan. In addition to this plan, the two sections share a web site and Geographic Information System (GIS) and produce a common set of maps, reports and data that are used on both sides of the boundary.

Efforts are currently underway to further harmonize the work of the two sections. The Commission is moving forward in modernizing historic coordinates and datasets that will permit the publication of new geodetic definitions for the boundary. This updated information will be usable in modern applications and in the creation of a new set of official boundary maps.

The Commissioners are pleased to report that the work of maintaining the boundary is proceeding according to plan and the condition of the boundary meets with the requirements of both countries.



Kyle K. Hipsley, Commissioner for the United States



Jean Gagnon, Commissioner for Canada

## INTRODUCTION

The boundary between Canada and the United States was defined and refined through a series of twenty-six treaties, conventions, protocols, decisions, and awards beginning with the 1783 *Treaty of Peace* and culminating in the 1925 *International Boundary Treaty*. In 1794, the first Commissioners were appointed to resolve ambiguities regarding the exact location of the boundary. The tradition of appointing Commissioners to resolve specific issues was carried on until, in the Treaty of 1925, the positions were made permanent, and the Commissioners tasked with the ongoing maintenance of the boundary.

#### The Mandate of the Commissioners

The International Boundary Treaty of 1925 set out the responsibilities of the Commissioners as:

- Inspect the various sections of the boundary line between the Dominion of Canada and the
  United States and between the Dominion of Canada and Alaska at such times as they shall deem
  necessary.
- 2. Repair all damaged monuments and buoys.
- 3. Relocate and rebuild monuments which have been destroyed.
- 4. Keep the boundary vistas open.
- 5. Move boundary monuments to new sites and establish such additional monuments and buoys as they shall deem desirable.
- 6. Maintain at all times an effective boundary line between the Dominion of Canada and the United States.
- 7. Determine the location of any point of the boundary line which may become necessary in the settlement of any question that may arise between the two Governments.

The Commissioners were further instructed to submit to their respective Governments from time to time, at least once in every calendar year, a joint report containing a statement of the inspections made; the monuments and buoys repaired, relocated, rebuilt, moved, and all newly established monuments; and the mileage and location of vistas opened. The report is to contain plats and tables, giving the locations and geodetic positions of all monuments established within the year, and other information as may be necessary to keep the boundary maps and records accurately revised.

This is the 97th Joint Annual Report from the Commissioners to their respective Governments on the state of the U.S./Canada boundary.

## **MAINTENANCE ACTIVITIES**

The 2021 field season began in May and ended in November. The Commission conducted projects in support of its 15-Year Maintenance Plan as well as projects that advanced its goal of upgrading the geodetic coordinates that define the boundary. The 15-year maintenance plan covers the entire boundary length of over 5525 miles or 8891 km so that the entire border is covered in that time frame.

To ensure efficient and orderly management of boundary maintenance activities, the boundary is split into 8 sections and 30 subsections corresponding to areas with homogeneous characteristics. Projects are presented by subsections and activity from east to west, then north. A description of subsections can be found on the IBC website<sup>1</sup>.

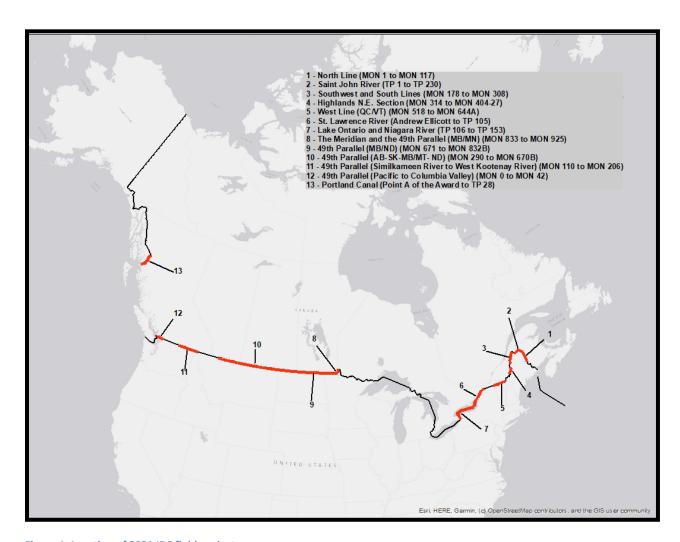


Figure 1: Location of 2021 IBC field projects

<sup>&</sup>lt;sup>1</sup> https://internationalboundarycommission.org/en/maps-coordinates/maps/section-a.php

## North Line (ME/NB): Boundary Monument Maintenance and Inspection



Figure 2: Looking north along the 20' vista from Monument 55C, North Line (NB/ME).

The North Line begins at the source of the St. Croix River and runs approximately 125 km (78 mi) northward to its intersection with the Saint John River separating New Brunswick and Maine. Stretched across farms and forests, the rapidly growing vegetation along the boundary necessitates frequent maintenance. This year's project continued efforts that have been ongoing for several years. A maintenance crew focused its work between Boundary Monuments 32 and 117 where a decade has passed since such work had been undertaken. During the field operations, the IBC team inspected a total of 56

boundary monuments of which 6 were reconstructed, 1 was repaired, 42 were painted, and 1 monument was not found and is presumed destroyed. The operations also identified 3 additional monuments that will require repairs.

## Saint John River (ME/NB): Reference Monument Inspection and Field Survey

The Saint John River Section is a 115 km (72 mi) water boundary that follows the river beginning at the North Line and travels westerly to the mouth of the St. Francis River. Along each shore are small towns and rural properties where a collection of reference monuments is used to locate the 230 turning points that delimit the boundary. In 2020 the Canadian section started the inspection and resurvey of the reference monuments so that they can be used to recompute the positions of the turning points on a modern datum. In 2021, a Canadian and U.S. crew worked on the north side in New Brunswick while only the U.S. crew worked on the south side in Maine, both with the objective to recover and document the conditions of the reference monuments. In addition, the Canadian team began the survey of the monuments recovered on the Canadian side.

#### **Reference Monuments on the Canadian Shore**

The recovery of reference monuments continued from the previous seasons to advance the goals of recovery and survey of all existing monuments. GNSS field survey was divided into 12 subsections, 4 of these subsections were surveyed this year. The Canadian team completed the year's surveying at RMC-40, near Sainte-Anne-de-Madawaska, New Brunswick and will resume from here in 2022, heading westerly along the north side of the Saint John River to reach the St. Francis River and the end of the section.



Figure 3: Reference Monument RMC-49 recovered in a pasture on the Canadian shore of the Saint John River.

#### **Reference Monuments on the United States Shore**



Figure 4: Reference Monument RMS-40 found deteriorating in the forest along the shore. (NB/ME)

The IBC U.S. Section worked along both shores of the Saint John River to recover and inspect the reference monuments. The ones that have been regularly maintained, over the past 14 years, are generally in good condition while others will require repairs or are destroyed. The team inspected 180 reference monuments along the U.S. side of which 62 were in good condition, 11 were in poor/fair condition and 107 were reported as destroyed or were not found.

## South and Southwest Lines (QC/ME): Vista Clearing and Boundary Monument Inspection

At the source of the St. Francis River near Pohénégamook, Québec, the boundary travels on land and follows a straight-line course in a southwesterly direction for 103 km (64 mi) to Lac Frontière, Québec. This portion of the boundary is located on the border between the Province of Quebec and the State of Maine and has very little development. Due to the nature of a straight-line boundary, the topography is varied, and ranges from thick forests to swamp like conditions where access is gained by logging roads.

In 2021, IBC advanced this section by 2 years on the 15-year plan by awarding a contract for vista clearing. The contractor cleared the entirety of the South and Southwest Lines for a total distance of 134.5 km (83.6 mi). While inspecting the work performed by the contractor, the IBC team documented the condition of 68 out of the 246 monuments that mark this section - 53 were in good condition, 10 were in fair to poor condition, 5 of which will require future maintenance work and 5 were presumed destroyed or are lost. This



Figure 5: View at Monument 239A looking to the southwest. (QC/ME)

section of the boundary will be the subject of maintenance in the coming seasons to repair the monuments listed in poor condition.

## Highlands Projects (QC/ME): Boundary Monument Maintenance

The Northeast and Southwest Highlands Sections are some of the most difficult and challenging areas of the boundary to maintain. The two sections have a total length of 282 km (175 mi) starting at the end of the Southwest Branch of the St. John River, near Little Lake Saint John, and travels southwesterly to the head of Halls Stream. This winding boundary follows the height of land along the crests of the mountains and ridges that divide the St. Lawrence and Atlantic coastal watersheds. Some of the Highland's mountains rise to 1,200 m (3,900 ft), are heavily forested and far from civilization. In 2021, an IBC team worked along both sections performing maintenance and surveys, as follows:

#### **Highlands, North-East Section**



Figure 6: Monument 385 Renewed in 2021 with the additional signage for visibility (QC/ME)

Major maintenance work, undertaken in recent years, continued along this section as a crew concentrated their efforts on the repairs to the obelisk type monuments, which are constructed in a concrete base that support an iron or granite type obelisk. In total this team inspected 60 monuments, of which 14 were repaired, another 14 were painted and 8 were re-established and surveyed once the work was complete.

The team also sought to improve the visibility of the boundary markers in winter conditions by attaching carsonite-type markers to their concrete base. Snowmobilers use portions of the 20 foot vista, and a few collisions have damaged some of the snow-buried monuments. By attaching taller carsonite markers signs, to add additional height, IBC hopes to avoid future occurrences at those monument locations when they are snow covered.

#### **Highlands, Southwest Section**



Figure 7: Boundary Monument 341.10 before renewal (QC/ME)

A second team inspected and surveyed the boundary markers on the Northeast and Southwest Sections of the Highlands. A total of 369 boundary

markers were inspected of which 196 were maintained, 180 were renewed with a cast aluminum disk on rebar and 16 additional disks were repaired while in-place. Operations took place between boundary monuments 340-5 and 369-2 and between boundary monuments 470-1 and 470-22 and at 445-2. On two occasions during the project, the team met with a hiking organization responsible for La Route des Sommets to help them place markers and signs outside of



Figure 8: Boundary Monument 341.10 after renewal (QC/ME)

the 3.05-metre zone of the boundary. Maintaining these collaborations with stakeholders is one of the IBC key tasks.

## West line (QC/NY): Boundary Monument Maintenance and Inspection



Figure 9: Karl Leblanc prepares Monument 592 for repairs, located at the end of the Long Trail. (QC/NY)

The West Line, between Vermont and Quebec, crosses the scenic mountain vistas and gently rolling hills of the Eastern Townships. It also dips into two of the most scenic lakes of the Northeast, Lake Memphremagog and Lake Champlain, where many early chapters of American and Canadian history were written. This year, an IBC crew was tasked with inspecting and making the necessary repairs to some of the boundary monuments along the west line between monuments 525A and 755, for a total distance of 229 km (142 mi). The team worked on the section periodically between May and November 2021 and was able to inspect 19 monuments of which 6 were repaired or renewed, and 13 others were painted. During their visits to the region, four specific sectors were surveyed, including three in the municipality of Stanstead. Two other sites were visited to verify that previously authorized work had been carried out in compliance with the Commissioners' approvals. inspection work will help establish a priority list for the coming years along this particularly important section of the boundary.

# St. Lawrence River (ON/NY): Reference Monument Inspection and Maintenance



Figure 10: Reference Monument 15A-59 (ON/NY)

The intersection of the south shore on the St. Lawrence River and the West Line Boundary, is the point of beginning for the St. Lawrence River Section. This section of the boundary is an active commercial and recreational waterway transporting goods through the Great Lakes. It is a water boundary that meanders around islands and through narrow channels and is located by measurements to reference monuments and light houses on each side which must be maintained to respond to any question on the location of the boundary line. This year's project was to complete the maintenance of the reference markers on the U.S. side which began in 2020 but due to the Covid-19 pandemic, the Commission decided to limit travel and the project was not completed. The crew was able to inspect and recover 50 reference monuments, 4 line disks, and 4 bridge plaques. Two additional bridge plaques were sought but not found.

## Lake Ontario and Niagara River (ON/NY): **Reference Monument Inspection and Maintenance**

This section of the boundary travels across Lake Ontario and then follows the Niagara River south until it reaches Lake Erie. The objective was to complete the inspection and maintenance work, undertaken in 2020, along the south shore of the Niagara River between boundary markers 1-41 and 35-41. A total of 6 Bridge Plagues and 25 reference monuments were inspected of which 6 were painted and one underwent minor repairs. In addition, Niagara Parks management authorities reported that RM 32-41 had been broken off. Upon inspection, the bottom of the base was found intact, and the top portion was renewed in its original position. Activities on this project took place over one week in September 2021.



Figure 11: Reference Monument 32-41 as renewed in its original position (ON/NY)

## The Meridian and 49<sup>th</sup> Parallel (MB/MN): Field Surveying, Boundary Monument Inspection and Vista Clearing

The Manitoba-Minnesota section of the boundary extends 153 km (95 mi) along the 49th parallel and 42 km (26 mi) along the meridian line north of the northwesternmost of Lake of the Woods. The terrain is generally flat and swampy, with a rapid rate of vegetation growth along most of the section. The North Dakota portion and the remainder of the Manitoba International Boundary pass primarily through grasslands, interrupted only by two small mountain ranges - the Pembina Hills are forested for 19 km (12

mi), while the Turtle Mountains are forested for 56 km (35 mi).

In 2021 a U.S. crew carried out inspections, maintenance and vista clearing between monuments 723 and 908A. Along this segment, the team recovered 47 monuments of which 46 were in good condition, 1 underwent major repairs and 26.6 km (16.5 mi) of vista was cleared. The survey efforts, undertaken over the last few years, continued with GNSS observations at 30 monuments.

A vista clearing contract was awarded to clear 53.4 km Figure 12: Monument renewal underway (MB, MN/ND) (33.2 miles) in the Turtle Mountain area between monuments 695C and 719. No monuments were recovered.



## 49th Parallel, Prairie Section (AB-SK -MB/MT-ND): Field Surveying and Boundary Monument Maintenance and Inspection

The Prairie Section covers the Saskatchewan/Alberta – North Dakota/Montana portion of the boundary, which was resurveyed, mapped and monumented during the years 1909 through 1912.

This season an IBC crew performed maintenance on the boundary monuments between Monuments 341 and 364. The purpose is to increase the visibility along the boundary by replacing intermediary boundary monuments, constructed in prior years and marked by concrete cylinders, with the standard IBC stainless steel



Figure 13 and 14: Boundary Monument 341A before and after. (AB/MN)

obelisk type monuments. In total 28 monuments were inspected, of which 9 were replaced and surveyed, and 19 were found in good condition. At the request of U.S. Customs and Border Protection, carsonite marker signs were installed to identify the location of the boundary between Monuments 564A and 564B.

# 49th Parallel, West Kootenay River to Similkameen River Section (BC-ID/WA): Field Surveying, Boundary Monument Maintenance and Vista Clearing

This section of the boundary line traverses several mountain ranges that are predominantly forested. However, growth becomes sparse along the Okanogan Valley where climatic conditions are semi-arid and considerable agricultural, commercial, and mining interests have developed west of the Grand Forks, BC and Danville, WA.

In cooperation with the U.S. Border Patrol and Customs Officials, Monument 116AA was established and surveyed between Monument 116 and 117 along a segment of the boundary west of the Oroville and Osoyoos Ports-of-Entries. In addition, the vista was cleared between the port of entry and the west shore of Lake Osoyoos. In total, 8 monuments were inspected, 1 was established and 1 is reported to be in poor condition.



Figure 15: Vista clearing between the port of entry and the west shore of Lake Osoyoos. (BC/WA)

## 49th Parallel: Columbia Valley to the Pacific (BC/WA): Monument Maintenance and Inspection



Figure 16: Boundary Monument 1 on west shore of Point Roberts after cleaning. (BC/WA)

The Fraser Valley lies between British Columbia and Washington State at the western end of the 49<sup>th</sup> Parallel. The area along the boundary has been extensively developed, both agriculturally and residentially. For this reason, and for the prolific growth of vegetation, vista and monument maintenance must be completed every 3 years. In 2021, an IBC crew inspected the boundary vista, performed monument maintenance, and examined encroachment between Monuments 0 and 43. A total of 77 monuments were inspected of which 5 required repairs.

The 6-meter-high granite Monument 1 was constructed on the high cliff between Tsawwassen, BC and Point Roberts, WA to mark the western extremity of the 49<sup>th</sup> Parallel. This monument was cleaned, and the line was cleared to the shore of the Georgia Strait. Remnants of the original Ranges Mark, delimiting the boundary onto the Georgia Strait, were found, and surveyed. This field survey

was conducted to support and help verify the reestablishment of the boundary extending into the Strait of Georgia. The team also visited numerous sites to evaluate and document any new encroachments that could hinder any future work by the Boundary Commission.

# 49th Parallel and Juan de Fuca Strait (BC/WA): Range Mark Inspection

This project took place on the two maritime boundary segments across Boundary Bay and the Georgia Strait. Each of the segments having several tri-pile structures that are driven into the seabed and used to delimit the position of the boundary along the 49<sup>th</sup> Parallel Boundary. The first segment between the Peace Arch and Point Roberts, known as Boundary Bay, has 7 structures equally spaced. The second segment extends into the Georgia Strait from the west shore of Point Roberts to Turning Point 1 and has 2 structures. A contract was awarded to inspect, maintain and make any modifications necessary. The contractor made the required repairs to the structures' day boards that had been damaged by heavy swells and winds since their installation in 2008.



Figure 17: Typical Range mark type beacon located in Boundary Bay. (BC/WA)

# Portland Canal (AK/BC): Inspection and Field Survey



Figure 18: Portland Canal fjord. (AK/BC)

Beginning at Dixon Entrance on the Pacific Ocean and located between the Alaska and British Columbian maritime boundary section of the Portland Canal, the boundary follows a fjord of the same name, and is defined by 28 turning points that are referenced to 52 shore reference monuments. An IBC team conducted maintenance and GNSS surveying of the reference monuments. This project is a continuation of efforts to modernize the coordinates of water boundaries and reference monuments. This year, a total of 55 reference monuments were located, of which 48 were surveyed.

## **COMMISSIONERS' ACTIVITIES**

## **Field inspections**

Field inspections by Commissioners provide them with an opportunity to experience firsthand the different projects under way by the Commission's field crews. This season U.S. Commissioner Hipsley joined the crew on site, to mentor the team during their work on the Portland Canal.

The Canadian IBC manager conducted two field inspections during the year. First, he visited a Canadian crew working in the Highlands amid a multi-year campaign to update the boundary monuments' positions on a modern NAD83 datum and in the renewal of boundary monuments. The second visit was to the Saint John River section where crews are working to recover and resurvey the reference monuments.

## **Commissioners' Meetings**

The Commissioners met virtually several times in 2021 to discuss a variety of issues related to the Commission's mandate. Traditionally, the spring meeting focuses on the work to be done in the upcoming field season and the fall meeting focuses on what was accomplished during the season and to discuss any related boundary questions that may arise.

This year, unfortunately the spring meeting was cancelled since nonessential travel was still not allowed. To start the 2021 season, the Commissioners assigned the projects that had been planned during the fall 2020 meeting to their respective crews.

On December 17, 20 and 21, 2021, the Commissioners met for their annual fall meeting during which the operations performed throughout the year were reviewed and various boundary issues were discussed as follows:

#### Covid-19

As the pandemic is still a factor for field operations in 2021, IBC continues to follow recommendations and protocols to ensure the safety of its employees and the citizens of both countries. The Commissioners agreed to remain vigilant and to keep each other informed of future developments.

## Vista Clearing Contracts

Along some areas of the boundary in recent year, the price quotes obtained for clearing operations have risen sharply and the number of service providers have fallen dramatically. At specific locations, accessibility, topography, and are making mobilization costs excessive. To ensure that a reasonable value is obtained for each contract, the Commissioners agreed to produce and share detailed estimates for each project.

#### Surveying and Cartography

The National Geodetic Survey (NGS) is the authority on geospatial referencing in the United States. To provide better horizontal and vertical reference frames for users and emerging technologies, NGS is currently implementing a new datum planned for 2027. The new datum, called NATRF 2022, will be based on the Global Navigation Satellite System (GNSS) and will incorporate an improved geocentric position of the Earth's centre of mass. The IBC has; therefore, taken steps to accelerate the modernization of its historical coordinates to be ready for this important North American Datum change.

#### Obstructions in the Vista

Part of the IBC mandate is to maintain an effective boundary line by keeping the boundary vista open and by maintaining the boundary monumentation. A clear 6-metre wide corridor between the monuments ensures that there is no mistaking where the boundary lies and serves as notice to those who venture into this zone.

As in past years, the IBC has discovered multiple unauthorized structures within the vista that obstruct the cleared line of the boundary. The nature of the obstructions in the IBC regulated zone ranged from temporary structures, such as hunting blinds in remote locations, to entire buildings, such as the historic line houses that straddle the border. In between are fences, utility poles, retaining walls, pipelines, drainage ditches and even airstrips. The Commission works with individual landowners or groups (e.g., utilities, municipalities, or public safety agencies) that have created an encroachment within the vista, to have them relocated it outside of the zone to preserve a clear unobstructed boundary in compliance with our treaty obligations.

#### 4x4 vehicles in the Vista

In October of this year, the Canadian Section became aware of off-road vehicles driving along the boundary vista and damaging boundary monuments. After identifying the users involved, a series of awareness meetings with various stakeholders including the Quebec Department of Forests, Wildlife and Parks and the Quebec Federation of 4x4 Clubs. During the next field season's work campaigns, the IBC will take more concrete actions by installing additional signage along problematic areas.

## **REGULATORY ITEMS**

The Commission monitors the construction of all works within 3.05 m (10 ft) of the boundary. Thus, all construction, whether it be a ditch, building, surface, underground structure (telephone, cable, electrical line or gas pipeline), line of communication or other, must first be authorized by the Commission. In 2021, the commissioners dealt with the following regulatory item requests and issues:

#### High-voltage Hydro line NECEC Transmission LLC and Hydro-Quebec

Application for authorization to construct a joint high-voltage line between Maine and Quebec by NECEC transmission LLC and Hydro-Quebec. After consideration of the submitted case, a Commissioners' approval letter was issued to the proponents on March 21, 2021.

## **Demolition of line buildings**

Request for approval to demolish line structures that consisted of a former store and two storage sheds, situated between Québec and Vermont. After a review of the submitted case, a letter of authorization from the Commissioners was issued to the proponent on May 26, 2021.

#### Varinet Optical fiber

Request for approval to install a fibre-optic cable underground near the Abbotsford/Sumas border crossing between British Columbia and Washington State. After a review of the submitted case, Commissioners' letter of approval was issued to the proponent on July 20, 2021.

#### Columbia Broadband Corporation Optical fiber

Request for approval to install a fibre-optic cable underground near the Roosville border crossing between British Columbia and Montana. After some discussion and adjustments to the original application, the Commissioners' approval letter was issued to the proponent on August 23, 2021.

#### Snowmobile trail (culvert)

Request for approval to install a culvert and to maintain a public trail inside the boundary regulated zone (QC/VT). After some requests for clarification on the nature and scope of the work, the Commissioners' letter of approval was issued to the proponent on November 22, 2021.

#### Other requests

Throughout the year, many requests are sent to the various IBC offices. Some of these requests are reviewed and documented but do not require a letter of authorization from the Commissioners. In 2021, the IBC processed 9 other requests that did not require authorization.

## REPORT ON COMPARABLE EXPENDITURES

This report shows the total amount spent by both sections of the Commission as of March 31, 2021, for maintenance of the boundary line under Section IV of the *Treaty of Washington 1925*.

The cumulative total represents the total spending on boundary maintenance projects each section, since 1925, on expenditures deemed comparable. Comparable expenditures are the subject of an agreement by both Commissioners as to the interpretation of Section IV of the *Treaty of 1925* and are revised regularly. The current agreement has been in effect since April 1, 1999. Under the agreement, and according to the Treaty, the expenditures do not include salaries or expenditures by the Commissioner and the Commissioner's assistants, including administrative staff, i.e., the permanent staff of each section. Therefore, this expenditure report is not a financial report, as it does not include all the expenditures incurred by each section.

The purpose of compiling cumulative expenditures since the Commission's origins is to demonstrate that the maintenance efforts of both governments are equally shared.

Expenditures are shown in each country's respective currency.

## Excerpt of Comparable Expenditures to March 31, 2021



#### **CERTIFIED STATEMENT OF COMPARATIVE EXPENDITURES**

## MADE BY THE UNITED STATES AND CANADA JOINTLY INCURRED BY THE COMMISSIONERS IN

MAINTAINING THE DEMARCATION OF THE BOUNDARY LINE IN ACCORDANCE WITH THE PROVISIONS OF THE TREATY OF 1925, AS OF MARCH 31, 2021

	United States (USD)	Canada (CAD)
Total to March 31, 2020	27,748,680.72 \$	28,309,378.33 \$
Projects from April 1, 2020 to March 31, 2021		
Section 10 - Halls Stream (QC/NH): Reference monument removal (Mon TP 395 to Mon TP 603)		10,780.60 \$
Section 13 - St-Lawrence River (ON/NY): Reference Mon maintenance RM 7-59 to RM 88, Canadian shore St-Lawrence only		6,789.80 \$
Section 14 - Lake Ontario and Niagara River (ON/NY): Reference monument maintenance and inspection from RM 1-41 to RM 35-41 Canadian shore only		4,710.84 \$
Section 11 - West line (QC/VT): Vista clearing contract from Mon 518 to Mon 543 for 36.0 km / 22.5 mi		68,736.50 \$
Section 24 - 49th parallel: Columbia Valley to Similkameen River (BC/WA) and Section 25 - 49th parallel: Pacific to Columbia Valley (BC/WA):Vista clearing contract for 4.4 km / 2.8 mi Intermitent between Mon 39 - Mon 44A		74,273.42 \$
Section 8 - Highlands N.E. (QC/ME) and Section 9 - Highlands S.W. (QC/ME): 13 major monuments and vista clearing 0.4 km / 0.25 mi		135,590.86 \$
Section 8 - Highlands N.E. (QC/ME) and Section 9 - Highlands S.W. (QC/ME): Inspection and monument maintenance (Mon 341-35 - Mon 484-11)		71,675.51 \$
Section 11 - West line (QC/VT): Vista clearing contract from Mon 572 to 631 for 65.0 km / 40.6 mi		130,125.04 \$
Section 11 - West line (QC/VT): Monument maintenance and vista clearing for a total of 16 monuments maintained and 4.4 km / 2.75 mi cleared		37,175.36 \$
<b>Section 4 – Saint John River (NB/ME):</b> reconnaissance and field survey from TP 1 to TP 230 and ties to the North Line section		42,459.08 \$
<b>Section 1 - Passamaquoddy Bay (ME/NB):</b> IBC-06-20 Contract for maintenance of range marks and vista clearing (TP1 - TP 15)	36,537.01 \$	
United States Section 1717 H Street, N.W. Suite 845 Washington, DC 20006 U.S.A.	Canadian Section 588 Booth Street Suite 210 Ottawa (Ontario) K1A 0Y7 Canada	
Tel: (202) 736-9100 Fax: (202) 632-2008	Tel/Tél: (613) 992 Fax/Télécopieur: (6	

Section 3 - North Line (ME/NB): ERFO GJH-01-20 Monument	86,407.74	Ś	
Maintenance for south half of section (Mon 1 to Mon 49)			
Section 17 - Lake Superior to Rainy River (MN/MB): CRFO BCC-01-20			
Vista clearing of portages (TP 766 - TP 768, TP 982 - TP 984, TP 1161 -	20,006.64	\$	
TP 1163)			
Section 20 - 49th Parallel (ND/MB): CRFO BCC-02-20 Vista Clearing	76 022 07	۲	
(Mon 720 - Mon 780)	76,832.07	Ş	
Section 21 - 49th Parallel (MT-ND/AB-SK-MB): WRFO PDH-01-20	422 225 07	۲.	
Monument Maintenance (Mon 333AA - Mon 344)	122,325.07	>	
Section 19 - Meridian and 49th Parallel (MN/MB): IBC-02-20 Vista	402 500 00		
Clearing Contract 58.9 mi/94.5 km (Mon 833 - Mon 891)	182,590.00	\$	
Section 19 - Meridian and 49th Parallel (MN/MB): IBC-03-20 Vista	24 000 00	,	
clearing contract 14.4 mi/23.2 km (Mon 912 - Mon 925)	34,000.00	>	
Section 3 - North Line (ME/NB): Vista clearing contract (Mon 49 to	79,000.00	ċ	
Mon 117A) Remaing Balance from IBC 01-18	79,000.00	ş	
Other and discuss from April 4, 2020 to 84 auch 24, 2024			
Other expenditures from April 1, 2020 to March 31, 2021	440 554 00	_	40 201 00 ¢
Vehicle Replacement	140,564.00		49,281.00 \$
Bridge Plaques	-	S	25,865.58 \$
Carsonite posts	11,000.00	\$	
Sub-total for 2020-21	789,262.53	\$	657,463.59 \$
Total as of March 31, 2021	28,537,943.25	\$	28,966,841.92 \$

NOTE: It is recognized that fluctuations in exchange rates are not reflected in the total expenditures by each country.

28,537,943.25 \$ is an accurate statement of the total amount I hereby certify that the above amount of expended to March 31, 2021 on the part of the United States in the joint maintenance of the International Boundary Line under the Article IV of the Treaty of 1925.

Kyle Hipsley, United States Commissioner

28,966,841.92 \$ is an accurate statement of the total amount I hereby certify that the above amount of expended to March 31, 2021 on the part of Canada in the joint maintenance of the International

Boundary Line under the Article IV of the Treaty of 1925.

Jean Gagnor, Commissioner for Canada

## **COMMISSIONERS OF THE IBC**

## UNITED STATES

## **CANADA**

Otto H. Tittmann Edward C. Barnard E. Lester Jones James H. Van Wagenen Thomas Riggs John A. Ulinski Samuel L. Golan Edward J. King Richard L. Herman	1904 - 1915 1915 - 1921 1921 - 1929 1929 - 1935 1935 - 1945 1945 - 1953 1953 - 1961 1961 - 1969 1969 - 1977	William F. King James J. McArthur John D. Craig Noel J. Ogilvie James M. Wardle J. Leslie Rannie J. Earl R. Ross A. Frederick Lambert Alec C. McEwen	1904 - 1916 1917 - 1924 1925 - 1931 1931 - 1947 1947 - 1950 1950 - 1951 1951 - 1957 1957 - 1976 1976 - 1991
Samuel L. Golan	1953 - 1961	J. Earl R. Ross	1951 – 1957
S		Alec C. McEwen	
Frank R. Whetstone David C. Fischer	1977 – 1981 1981 – 1985 1985 – 1991	Suzanne Jacques Michael O'Sullivan Peter J. Sullivan	1991 – 1990 1996 – 2005 2005 – 2017
Allen C. Kolstad Clyde Moore (Acting)	1991 – 1993 1993 – 1996	Jean Gagnon	2017-
Thomas L. Baldini Dennis L. Schornack	1996 – 2002 2002 – 2007		
David L. Bernhardt Kyle K. Hipsley (Acting) Kyle K. Hipsley	2007 - 2008 2008 - 2014 2014 -		

## **CERTIFICATION**

We certify that the foregoing is a true record of the work done by the Commissioners during the year ending December 31, 2021 on the maintenance of the International Boundary Line between Canada and the United States of America, and that the plats and tables submitted herein show the true location and geodetic position of all monuments moved and all additional monuments and marks established within the year, in accordance with the provisions of Article IV of the Treaty between the United States of America and His Britannic Majesty in respect of Canada signed at Washington, February 24, 1925.

Jean Gagnon Commissioner for Canada Kyle K. Hipsley Commissioner for the United States



APPENDIX A – DETAILS OF MAINTENANCE AND SURVEY WO	JOK
AFFENDIX A - DETAILS OF MAINTENANCE AND SURVET WO	JKK

## Legend

Boundary Monument Type:	MON	Monument (Artificial feature set to mark the international boundary)			
	LM	Line Mark (Artificial feature set between established boundary points)			
	RG	Range Mark (Artificial feature set to define turning points by mean of alignment)			
	RM	Reference Monument (Artificial feature set to define turning points by traverse)			
Reconnaissance:	G	Recovered In Good Condition			
	F	Recovered in Fair Condition (requires minor repair)			
	P	Recovered in Poor Condition (requires major repair)			
	D	Destroyed (evidence found but Monument not in place)			
	NR	Not Recovered (no evidence found or inadequate search)			
Established:	NM	New Monument constructed (in new location)			
	R	Renewed (in same location)			
Repairs:	MI	Minor repairs to base (cracks patched, plumbed, dirt packed at base, etc)			
	MA	Major repairs (new marker installed, base partially replaced or recapped)			
Painted:	MP	Monument Painted			
Description:	DU	Description Updated			
	ND	New Description (newly established monuments only)			
Photo:	YES	Photographed			
	NO	Not Photographed			
Monument Surveyed:	S	Survey performed to position the monument			

## North Line (New Brunswick/Maine)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 32	Р					YES	
MON 32A	G					YES	
MON 33	Р					YES	
MON 33A	Р					YES	
MON 35B	G					YES	S
MON 35C	Р	R		MP		YES	S
MON 35D	G					YES	S
MON 36A	Р	R		MP		YES	S
MON 37	Р	R		MP		YES	S
MON 37A	G					YES	S
MON 39B	G					YES	S
MON 40	Р	R		MP		YES	S
MON 40A	G					YES	S
MON 42	G					YES	S
MON 42A	Р	R		MP		YES	S
MON 43	G					YES	S
MON 48	G					YES	
MON 48A	NR					NO	
MON 49	G					YES	
MON 55B	G					YES	S
MON 55C	Р	R		MP		YES	S
MON 56	G			MP		YES	S

North Line
(New Brunswick/Maine)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 97C	G			MP		NO	
MON 98	G			MP		NO	
MON 99	G			MP		NO	
MON 100A	G			MP		YES	
MON 100B	G			MP		YES	
MON 100C	G			MP		YES	
MON 101	G			MP		YES	
MON 101A	G			MP		YES	
MON 101B	G			MP		YES	
MON 102	G			MP		YES	
MON 103	G			MP		YES	
MON 104	G			MP		YES	
MON 104A	G			MP		YES	
MON 105	G			MP		YES	
MON 105A-58	G			MP		YES	
MON 106	G			MP		YES	
MON 106A	G			MP		YES	
MON 107	G			MP		YES	
MON 108	G			MP		YES	
MON 109	G			MP		YES	
MON 109A	G			MP		YES	
MON 110	G			MP		YES	
MON 110A	G			MP		YES	
MON 110B	G			MP		YES	
MON 111	G			MP		YES	
MON 111A	G			MP		YES	
MON 112	G			MP		YES	
MON 113	G			MP		YES	
MON 113A	G			MP		YES	
MON 113B-40	G			MP		YES	
MON 114-31	Р		MI	MP		YES	
MON 114A	G			MP		YES	
MON 115	G			MP		YES	
MON 116-52	G			MP		YES	
MON 117-73	G			MP		YES	

Boundary Monument Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
RM C1	D					NO	
RM C1-52	G			MP	DU	YES	S

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM S1-55	G			MP		YES	
RM S2A-72	G			MP		YES	
RM S2	G			MP		YES	
RM C2-52	NR				DU	NO	
SITE RM C2	D					NO	
RM C3	Р			MP	DU	YES	S
RM S3	G			MP		YES	
RM S4-72	G			MP		YES	
RM S4A-55	D					NO	
RM S-4A	D					NO	
RM S4	G			MP		YES	
RM C4-52	G			MP	DU	YES	S
RM C4-72	Р			MP	DU	YES	S
SITE RM C4	D					NO	
RM S5	D					NO	
RM S-5-72	D					NO	
SITE RM C5	D					NO	
RM C5-52	D				DU	YES	S
RM C5-72	G			MP	DU	YES	S
SITE RM S6	D					NO	
RM S6-57	D					NO	
RM S-6A-72	D					NO	
RM C6-72	G			MP	DU	YES	
RM C6	D					NO	
RM C6-52	G			MP	DU	YES	S
SITE RM S7	D					NO	
RM S-7-52	D					NO	
RM S7-72	Р					YES	
RM C7-72	NR				DU	NO	
RM C7	NR				DU	NO	
RM C7A-72	G			MP	DU	YES	S
RM C7-52	NR				DU	NO	
RM S8B-72	G			MP		YES	
RM S-8A	D					NO	
RM C8-52	D				DU	NO	
RM C8-72	G			MP	DU	YES	
RM C8	D				DU	NO	
RM S-9A	D					NO	
SITE RM S9	G			MP		YES	
RM C9-72	NR				DU	NO	
RM S-10-52	Р					YES	
RM C9-52	NR				DU	NO	
SITE RM C9	NR				DU	NO	
SITE RM S10	D					NO	
RM S10-72	D					NO	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number						\/EC	Surveyed
RM S11-72	G			MP		YES	
SITE RM C10	NR				DU	NO	
RM C10-52	G			MP	DU	YES	S
RM S11	G			MP		YES	
RM C11	D			MP	DU	YES	
SITE RM S12	D					NO	
RM S12-72	G			MP		YES	
RM C12	D					NO	
RM S13-72	G			MP		YES	
RM C12A-72	G			MP	DU	NO	S
RM S-13-31	D					NO	
SITE RM S13	D					NO	
SITE RM C13	NR				DU	NO	
RM C13-72	Р				DU	YES	
RM S14	D					NO	
RM S14-31	G			MP		YES	
RM S-14-57	G			MP		YES	
RM S15-72	G			MP		YES	
RM C14	NR				DU	NO	
RM S-15-52	D					NO	
SITE RM S15	D					NO	
RM C15	G			MP	DU	YES	S
SITE RM S16	D					NO	
RM S16-40	G			MP		YES	
SITE RM C16	NR				DU	NO	
RM S17	G			MP		YES	
RM C16-72	G			MP	DU	YES	S
RM S18-72	G			MP		YES	
RM C17-40	G			MP	DU	YES	S
SITE RM C17	NR				DU	NO	
SITE RM S18	D					NO	
RM S-18-40	D					NO	
RM C18-72	G			MP	DU	YES	
RM S19-52	D					NO	
SITE RM S19	D					NO	
SITE RM C18	NR				DU	NO	
RM C18-52	NR				DU	NO	
RM S20-72	G			MP		YES	
RM C18A-72	NR				DU	NO	
RM C19-72	NR				DU	NO	
RM C-19-52	NR				DU	NO	
SITE RM C19	NR				DU	NO	
RM S20	D					NO	
RM S20-52	NR				DU	NO	
RM C20-52	D					NO	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number RM C20-72	NR				DU	NO	Surveyed
SITE RM C20	D D				DU	NO	
				MD			
RM S21 RM C21-72	G F			MP	DU	YES	S
					DU	YES	3
RM S22 RM C21-52	D NR				DU	NO	
RM S-23-52	D				DU	NO	
RM S-23A	D					NO	
RM S23A-59	D					NO	
SITE RM S23	D					NO NO	
RM C22-58	F			MP	DU		S
				IVIP	DU	NO	3
RM C22	D				DII	NO	
RM C23-72	G			NAD	DU	YES	
RM S24A-72 RM C-23-52	G			MP	DU	YES	
SITE RM C23	NR D				DU	NO	
				MD		NO	
RM S24	G			MP		YES	
RM S25-73	D					NO	
SITE RM S25	D					NO	
RM S-25-52	D					NO	
RM S26-73	G			MP		YES	
RM C24-73	G				DU	YES	S
RM C24-52	G				DU	YES	
SITE RM S26	D					NO	
RM S-26-52	D					NO	
RM C25-54	F				DU	YES	S
RM S27	G			MP		YES	
SITE RM C25	NR				DU	NO	
RM C26-73	NR				DU	NO	
RM C-26-52	NR				DU	NO	
RM S28-52	D					NO	
SITE RM C26	D					NO	
RM S28	D					NO	
RM C-27-54	NR				DU	NO	
SITE RM C27	D					NO	
RM C27-73	G			MP	DU	YES	S
RM C27A-40	G				DU	YES	
RM S28-73	G			MP		YES	
RM S29A-52	G			MP		YES	
RM S29	D					NO	
RM S-29-52	D					NO	
RM S30-52	Р			MP		YES	
SITE RM S30	D					NO	
RM C28-52	G			MP	DU	YES	
RM C28A-40	NR				DU	NO	

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM C29-52	D				DU	NO	
SITE RM C29	D					NO	
RM S31-73	D					NO	
SITE RM S31	D					NO	
RM S-31-52	D					NO	
RM S32B-73	Р					YES	
RM S32A-52	Р					YES	
RM S32-73	G			MP		YES	
SITE RM S32	D					NO	
RM C30-31	NR				DU	NO	
RM S33-52	Р					YES	
SITE RM S33	D					YES	
RM C31-73	G			MP	DU	YES	S
RM C-31-52	NR				DU	NO	
SITE RM C31	D					NO	
RM S34A-73	G			MP		YES	
RM C32-73	NR				DU	NO	
RM C32	NR				DU	NO	
RM S34	D					NO	
RM S34-52	D					NO	
RM S35	G			MP		YES	
RM C-33-40	G				DU	YES	S
RM C33-73	NR				DU	NO	
RM S36-52	D					NO	
SITE RM S36	D					NO	
RM C34	G			MP	DU	YES	S
RM S37-73	F			MP		YES	
RM S37-52	F			MP		YES	
SITE RM S37	D					NO	
RM C-35-52	D					NO	
RM C35-73	G			MP	DU	YES	S
SITE RM C35	NR				DU	NO	
RM S38A-73	D					NO	
RM S38-73	D					NO	
SITE RM C36	D					NO	
RM C-36-52	G			MP	DU	YES	S
RM S38-52	G			MP		YES	
RM S38	D					NO	
RM C36-75	G				DU	YES	S
RM C37-73	G	·		MP	DU	YES	S
SITE RM C37	NR				DU	NO	
RM C-37-51	NR				DU	NO	
RM C37A-40	NR				DU	NO	
SITE RM S39	D					NO	
RM S39-51	G			MP		YES	

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM S39A-73	G			MP		YES	
SITE RM C38	D					NO	
RM C-38-51	G				DU	YES	S
RM S40	G			MP		YES	
RM S40A-52	G			MP		YES	
RM S41-51	D					NO	
RM C-39A-73	G			MP		YES	
RM C39A-75	G			MP	DU	YES	
RM C39	D				DU	NO	
SITE RM S41	D					NO	
SITE RM S42	D					NO	
RM S42-51	D					NO	
RM S42-A	D					NO	
RM S42-73	G			MP		YES	
RM C40	D					NO	
RM C40-51	G				DU	NO	S
RM C40A-40	Р				DU	NO	
RM C40-75	G			MP	DU	YES	S
SITE RM C41	D				DU	NO	
RM C41-51	F			MP	DU	YES	
RM S43-51	D					NO	
RM S43	Р					YES	
RM C42-75	G			MP	DU	YES	
SITE RM C42	D					NO	
SITE RM S44	D					NO	
RM S44-73	G			MP		YES	
RM S44A-75	G			MP		YES	
RM C-42-52	NR				DU	NO	
RM S45-75	G			MP		YES	
RM C43-75	G				DU	YES	
RM S45-51	D					NO	
SITE RM S45	D					NO	
SITE RM C43	NR				DU	NO	
RM S-46A	Р			MP		YES	
SITE RM S46	D					NO	
RM S46-52	D					NO	
RM S46-75	G			MP		YES	
RM C44A-75	G			MP	DU	YES	
RM C44	G			MP	DU	YES	
RM C44B-75	D				DU	NO	
RM C45-75	G			MP	DU	YES	
RM C-45-52	NR				DU	NO	
RM C45A-75	G			MP	DU	YES	
RM S47	G			MP	-	YES	
RM S-47-51	G			MP		YES	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM S48	G			MP		YES	
RM C46	F			MP	DU	YES	
SITE RM S49	D					NO	
RM S49-54	G			MP		YES	
RM C47	G			MP	DU	NO	
RM C48A-75	G			MP	DU	YES	
RM C48	G			MP	DU	YES	
RM S50-54	D					NO	
SITE RM S50	D					NO	
RM C49-75	G			MP	DU	YES	
RM C49	F				DU	YES	
SITE RM S51	D					NO	
RM S51-75	D					NO	
RM S-51-51	D					NO	
RM C49A-75	G			MP	DU	YES	
RM S52-51	G			MP		YES	
SITE RM S52	Р					YES	
RM C50	G			MP	DU	YES	
RM C50-75	D				DU	YES	
RM C-50A-75	D				DU	NO	
RM C51-75	G			MP	DU	YES	
RM C-51-51	NR				DU	NO	
RM C51	D					NO	
RM S53	NR					NO	
RM S-53A	D					NO	
RM C52	G			MP	DU	YES	
RM S53-73	G			MP		YES	
RM S54-57	D					NO	
RM S54	G			MP		YES	
RM C52A-73	NR				DU	NO	
RM S54A-75	D					NO	
RM C53	G			MP	DU	YES	
SITE RM S55	D					NO	
RM S-55-51	D					NO	
RM S55-73	G			MP		YES	
RM C54A-75	G			MP	DU	YES	
RM C54	G			MP	DU	YES	
SITE RM S56	G			MP		YES	
RM S56-75	G			MP		YES	
RM S57-73	G			MP		YES	
RM C55-75	G			MP	DU	YES	
RM C55A-39	NR				DU	NO	
RM C-55-51	D					NO	
RM C55A-51	D					NO	
SITE RM C55	D					NO	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM S-57-51	D					NO	
SITE RM S57	D					NO	
RM S58-75	D					NO	
SITE RM S58	D					NO	
RM S-58-40	D					NO	
RM C56A-75	G			MP	DU	YES	
SITE RM S59	D					NO	
RM S-59-51	D					NO	
RM C-57-51	NR				DU	NO	
SITE RM C57	D					NO	
RM S60	G			MP		YES	
RM C58	D					NO	
RM C57-75	D					NO	
RM C58-75	NR				DU	NO	
RM S60-75	G			MP		YES	
RM C-58-52	D					NO	
RM C59A-51	D					NO	
RM C59-75	NR				DU	NO	
RM C59	Р				DU	YES	
RM C59-51	Р				DU	YES	
RM S61	D					NO	
RM S61-51	D					NO	
RM S61-75	G			MP		YES	
RM S62-51	D					NO	
SITE RM S62	D					NO	
SITE RM C60	NR				DU	NO	
RM C60-75	G			MP	DU	YES	
RM S-63-51	D					NO	
RM S-63A	D					NO	
RM S63-75	D					NO	
RM C61A-75	NR			MP	DU	NO	
SITE RM S63	D					NO	
SITE RM C61	D					NO	
RM C62-75	G			MP	DU	YES	
RM S64-75	G			MP		YES	
RM C62	G			MP	DU	YES	
SITE RM S64	D					NO	
RM S65-75	D					NO	
SITE RM C63	D					NO	
SITE RM S65	D					NO	
RM C63-75	G			MP	DU	YES	
RM C64	G			MP	DU	YES	
SITE RM C65	D					NO	
RM C64-76	G			MP	DU	YES	
RM S-66-51	D					NO	

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
SITE RM S66	D					NO	
RM S66-76	D					NO	
RM C65-75	NR				DU	NO	
RM C-65-51	D					NO	
RM C65A-76	NR				DU	NO	
RM C66	D				DU	NO	
RM C66A-75	G				DU	YES	
RM S-68-51	D					NO	
RM S68	D					NO	
RM S-68-75	G			MP		YES	
SITE RM S70	D					NO	
RM S70-75	G			MP		YES	
RM S-70-51	D					NO	
RM S71A-51	G			MP		YES	
SITE RM S71	D					NO	
RM C67	G				DU	NO	
RM C67A-75	G				DU	YES	
RM S72A-75	G			MP		YES	
RM S72-54	G					YES	
SITE RM S72	NR					NO	
RM C68A-75	Р				DU	YES	
RM C68B-76	NR					NO	
SITE RM S73	G			MP		YES	
RM C69A-76	G				DU	NO	
RM C70	G				DU	NO	
RM C70-75	NR				DU	NO	
RM C70A-76	G				DU	YES	
RM C71-76	G				DU	NO	
SITE RM S69	G			MP		NO	
RM S69A-76	G					YES	
RM C72A-76	G				DU	NO	
RM C72	G				DU	NO	
RM C73	G				DU	NO	
RM C94B-77	G				DU	YES	
RM C95A-77	G				DU	YES	
RM C95	G				DU	YES	
RM C96	G				DU	YES	
RM C96-77	G				DU	YES	
RM C-97-51	NR				DU	NO	
RM C97-77	NR				DU	NO	
RM C98-77	G				DU	YES	
RM C98	G				DU	NO	
RM C99	F				DU	NO	
RM C100-51	G				DU	NO	
RM C101	G				DU	NO	

### Saint John River (New Brunswick/Maine)

Boundary Monument Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
RM C102-77	G				DU	YES	
RM C103-77	G				DU	YES	
RM C104-77	G				DU	YES	
RM C105-77	U				DU	YES	

### Southwest and South Lines (Quebec/Maine)

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 181A2	G					YES	
MON 181A3	G					YES	
MON 181A	G					YES	
MON 183A	G					YES	
MON 184	G					YES	
MON 184A	G					YES	
MON 185	G					YES	
MON 186	G					YES	
MON 186A	G					YES	
MON 187	G					YES	
MON 188	G					YES	
MON 188A	G					YES	
MON 189	G					YES	
MON 189A	G					YES	
MON 190	G					YES	
MON 192C	G					YES	
MON 192B	G					YES	
MON 193	G					YES	
MON 195	G					YES	
MON 195A-88	G					YES	
MON 222	D					YES	
MON 224	D					YES	
MON 237B	G					YES	
MON 238	G					YES	
MON 239	G					YES	
MON 239A	G					YES	
MON 239B	D					YES	
MON 239C	G					YES	
MON 240	G					YES	
MON 240A	G					YES	
MON 240B	Р					YES	
MON 241-90	G					YES	
MON 241	D					YES	

### Southwest and South Lines (Quebec/Maine)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 241A	F					YES	
MON 242	Р					YES	
MON 256	F					YES	
MON 258B	G					YES	
MON 259	F					YES	
MON 259A	G					YES	
MON 259C	G					YES	
MON 260	G					YES	
MON 261	Р					YES	
MON 262	G					YES	
MON 263	F					YES	
MON 263A	G					YES	
MON 264	G					YES	
MON 265	F					YES	
MON 265A	G					YES	
MON 266	G					YES	
MON 267	G					YES	
MON 267A	G					YES	
MON 268	G					YES	
MON 268B	G					YES	
MON 269	G					YES	
MON 269A	G					YES	
MON 270	G					YES	
MON 271A	G					YES	
MON 299A	G					YES	
MON 300	G					YES	
MON 301-91	G					YES	
MON 301A	G					YES	
MON 302	G					YES	
MON 303	G					YES	
MON 304	D					YES	
MON 305	G					YES	
MON 306	Р					YES	
MON 307	G					YES	
MON 308	Р					YES	

Boundary Monument Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
MON 323	G			MP		YES	
MON 332	G			MP		YES	

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 333	G	R			DU	YES	S
MON 336	G	R			DU	YES	S
MON 340.5	G					NO	S
MON 340.6	G					NO	S
MON 340.7	G					NO	S
MON 340.8	G	R				YES	S
MON 340.9	G					NO	S
MON 340.10	G					NO	S
MON 340.11	G					NO	S
MON 340.12	G					NO	S
MON 340.13	G					NO	S
MON 340.14	G					NO	S
MON 340.15	G					NO	S
MON 340.16	G					NO	S
MON 340.17	G					NO	S
MON 340.18	G					NO	S
MON 340.19	G					NO	S
MON 340.20	G					NO	S
MON 340.21	G					NO	S
MON 340.22	G					YES	S
MON 340.23	G					YES	S
MON 340.24	G					YES	S
MON 340.25	G					YES	S
MON 340.26	G					YES	S
MON 340.27	G					YES	S
MON 341	P					NO	S
MON 341	G	R			DU	YES	S
MON 341.1	G	R			_	YES	S
MON 341.2	G					YES	S
MON 341.3	G	R				YES	S
MON 341.4	G					YES	S
MON 341.5	G					YES	S
MON 341.6	G					YES	S
MON 341.7	G					YES	S
MON 341.8	G					YES	S
MON 341.9	G					YES	S
MON 341.10	G	R				YES	S
MON 341.11	G	••				YES	S
MON 341.11 MON 341.12	G					YES	S
MON 341.12 MON 341.13	G					YES	S
MON 341.14	G					YES	3
MON 341.14 MON 341.15	G					YES	
MON 341.15	G	R				YES	
MON 341.17	G	R R				YES	
	G	n					
MON 341.18	٥					YES	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 341.19	G	R				YES	
MON 341.20	G					YES	
MON 341.21	G					YES	
MON 341.22	G					YES	
MON 341.23	G	R				YES	
MON 341.24	G	R				YES	
MON 341.25	G					YES	
MON 341.26	G	R				YES	
MON 341.27	G	R				YES	
MON 341.28	G					YES	
MON 341.29	G					YES	
MON 341.30	G	R				YES	
MON 341.31	G					YES	
MON 341.32	G	R				YES	
MON 341.33	G					YES	
MON 341.34	G					YES	
MON 342.4	G	R				YES	
MON 342.5	G					YES	
MON 342.6	G	R				YES	
MON 342.7	G	R				YES	
MON 342.8	G	R				YES	
MON 342.9	G					YES	
MON 342.10	G					YES	
MON 342.11	G					YES	
MON 342.12	G	R				YES	
MON 342.13	G	R				YES	
MON 342.14	G	R				YES	
MON 342.15	G	R				YES	
MON 342.16	G	R				YES	
MON 342.17	G					YES	
MON 342.18	G	R				YES	
MON 342.19	G	R				YES	
MON 342.20	G					YES	
MON 342.21	G					YES	
MON 342.22	G	R				YES	
MON 342.23	G	R				YES	
MON 342.24	G	R				YES	
MON 342.25	G					YES	
MON 342.26	G					YES	
MON 342.27	G	R				YES	
MON 342.28	G	R				YES	
MON 342.29	G	R				YES	
MON 342.30	G	R				YES	
MON 342.31	G					YES	
MON 342.32	G	R				YES	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 343	G	R			DU	YES	
MON 343.1	G	R				YES	
MON 343.2	G	R				YES	
MON 343.3	G	R				YES	S
MON 343.4	G					YES	
MON 343.5	G					YES	
MON 343.6	G	R				YES	
MON 343.7	G	R				YES	
MON 343.8	G	R				YES	
MON 343.9	G					YES	
MON 343.10	G	R				YES	
MON 343.11	G	R				YES	
MON 343.12	G	R				YES	
MON 343.13	G					YES	
MON 343.14	G					YES	
MON 343.15	G	R				YES	
MON 343.16	G					YES	
MON 343.17	G					YES	
MON 343.18	G	R				YES	
MON 343.19	G					YES	
MON 343.20	G					YES	
MON 343.21	G	R				YES	
MON 344	G				DU	YES	
MON 344.1	G					YES	
MON 344.2	G	R				YES	
MON 344.3	G					YES	
MON 344.4	G	R				YES	
MON 344.5	G					YES	
MON 344.6	G	R				YES	
MON 344.7	G	R				YES	
MON 344.8	G	R				YES	
MON 344.9	G					YES	
MON 344.10	G					YES	
MON 344.11	G		MI			YES	
MON 344.12	G					YES	
MON 344.13	G	<del></del>				YES	
MON 344.14	G	<del></del>				YES	
MON 344.15	G	R				YES	
MON 344.16	G					YES	
MON 344.17	G					YES	
MON 344.18	G					YES	
MON 344.19	G					YES	
MON 344.20	G	R				YES	
MON 344.21	G	R				YES	
MON 345	G				DU	YES	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 345.1	G					YES	
MON 345.2	G	R				YES	
MON 345.3	G					YES	
MON 345.4	G					YES	
MON 345.5	G		MI			YES	
MON 345.6	G	R				YES	
MON 345.7	G					YES	
MON 345.8	G	R				YES	
MON 345.9	G					YES	
MON 345.10	G					YES	
MON 345.11	G	R				YES	
MON 345.12	G		MI			YES	
MON 345.13	G	R				YES	
MON 345.14	G					YES	
MON 345.15	G					YES	
MON 345.16	G	R				YES	
MON 345.17	G					YES	
MON 345.18	G					YES	
MON 345.19	G					YES	
MON 345.20	G	R				YES	
MON 345.21	G					YES	
MON 345.22	G	R				YES	
MON 345.23	G	R				YES	
MON 345.24	G					YES	
MON 345.25	G	R				YES	
MON 345.26	G	R				YES	
MON 345.27	G	R				YES	
MON 345.28	G	R				YES	
MON 345.29	G	R				YES	
MON 345.30	G					YES	
MON 345.31	G		MI			YES	
MON 345.32	G	R				YES	
MON 345.33	G	R				YES	
MON 345.34	G	R				YES	
MON 345.35	G	R				YES	
MON 345.36	G					YES	
MON 345.37	G	R				YES	
MON 345.38	G	R				YES	
MON 346	F				DU	YES	
MON 346	G		MI	MP	DU	YES	
MON 346.1	G	R				YES	S
MON 346.2	G					YES	
MON 346.3	G	R				YES	
MON 346.4	G	R				YES	
MON 346.5	G	R				YES	
	ı		<u> </u>	1	l	<u> </u>	

Boundary Monument Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
MON 346.6	G					YES	
MON 346.7	G	R				YES	
MON 346.8	G					YES	
MON 346.9	G	R				YES	
MON 346.10	G	R				YES	
MON 346.11	G	R				YES	
MON 346.12	G	R				YES	
MON 346.12A	G	R				YES	
MON 346.13	G	R				YES	
MON 346.14	G	R				YES	S
MON 346.15	G					YES	
MON 346.16	G		MI			YES	
MON 346.17	G	R				YES	
MON 347	G		MA		DU	YES	
MON 347.1	G	R				YES	
MON 347.2	G	R				YES	
MON 347.3	G	R				YES	
MON 347.4	G					YES	
MON 347.5	G	R				YES	S
MON 347.6	G	R				YES	
MON 347.7	G					YES	
MON 347.8	G					YES	
MON 347.9	G	R				YES	
MON 347.10	G	R				YES	
MON 347.11	G	R				YES	
MON 347.12	G					YES	
MON 347.13	G	R				YES	
MON 347.14	G					YES	
MON 347.15	G		MI			YES	
MON 347.16	G	R				YES	
MON 347.17	G	R				YES	
MON 347.18	G	R				YES	
MON 347.19	G	R				YES	
MON 347.20	G					YES	
MON 347.21	G	R				YES	
MON 347.22	G	R				YES	
MON 347.23	G	R				YES	
MON 347.24	G	R				YES	
MON 347.25	G	R				YES	S
MON 347.26	G	R				YES	S
MON 347.27	G	R				YES	
MON 347.28	G	R				YES	
MON 347.29	G	R				YES	
MON 347.30	G	R				YES	
MON 347.31	G	R				YES	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 347.32	G	R				YES	
MON 347.33	G	R				YES	
MON 347.34	G	R				YES	
MON 348.1	G	R				YES	
MON 348.2	G					YES	
MON 348.3	G	R				YES	
MON 348.4	G					YES	
MON 348.5	G					YES	
MON 348.6	G	R				YES	
MON 348.7	G	R				YES	
MON 348.8	G	R				YES	
MON 348.9	G					YES	
MON 348.10	G	R				YES	
MON 348.11	G					YES	
MON 348.12	G		MI			YES	
MON 348.13	G	R				YES	
MON 348.14	G					YES	
MON 348.15	G	R				YES	
MON 348.16	G					YES	
MON 348.17	G	R				YES	
MON 348.18	G	R				YES	
MON 348.19	G	R				YES	
MON 348.20	G	R				YES	
MON 348.21	G					YES	
MON 348.22	G	R				YES	
MON 348.23	G	R				YES	
MON 348.24	G					YES	
MON 348.25	G		MI			YES	
MON 348.26	G	R	1411			YES	
MON 348.27	G	R				NO	S
MON 348.28	G	R					S
MON 348.29	G	R				YES YES	<u> </u>
	G	R R					
MON 348.30						YES	
MON 348.31	G G	R				YES YES	
MON 348.32		R					
MON 348.33	G G	R				YES	
MON 348.34			N 41			YES	
MON 348.35	G		MI			YES	
MON 348.36	G					YES	
MON 348.37	G					YES	
MON 348.38	G	R			F.:	YES	
MON 350	G		MA		DU	YES	S
MON 351	G			MP		YES	
MON 351A	G			MP		YES	
MON 351B	G			MP		YES	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 352	G			MP		YES	
MON 353	G					YES	
MON 353	G			MP		YES	
MON 353AA	F				DU	YES	
MON 353B	G				DU	YES	
MON 354	G				DU	YES	
MON 355	F				DU	YES	
MON 355	G	R			DU	YES	S
MON 357	G		MA		DU	YES	S
MON 358	Р		MA	MP	DU	YES	
MON 359	G			MP		YES	
MON 359.7	G	R				YES	
MON 359.8	G	R				YES	
MON 359.9	G		MI			YES	
MON 359.10	G	R				YES	
MON 360	G		MA	MP	DU	YES	
MON 360	G				DU	YES	
MON 360.1	G	R				YES	
MON 360.2	G	R				YES	
MON 360.3	G					YES	
MON 360.4	G					YES	
MON 360.5	G		MI			YES	
MON 360.6	G					YES	
MON 360.7	G					YES	
MON 360.8	G					YES	
MON 360.9	G	R				YES	
MON 360.10	G					YES	
MON 360.11	G	R				YES	
MON 360.12	G					YES	
MON 361.1	G	R				YES	
MON 361.2	G	R				YES	S
MON 361.3	G					YES	
MON 361.4	G	R				YES	
MON 361.5	G					YES	
MON 362.1	G					YES	
MON 362.2	G					YES	
MON 362.3	G					YES	
MON 362.4	G					YES	
MON 362.5	G					YES	
MON 362.6	G	R				YES	
MON 363.2	G	R				YES	
MON 364.1	G	R				YES	
MON 365.4	G	n				YES	
	G					YES	
MON 365.5							
MON 365.6	G	R				YES	

Boundary Monument Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
MON 365.7	G	R				YES	Surveyeu
MON 365.8	G	R				YES	
MON 366	P				DU	NO	
MON 366.1	G				50	YES	
MON 366.2	G					YES	
MON 366.3	G					YES	
MON 366.4	G					YES	
MON 366.5	G					YES	
MON 366.6	G					YES	
MON 366.7	G					YES	
MON 366.8	G	R				YES	
MON 366.9	G	R				YES	S
MON 366.10	G					YES	
MON 366.11	G					YES	
MON 366.12	G		MI			YES	
MON 367	G					YES	
MON 367.1	G	R				YES	
MON 367.2	G	R				YES	
MON 367.3	G					YES	
MON 367.4	G					YES	
MON 367.5	G					YES	
MON 367.6	G	R				YES	
MON 367.7	G	R				YES	
MON 367.8	G					YES	
MON 367.9	G					YES	
MON 367.10	G	R				YES	
MON 367.11	G					YES	
MON 367.12	G	R				YES	
MON 367.13	G					YES	
MON 367.14	G	R				YES	
MON 367.15	G		MI			YES	
MON 367.16	G	R				YES	
MON 368	F				DU	YES	
MON 368.1	G					YES	
MON 368.2	G	R				YES	
MON 368.3	G	R				YES	S
MON 368.4	G	R				YES	S
MON 368.5	G	R				YES	
MON 368.6	G	R				YES	S
MON 368.7	G					YES	
MON 368.8	G	R				YES	
MON 368.9	G					YES	
MON 368.10	G	R				YES	S
MON 368.11	G	R				YES	
MON 368.12	G	R				YES	

Boundary Monument  Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
MON 368.13	G					YES	•
MON 368.14	G	R				YES	
MON 368.15	G					YES	
MON 368.16	G	R				YES	
MON 368.17	G		MI			YES	
MON 368.18	G	R				YES	
MON 368.19	G	R				YES	
MON 368.20	G					YES	
MON 368.21	G					YES	
MON 368.22	G					YES	
MON 368.23	G	R				YES	
MON 368.24	G	R				YES	
MON 369	G					YES	
MON 369.1	G		MI			YES	
MON 369.2	G					YES	
MON 370	G					YES	
MON 371	F				DU	YES	
MON 372	G					YES	
MON 374	G				DU	NO	
MON 375	Р				DU	NO	
MON 378	G					YES	
MON 379	G					YES	
MON 381	Р				DU	YES	
MON 383	Р				DU	YES	
MON 384	D				DU	YES	
MON 384	G				DU	YES	
MON 384	G	R			DU	YES	S
MON 385	P				DU	YES	
MON 385	G	R			DU	YES	S
MON 385	G				DU	YES	
MON 386	G					YES	
MON 387	G					YES	
MON 388	G					YES	
MON 389	Р				DU	YES	
MON 390	G				DU	YES	
MON 391	G					YES	
MON 392	F				DU	YES	
MON 393	Р		MI	MP	DU	YES	
MON 394	G			MP		YES	
MON 395	G			MP		YES	
MON 396	P				DU	YES	
MON 397	G				DU	YES	
MON 398	G					YES	

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 445.2	G	R				YES	
MON 445.3	G					YES	
MON 470.1	G					YES	
MON 470.2	G					YES	
MON 470.3	G					YES	
MON 470.4	G					YES	
MON 470.5	G					YES	
MON 470.6	G					YES	
MON 470.7	F					YES	
MON 470.8	G	R				YES	
MON 470.9	F					YES	
MON 470.10	NR					NO	
MON 470.11	G					YES	
MON 470.12	G					YES	
MON 470.13	G		MI			YES	
MON 470.14	G					YES	
MON 470.15	G					YES	
MON 470.16	NR					NO	
MON 470.17	G					YES	
MON 470.18	G					YES	
MON 470.19	G					YES	
MON 470.20	G					YES	
MON 470.21	G	R				YES	
MON 470.22	G	R				YES	

### West Line (QC/VT) (Quebec/Vermont)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 525A	G					YES	
MON 525B	G					YES	
MON 526	F					YES	
MON 531	G					YES	
MON 531A	G					YES	
MON 531B	Р					YES	
MON 535C1	G			MP		YES	
MON 535D	Р					YES	
MON 535E	G			MP		YES	
MON 535F	G					YES	
MON 548A	G					YES	
MON 548B	G					YES	
MON 549	G					YES	

# West Line (QC/VT) (Quebec/Vermont)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 549A	Р					YES	
MON 550	F					YES	
MON 551	Р					YES	
MON 551A-35	G			MP		YES	
MON 551A4	G			MP		YES	
MON 552A	G					YES	
MON 553-00	G		MA	MP		YES	
MON 553A	G					YES	
MON 554A	G					NO	
MON 555	Р					YES	
MON 555A	G					YES	
MON 555B	G					YES	
MON 557A	G					YES	
MON 558	G					YES	
MON 558A	G					YES	
MON 558B	G			MP		YES	
MON 560	G					YES	
MON 560A	G					YES	
MON 582A	G					YES	
MON 583	G					YES	
MON 584	G	R				YES	
MON 584A	G		MI	MP		YES	
MON 585	G			MP		YES	
MON 586	F			MP		YES	
MON 588A	F					YES	
MON 588B	G					YES	
MON 589	G					YES	
MON 590	G					YES	
MON 591	G					YES	
MON 591A	G	R				YES	
MON 591B	G	R				YES	
MON 592	G	R		MP		YES	
MON 596	G			MP		YES	
MON 596A	G			MP		YES	
MON 603A	G			MP		YES	
MON 605A	F					YES	
MON 605B-99	Р					YES	
MON 612	F					YES	
MON 613	G					YES	
MON 614	G					YES	
MON 614A	Р					YES	
MON 614B	G					YES	
MON 614C	G					YES	
MON 614D	G					YES	
MON 615	G					YES	

# West Line (QC/VT) (Quebec/Vermont)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 616	G					YES	
MON 622A	G					YES	
MON 627A	G					YES	
MON 632 & 633	G					YES	
MON 637B	G					YES	
MON 638	G					YES	
MON 638A	G					YES	
MON 638B	G					YES	

### West Line (QC/NY) (Quebec/New York)

Boundary Monument  Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
MON 755	G					YES	
MON 755A	G					YES	

### St. Lawrence River (Ontario/New York)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM 7-59	G			MP		YES	
RM 9-59	G					YES	
RM 11-59	G					NO	
S.E. DISK	G					YES	
N.W. DISK	G					YES	
RM 10-59	G					YES	
RM 12-59	G			MP		YES	
RM 14	G			MP		YES	
RM 13-59	G			MP		YES	
RM 15-59	G			MP		YES	
RM 15A-59	G					YES	
RM 16-59	G			MP		YES	
RM 19-59	G			MP		YES	
RM 21	G			MP		YES	
RM 24-58	G					YES	
RM 26-59	G			MP		YES	
RM 27-78	G		MI	MP		YES	
RM 29-59	G			MP		YES	
RM 30-58	G					YES	

### St. Lawrence River (Ontario/New York)

Boundary Monument Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
RM 31-58	G			MP		YES	Juiveyeu
RM 32-58	G			MP		YES	
RM 34-59	G			MP		YES	
RM 33-78	G			MP		YES	
RM 36-78	G			IVIP		YES	
RM 37-59	G					YES	
RM 43-59	G					YES	
RM 44-59	G			MP		YES	
RM 42-59	G			IVIP			
	G					YES YES	
NO. LINE TABLET, IROQUOIS DAM	G					YES	
SO. LINE TABLET, IROQUOIS DAM	G					YES	
	G			MD		VEC	
RM 45-59	G F			MP		YES	
RM 46						YES	
RM 47-59	G					NO	
RM 53-99	NR					NO	
RM 59-50	G					YES	
RM 60	G					YES	
RM 63	G					YES	
RM 64	G					YES	
RM 65	G			MP		YES	
RM 66	G					YES	
RM 67	G					YES	
RM 68	G					YES	
RM 69	G					YES	
RM 70	G					YES	
E. TABLET - 1959 - T.I. BRIDGE	G					YES	
W. TABLET -1959 - T.I. BRIDGE	G					YES	
E. TABLET -1937 - T.I. BRIDGE	G					YES	
W. TABLET - 1937 - T.I. BRIDGE	G					YES	
RM 71	NR					NO	
RM 72	G					YES	
RM 72 TIWC	G					YES	
RM 73 CIWC	G					YES	
RM 74	G					YES	
RM 75	G					YES	
RM 76	G					YES	
RM 77	G					YES	
RM 78	G					YES	
RM 79	G					YES	
RM 80	G					YES	
RM 81	G					YES	
KIVI 81	G					YES	

### Lake Ontario and Niagara River (Ontario/New York)

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
LEWISTON-QUEENSTON	G					NO	
BRIDGE S. TABLET							
RM FTNIAG	G					YES	
RM 2-41	G			MP		YES	
RM 4-41	G			MP		YES	
RM 6-41	G					YES	
RM 8-41	G			MP		YES	
RM 9A	G					YES	
RM 9-63	G		MI			YES	
LEWISTON-QUEENSTON	G					NO	
BRIDGE N. TABLET							
RM 11-63	G					YES	
RM 13-41	G			MP		YES	
RM 15-41	NR					NO	
RM 17-67	NR					NO	
NORTH TABLET, RAINBOW	G					NO	
BRIDGE							
SOUTH TABLET, RAINBOW	G					NO	
BRIDGE							
RM 19-67	G					YES	
RM 19A-67	G					YES	
CP TERRAPIN-SUB	NR					NO	
RM 22-41	D					YES	
RM 23-67	G					YES	
RM 23-41	G			MP		YES	
RM 24-67	G					YES	
RM 25-67	G					YES	
RM 27-67	G					YES	
RM 29-41	G			MP		YES	
RM 31-41	G					NO	S
RM 32-41	G	R		MP		YES	S
RM 33-98	G					NO	S
NORTH TABLET, PEACE	G					NO	
BRIDGE							
SOUTH TABLET, PEACE BRIDGE	G					NO	
RM 34-98	NR					NO	
RM 34-2016	NR					NO	

### Meridian and 49th Parallel (MB/MN)

### (Manitoba/Minnesota)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 885	G					NO	S
MON 886	G					NO	S
MON 887	G					NO	S
MON 889	G					NO	S
MON 893	G					NO	S
MON 898	G					NO	S
MON 899	G					NO	S
MON 906	G					NO	S
MON 907	Р		MA			NO	S
MON 908	G					NO	S
MON 908A	G					NO	S

### 49th Parallel (MB/ND) (Manitoba/North Dakota)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 723	G					NO	
MON 723A	G					NO	
MON 724	G					NO	
MON 730	G					NO	
MON 730A	G					NO	
MON 731	G					NO	
MON 732	G					NO	
MON 734A-98	G					NO	
MON 734B-66	G					NO	
MON 741	G					NO	
MON 742	G					NO	
MON 745	G					NO	
MON 745A	G					NO	
MON 746	G					NO	
MON 753A	G					NO	
MON 754	G					NO	
MON 765	G					NO	
MON 765A-66	G					NO	
MON 767	G					NO	
MON 768	G					NO	
MON 768A	G					NO	
MON 769	G					NO	
MON 769A	G					NO	
MON 770	G					NO	
MON 770A	G					NO	
MON 771	G					NO	

### 49th Parallel (MB/ND) (Manitoba/North Dakota)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 771A	G					NO	
MON 772	G					NO	
MON 773	G					NO	
MON 773A	D					NO	
MON 774	G					NO	
MON 775	G					NO	
MON 779A	G					NO	
MON 779B	G					NO	
MON 779C	G					NO	
MON 780	G					NO	

### 49th Parallel (AB-SK-MB/MT- ND) (Alberta, Saskatchewan/Montana)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 341	G					NO	S
MON 341A	G	R		MP	DU	YES	S
MON 342	G					NO	S
MON 342A	G	R		MP	DU	YES	S
MON 343	G					NO	S
MON 343A	G	R		MP	DU	YES	S
MON 344	G					NO	S
MON 354	G					NO	S
MON 354A	G	R		MP	DU	YES	S
MON 354B	G	R		MP	DU	YES	S
MON 355	G					NO	S
MON 356	G					NO	S
MON 356AA	G	R		MP	DU	YES	S
MON 356A	G					NO	S
MON 356B	G					NO	S
MON 356C	G					NO	S
MON 357	G					NO	S
MON 358	G					NO	S
MON 358A	G	R		MP	DU	YES	S
MON 359	G					NO	S
MON 359A	G					NO	S
MON 359B	G	R		MP	DU	YES	S
MON 360	G					NO	S
MON 363	G					NO	S
MON 363A	G	R		MP	DU	YES	S
MON 364	G					NO	S
MON 564A	G					YES	
MON 564B	G					YES	

### 49th Parallel (Similkameen River to West Kootenay River) (British Columbia/Washington)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 116	G					NO	S
MON 116AA	G	NM		MP	ND	YES	S
MON 116A	G					NO	S
MON 116B	G					NO	
MON 116C	G					NO	
MON 116D	G					NO	
MON 117-56	G					NO	S
MON 117A	Р					NO	

### 49th Parallel (Similkameen River to West Kootenay River) (British Columbia/Washington)

Boundary Monument Type & Number	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument Surveyed
MON 117B	G					NO	

### 49th Parallel (Columbia Valley to Similkameen River) (British Columbia/Washington)

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 43	G					YES	

### 49th Parallel (Pacific to Columbia Valley) (British Columbia/Washington)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number					-		Surveyed
MON 0	G					YES	
MON 1	G		MI			YES	
MON 1A	G					YES	
MON 1B	G					YES	
MON 2	F					YES	
MON 2A-00	G					YES	
MON 2B	G					YES	
MON 3	G					YES	
MON 3A	G					YES	
MON 3B	G					YES	
MON 4	G					YES	
MON 5	G					YES	
MON 5A	G					YES	
MON 5B	G					YES	
MON 5B1	G					YES	
MON 5D	G					YES	
MON 5G	G					YES	
MON 5X	G					YES	
MON 5D1	G					YES	
MON 5E-2009	G					YES	
MON 5F-92	G					YES	
MON 6	G					YES	
MON 7	G					YES	
MON 7A	G					YES	
MON 8	G					YES	
MON 8A	G					YES	
MON 9	G					YES	

# 49th Parallel (Pacific to Columbia Valley) (British Columbia/Washington)

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 9A	G					YES	
MON 10	G					YES	
MON 11	G					YES	
MON 12	G					YES	
MON 12A	G					YES	
MON 13	G					YES	
MON 13A	G					YES	
MON 14	G					YES	
MON 15	G					YES	
MON 15A	G					YES	
MON 16	G					YES	
MON 17	G					YES	
MON 18	G					YES	
MON 18A	G					YES	
MON 19	G					YES	
MON 19AA	G					YES	
MON 19A	G					YES	
MON 19C	G					YES	
MON 20	G					YES	
MON 20A	G					YES	
MON 20B	G					YES	
MON 21	G					YES	
MON 22	G					YES	
MON 22A	G					YES	
MON 23	G					YES	
MON 23A	G					YES	
MON 24	G					YES	
MON 24A	G					YES	
MON 25	G					YES	
MON 25A	G					YES	
MON 25B	G					YES	
MON 26	G			MP		YES	
MON 27	G					YES	
MON 28	G					YES	
MON 28A	F					YES	
MON 29	G					YES	
MON 29A	G					YES	
MON 30	G					YES	
MON 30AAA	G					YES	
MON 30AA	G					YES	
MON 30A	G					YES	
MON 31AA	G					YES	
MON 31C	G					YES	
MON 32	G					YES	
MON 32A	G					YES	

## 49th Parallel (Pacific to Columbia Valley) (British Columbia/Washington)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 33	G					YES	
MON 34	G					YES	
MON 36A	G					YES	

### Portland Canal (British Columbia/Alaska)

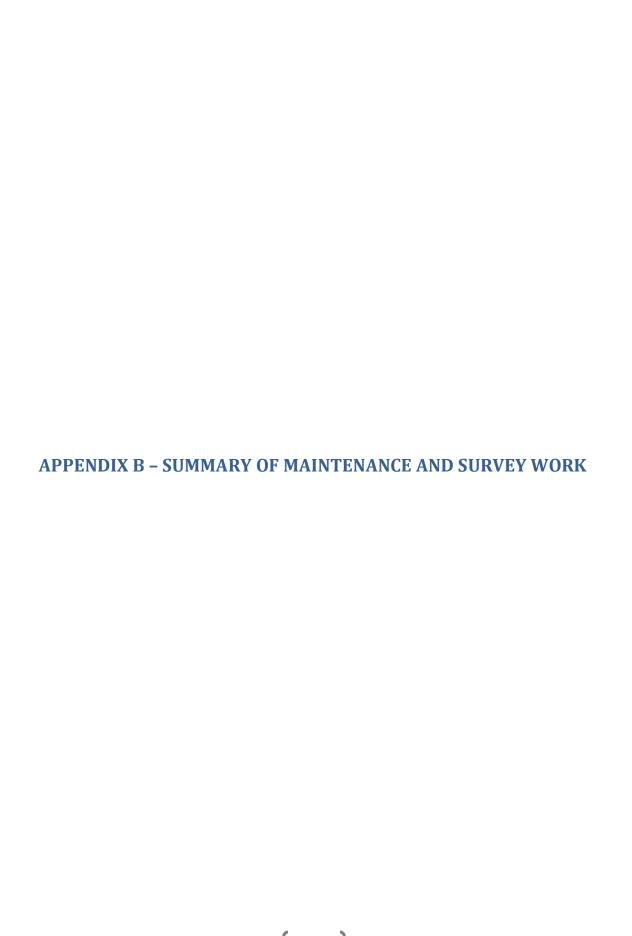
<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM C1	G				DU	YES	S
RM S1&2	G				DU	YES	S
RM C2	G				DU	YES	S
RM C3	Р	R			DU	YES	S
RM S3	G				DU	YES	
RM C4	G				DU	YES	S
RM S4	G				DU	YES	
RM C5	G				DU	YES	S
RM S5	G				DU	YES	S
RM C6	G				DU	YES	S
RM S6	G				DU	YES	S
RM C7	G				DU	YES	
RM S7	G				DU	YES	
RM C8	G				DU	YES	S
RM S8	G				DU	YES	
RM C9	NR				DU	NO	
RM S9	G				DU	YES	S
CP Hidden	G				DU	YES	S
RM S10	G				DU	YES	S
RM C10	G				DU	YES	S
RM S11	G				DU	YES	S
RM C11	G				DU	YES	S
RM S12	G				DU	YES	S
RM C12	G				DU	YES	S
RM S13	G				DU	YES	S
RM C13	G				DU	YES	S
RM C14	G				DU	YES	S
RM S14	G				DU	YES	S
RM C15	G				DU	YES	S
RM S15	G				DU	YES	S
RM C16	G				DU	YES	S
CP Hattie	G				DU	YES	S
RM S16&17	G				DU	YES	S
RM C17	G				DU	YES	S

### Portland Canal (British Columbia/Alaska)

Boundary Monument	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
RM S18	G				DU	YES	S
RM S19	G				DU	YES	S
RM C-19	G				DU	YES	S
RM S20	G				DU	YES	S
RM C20	G				DU	YES	S
RM C21	G				DU	YES	S
RM S21	G				DU	YES	S
CP Ford	G				DU	YES	S
RM C22	G				DU	YES	S
RM S22	G				DU	YES	
RM C23	G				DU	YES	S
RM S23	G				DU	YES	S
RM S24	G				DU	YES	S
RM C24	G				DU	YES	S
RM S25	G				DU	YES	S
RM C25	G				DU	YES	S
RM S26	G				DU	YES	S
RM C26	G				DU	YES	S
RM EAST	G				DU	NO	

### Southeast Alaska (British Columbia/Alaska)

<b>Boundary Monument</b>	Reconnaissance	Established	Repairs	Painted	Description	Photo	Monument
Type & Number							Surveyed
MON 1	G				DU	YES	S



#### **MONUMENT MAINTENANCE**

#### North Line

#### (New Brunswick/Maine)

Monuments recovered	56
Monuments not recovered	1
Monuments repaired or re-established	7
Monuments painted	42
Monuments photographed	53
Monuments surveyed	15

#### Saint John River

#### (New Brunswick/Maine)

Reference Monuments recovered	310
Reference Monuments not recovered	56
Reference Monuments painted	118
Reference Monuments photographed	153
Reference Monuments surveyed	28

#### **Southwest and South Lines**

#### (Quebec/Maine)

Monuments recovered	68
Monuments photographed	68

### Highlands N.E. Section

#### (Quebec/Maine)

Monuments recovered	405
Monuments repaired or re-established	205
Monuments painted	14
Monuments photographed	384
Monuments surveyed	59

Monuments recovered	22
Monuments not recovered	2
Monuments repaired or re-established	5
Monuments photographed	22

### West Line (QC/VT)

#### (Quebec/Vermont)

Monuments recovered	66
Monuments repaired or re-established	6
Monuments painted	13
Monuments photographed	65

### West Line (QC/NY)

#### (Quebec/New York)

Monuments recovered 2
Monuments photographed 2

#### St. Lawrence River

#### (Ontario/New York)

Reference Monuments recovered	50
Reference Monuments not recovered	2
Reference Monuments repaired or re-established	1
Reference Monuments painted	18
Reference Monuments photographed	48

### Lake Ontario and Niagara River

#### (Ontario/New York)

Reference Monuments recovered	21
Reference Monuments not recovered	4
Reference Monuments repaired or re-established	2
Reference Monuments painted	7
Reference Monuments photographed	19
Reference Monuments surveyed	3

#### Meridian and 49th Parallel (MB/MN)

#### (Manitoba/Minnesota)

Monuments recovered	11
Monuments repaired or re-established	1
Monuments surveyed	11

#### 49th Parallel (MB/ND)

(Manitoba/North Dakota)

Monuments recovered 36

#### 49th Parallel (AB-SK-MB/MT- ND)

#### (Alberta, Saskatchewan/Montana)

Monuments recovered	28
Monuments repaired or re-established	9
Monuments painted	9
Monuments photographed	11
Monuments surveyed	26

### 49th Parallel (Similkameen River to West Kootenay River)

#### (British Columbia/Washington)

Monuments recovered	9
Monuments established	1
Monuments painted	1
Monuments photographed	1
Monuments surveyed	4

### 49th Parallel (Columbia Valley to Similkameen River)

#### (British Columbia/Washington)

Monuments recovered	1
Manuments photographed	1

### 49th Parallel (Pacific to Columbia Valley)

#### (British Columbia/Washington)

Monuments recovered	75
Monuments repaired or re-established	1
Monuments painted	1
Monuments photographed	75

#### **Portland Canal**

#### (British Columbia/Alaska)

Reference Monuments recovered	49
Reference Monuments not recovered	1
Reference Monuments repaired or re-established	1
Reference Monuments photographed	48
Reference Monuments surveyed	42

#### Southeast Alaska

#### (British Columbia/Alaska)

Monuments recovered	1
Monuments photographed	1
Monuments surveyed	1

Vista Clearing					
Section name	Province / State	Boundary monument to Boundary monument	Section responsible	Distance Km	Distance mi
South South-West	Québec / Maine	Mon 1 to Mon 49	CANADA	134.5	84.1
49e parallel (Prairies)	Manitoba/ Minnesota- North Dakota	Mon 723 to Mon 908	U.S.	26.6	16.6
49e parallel (Prairies)	Manitoba/ Minnesota- North Dakota	Mon 695C to Mon 719	U.S.	53.4	33.2
			TOTAL	214.5	133.9

**APPENDIX C - 15 YEAR PLAN -** 66

Level	Major Task	Section	Cycle (years)
3	Vista Clearing & Maintenance	Passamaquoddy Bay	3
3	Inspection & Maintenance	St. Croix River	8
1	Vista Clearing & Maintenance	North Line	6
3	Inspection & Maintenance	Saint John River	8
2	Inspection & Maintenance	St. Francis River	4
2	Vista Clearing & Maintenance	Southwest and South Lines	6
3	Inspection & Maintenance	Southwest Branch of the St. John River	8
2	Vista Clearing & Maintenance	Highlands N.E. Section	6
2	Vista Clearing & Maintenance	Highlands S.W. Section	6
2	Inspection & Maintenance	Halls Stream	4
1	Vista Clearing & Maintenance	West Line (QC/VT)	6
1	Vista Clearing & Maintenance	West Line (QC/NY)	6
3	Inspection & Maintenance	St. Lawrence River	8
3	Inspection & Maintenance	Lake Ontario and Niagara River	8
3	Inspection & Maintenance	Lake Erie, Detroit and St. Clair Rivers	8
3	Inspection & Maintenance	Lake Huron, Saint Marys River and Lake Superior	8
3	Inspection & Maintenance	Lake Superior to Rainy River	8
3	Inspection & Maintenance	Rainy River and Lake of the Woods	8
2	Vista Clearing & Maintenance	Meridian and 49th Parallel (MB/MN)	5
2	Vista Clearing & Maintenance	49th Parallel (MB/ND)	5
2	Vista Clearing & Maintenance	49th Parallel (AB-SK-MB/MT- ND)	5
3	Vista Clearing & Maintenance	49th Parallel (Foothills to West Kootenay River)	8
3	Vista Clearing & Maintenance	49th Parallel (Similkameen River to West Kootenay River)	8
3	Vista Clearing & Maintenance	49th Parallel (Columbia Valley to Similkameen River)	8
1	Vista Clearing & Maintenance	49th Parallel (Pacific to Columbia Valley)	5
3	Inspection & Maintenance	Straits of Georgia and Juan De Fuca	8
3	Inspection & Maintenance	Portland Canal	8
3	Vista Clearing & Maintenance	Southeast Alaska	10
3	Vista Clearing & Maintenance	141st Meridian (YK/AK)	15

	Task	Section	× 1000\$
	Inspection & Maintenance	Passamaquoddy Bay	36
	Inspection & Maintenance	Saint John River	175
	Inspection & Maintenance	Highlands S.W. Section	120
	Vista Clearing	Highlands S.W. Section	230
	Inspection & Maintenance	West Line (QC/VT)	200
	Inspection & Maintenance	Lake Superior to Rainy River	87
	Inspection & Maintenance	Rainy River and Lake of the Woods	88
	Inspection & Maintenance	49th Parallel (AB-SK-MB/MT- ND)	160
0	Survey	49th Parallel (Foothills to West Kootenay River)	20
7	Maintenance	49th Parallel (Pacific to Columbia Valley)	100
	Vista Clearing	Southeast Alaska	300
	Survey	141st Meridian (YK/AK)	250
	Mapping		50
	Contingency		50
	TOTAL		1,866

	Task	Section	x 1000\$
	Vista Clearing	North Line	80
	Inspection & Maintenance	Saint John River	87
	Inspection & Maintenance	St. Francis River	88
	Vista Clearing	Southwest and South Lines	260
	Inspection & Maintenance	Southwest Branch of the St. John River	175
	Maintenance	Highlands N.E. Section	175
	Vista Clearing	Highlands S.W. Section	230
$\infty$	Inspection & Maintenance	Halls Stream	50
	Vista Clearing	West Line (QC/NY)	150
01	Inspection & Maintenance	Lake Ontario and Niagara River	50
2	Inspection	Meridian and 49th Parallel (MB/MN)	175
	Maintenance	49th Parallel (AB-SK-MB/MT- ND)	175
	Inspection & Maintenance	49th Parallel (Pacific to Columbia Valley)	43
	Vista Clearing	Southeast Alaska	368
	Mapping		50
	Contingency		50
	TOTAL		2,206

Task Section x 1000\$ Inspection & Maintenance St. Croix River 87 North Line 172 Inspection & Maintenance Maintenance Highlands N.E. Section 185 90 Vista Clearing West Line (QC/VT) 80 Inspection & Maintenance St. Lawrence River Inspection & Maintenance Lake Erie, Detroit and St. Clair Rivers 88 Vista Clearing Meridian and 49th Parallel (MB/MN) 140 Maintenance 49th Parallel (MB/ND) 175 Vista Clearing 90 49th Parallel (MB/ND) Vista Clearing 49th Parallel (Foothills to West Kootenay River) 39 Vista Clearing 49th Parallel (Similkameen River to West Kootenay River) 370 49th Parallel (Pacific to Columbia Valley) 100 Vista Clearing Vista Clearing Southeast Alaska 375 50 Mapping 50 Contingency **TOTAL** 2,091

	Task	Section	x 1000\$
	Maintenance	Passamaquoddy Bay	40
	Maintenance	St. Croix River	87
	Maintenance	North Line	88
	Vista Clearing	Highlands N.E. Section	195
	Vista Clearing	West Line (QC/VT)	75
	Inspection & Maintenance	Lake Huron, Saint Marys River and Lake Superior	85
	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	40
2020	Vista Clearing	49th Parallel (Similkameen River to West Kootenay River)	225
	Vista Clearing	49th Parallel (Columbia Valley to Similkameen River)	300
$\sim$	Inspection & Maintenance	49th Parallel (Pacific to Columbia Valley)	88
	Inspection & Maintenance	Straits of Georgia and Juan De Fuca	35
	Vista Clearing	Southeast Alaska	400
	Maintenance	Southeast Alaska	400
	Capital	Truck replacement	100
	Contingency		50
	TOTAL		2,208

	Task	Section	x 1000\$
	Maintenance	Highlands S.W. Section	210
	Vista Clearing & Maintenance	Meridian and 49th Parallel (MB/MN)	253
	Vista Clearing	49th Parallel (MB/ND)	58
l	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	450
7	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	466
202	Vista Clearing & Maintenance	49th Parallel (Pacific to Columbia Valley)	150
	Inspection & Maintenance	Portland Canal	11 <i>7</i>
	Vista Clearing & Maintenance	Southeast Alaska	400
	Contingency		50
	TOTAL		2,154

	Task	Section	x 1000\$
	Inspection & Maintenance	St. Francis River	182
	Vista Clearing	Highlands N.E. Section	250
	Maintenance	Highlands S.W. Section	220
	Inspection & Maintenance	Halls Stream	50
2	Maintenance	Meridian and 49th Parallel (MB/MN)	182
2	Maintenance	49th Parallel (AB-SK-MB/MT- ND)	182
0	Maintenance	49th Parallel (Foothills to West Kootenay River)	400
2	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	133
	Vista Clearing	49th Parallel (Similkameen River to West Kootenay River)	415
	Contingency		50
	TOTAL		2,064

	Task	Section	x 1000\$
	Survey	Passamaquoddy Bay	91
	Maintenance	Passamaquoddy Bay	44
	Survey	St. Croix River	91
	Vista Clearing & Maintenance	Southwest and South Lines	280
n	Vista Clearing & Maintenance	Highlands S.W. Section	480
2	Vista Clearing	West Line (QC/NY)	165
0	Maintenance	Meridian and 49th Parallel (MB/MN)	183
2	Vista Clearing & Maintenance	49th Parallel (Foothills to West Kootenay River)	376
	Maintenance	49th Parallel (Similkameen River to West Kootenay River)	183
	Contingency		50
	TOTAL		1,943

T	Task Task	Section	x 1000\$
٧	/ista Clearing	North Line	90
٧	/ista Clearing	Highlands S.W. Section	250
٧	/ista Clearing	West Line (QC/VT)	110
	/ista Clearing	Meridian and 49th Parallel (MB/MN)	250
~	Maintenance	49th Parallel (MB/ND)	184
٧	/ista Clearing & Maintenance	141st Meridian (YK/AK)	750
٧	/ista Clearing & Maintenance	141st Meridian (YK/AK)	500
С	Contingency		50
T	OTAL		2,184

	Task	Section	x 1000\$
	Vista Clearing & Maintenance	North Line	193
	Vista Clearing	West Line (QC/VT)	90
	Maintenance	St. Lawrence River	90
	Maintenance	Lake Superior to Rainy River	93
10	Maintenance	Rainy River and Lake of the Woods	92
2025	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	45
	Vista Clearing & Maintenance	49th Parallel (Columbia Valley to Similkameen River)	500
2	Vista Clearing & Maintenance	49th Parallel (Pacific to Columbia Valley)	200
	Vista Clearing	141st Meridian (YK/AK)	192
	Vista Clearing	141st Meridian (YK/AK)	888
	Contingency		50
	TOTAL		2,433

	Task	Section	x 1000\$
	Vista Clearing & Maintenance	Passamaquoddy Bay	48
	Vista Clearing & Maintenance	North Line	99
	Maintenance	Saint John River	186
	Maintenance	St. Francis River	80
	Maintenance	Southwest Branch of the St. John River	200
9	Inspection & Maintenance	Halls Stream	75
26	Maintenance	Lake Ontario and Niagara River	60
20	Vista Clearing	Meridian and 49th Parallel (MB/MN)	230
2	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	46
	Vista Clearing	141st Meridian (YK/AK)	1,008
	Vista Clearing	141st Meridian (YK/AK)	550
	Contingency		50
	TOTAL		2,632

	Task	Section	x 1000\$
2027	Maintenance	St. Croix River	100
	Maintenance	Lake Erie, Detroit and St. Clair Rivers	100
	Vista Clearing	Meridian and 49th Parallel (MB/MN)	187
	Inspection & Maintenance	49th Parallel (AB-SK-MB/MT- ND)	190
	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	47
	Vista Clearing & Maintenance	49th Parallel (Similkameen River to West Kootenay River)	430
	Vista Clearing	141st Meridian (YK/AK)	573
	Vista Clearing	141st Meridian (YK/AK)	555
	Contingency		50
	TOTAL		2.232

	Task	Section	x 1000\$
	Maintenance	St. Croix River	100
	Vista Clearing & Maintenance	Southwest and South Lines	310
	Vista Clearing	Highlands N.E. Section	275
	Vista Clearing & Maintenance	West Line (QC/NY)	190
00	Inspection & Maintenance	Lake Huron, Saint Marys River and Lake Superior	95
2028	Vista Clearing & Maintenance	Meridian and 49th Parallel (MB/MN)	73
	Vista Clearing & Maintenance	49th Parallel (MB/ND)	73
	Maintenance	49th Parallel (AB-SK-MB/MT- ND)	210
	Vista Clearing & Maintenance	49th Parallel (Foothills to West Kootenay River)	667
	Vista Clearing	141st Meridian (YK/AK)	600
	Contingency		50
	TOTAL		2,643

	Task	Section	x 1000\$
	Vista Clearing & Maintenance	Passamaquoddy Bay	52
	Vista Clearing	Highlands S.W. Section	275
	Vista Clearing	West Line (QC/VT)	125
	Vista Clearing	Meridian and 49th Parallel (MB/MN)	295
0	Vista Clearing & Maintenance	49th Parallel (MB/ND)	189
2	Vista Clearing	49th Parallel (Foothills to West Kootenay River)	49
0	Vista Clearing & Maintenance	49th Parallel (Columbia Valley to Similkameen River)	550
2	Inspection & Maintenance	Portland Canal	155
	Vista Clearing & Maintenance	Southeast Alaska	400
	Contingency		50
	TOTAL		2,140

#### Task Section x 1000\$ Vista Clearing & Maintenance North Line 300 Inspection & Maintenance St. Francis River 80 Vista Clearing West Line (QC/VT) 110 75 Inspection & Maintenance Halls Stream Vista Clearing 49th Parallel (Foothills to West Kootenay River) 50 300 Vista Clearing & Maintenance 49th Parallel (Pacific to Columbia Valley) 400 Vista Clearing & Maintenance Southeast Alaska 420 Vista Clearing & Maintenance Southeast Alaska 50 Contingency 1,785 **TOTAL**



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