

APPENDIX M

Cultural Heritage Evaluation Report – Credit River Bridge

GO Rail Network Electrification TPAP

Final Cultural Heritage Evaluation Report:

Credit River Bridge

For



Reviewed by:



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Gannett Fleming Project No. 060277

Metrolinx Electrification Project

Contract No. QBS-2014-IEP-002

Submittal Date: September 2017

METROLINX GO RAIL ELECTRIFICATION

Quality Assurance Document Release Form

Name of Firm: Archaeological Services Inc. (ASI)

Document Name: Final Cultural Heritage Evaluation Report: Credit River Bridge Rev.3

Submittal Date: September 8, 2017

Discipline: Environmental Assessment

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Project Manager

The above electronic signatures indicate that the named document is controlled by GF Canada ULC, and has been:

1. Prepared by qualified staff in accordance with generally accepted professional practice.
2. Checked for completeness and accuracy by the appointed discipline reviewers and that the discipline reviewers did not perform the original work.
3. Reviewed and resolved compatibility interfaces and potential conflicts among the involved disciplines.
4. Updated to address previously agreed-to reviewer comments, including any remaining comments from previous internal or external reviews.
5. Reviewed for conformance to scope and other statutory and regulatory requirements.
6. Determined suitable for submittal by the Project Manager.

REVISION HISTORY

Revision	Date	Comments
0	July 27, 2016	Initial Release to Metrolinx
1	December 23, 2016	Revised report reflecting new information, corrected information, client review comments, etc.
2	January 16, 2017	Revised report reflecting new information, corrected information, client review comments, etc.
3	September 8, 2017	Final Report to Metrolinx reflecting new template and finalization

TABLE OF CONTENTS

EXECUTIVE SUMMARY	VI
1 INTRODUCTION	1
1.1 DESCRIPTION OF PROPERTY	1
1.2 HISTORICAL SUMMARY	1
1.3 CURRENT CONTEXT	1
2 METHODOLOGY AND SOURCES	3
2.1 LEGISLATION AND POLICY CONTEXT	3
2.2 APPROACH TO CULTURAL HERITAGE EVALUATION REPORT	4
2.2.1 LIST OF KEY SOURCES AND RESEARCH LIMITATIONS	5
2.3 CONSULTATION	6
3 HERITAGE RECOGNITIONS	7
3.1 MUNICIPAL	7
3.2 PROVINCIAL	7
3.3 FEDERAL	7
4 ADJACENT LANDS	7
5 SUMMARY OF ARCHAEOLOGICAL ASSESSMENTS	8
6 COMMUNITY INPUT	8
7 DISCUSSION OF CULTURAL HERITAGE VALUE	9
7.1 DISCUSSION OF HISTORICAL OR ASSOCIATIVE VALUE	9
7.1.1 SETTLEMENT HISTORY	9
7.1.2 SIGNIFICANT THEMES, EVENTS AND/OR PEOPLE	11
7.2 DISCUSSION OF DESIGN AND PHYSICAL VALUE	14
7.2.1 PHYSICAL CHARACTERISTICS	14
7.2.2 COMPARATIVE ANALYSIS	16
7.3 DISCUSSION OF CONTEXTUAL VALUE	17
7.3.1 DESCRIPTION OF SETTING AND CHARACTER OF THE PROPERTY AND SURROUNDINGS	17
7.3.2 COMMUNITY LANDMARK	18
8 DATA SHEET	19
9 FIGURES	20

FINAL CULTURAL HERITAGE EVALUATION REPORT: CREDIT RIVER BRIDGE



9.1	HISTORIC MAP REVIEW	20
9.2	HISTORICAL PHOTOGRAPHS	23
9.3	SELECT STRUCTURAL DRAWINGS	26
9.4	SITE VISIT PHOTOGRAPHS	32
9.5	FOR COMPARATIVE CONTEXTUAL ANALYSIS	36
10	CHRONOLOGY	39
11	BIBLIOGRAPHY	39
12	PROJECT PERSONNEL	42

APPENDIX A: CULTURAL HERITAGE LANDSCAPE INVENTORY EXCERPT

APPENDIX B: COMPLETED QUESTIONNAIRES

APPENDIX C: COMPARATIVE ANALYSIS

REPORT DISCLAIMER

NOTWITHSTANDING the results and recommendations presented in this study, Archaeological Services Inc. notes that no cultural heritage assessment, no matter how thorough or carefully completed, can necessarily identify every property and/or structure that has not been previously identified as a known or potential cultural heritage resource. Cultural heritage assessments for transportation related projects are limited to the public right-of-way, and as such, potential cultural heritage resources on private property may be screened from view by vegetation and/or other barriers. In the event that a potential cultural heritage resource is found during subsequent construction activities, the consultant cultural heritage specialist and approval authority should be immediately notified.

Executive Summary

ASI was contracted by Morrison Hershfield on behalf of Metrolinx to conduct a Cultural Heritage Evaluation Report (CHER) and Cultural Heritage Evaluation Recommendation Report (CHERR) of the Credit River Bridge on the Lakeshore West rail corridor as part of the GO Rail Network Electrification Transit Project Assessment Project (TPAP). Metrolinx is undertaking a TPAP study under *Ontario Regulation 231/08 - Transit Projects and Metrolinx Undertakings* for electrification of the GO Rail Network. The Credit River Bridge was identified as a Potential Provincial Heritage Property as part of the Cultural Heritage Screening Report completed for the GO Rail Network Electrification TPAP.

The Credit River Bridge is located at Mile 13.27 of the GO Transit Lakeshore West rail corridor, and is owned by Metrolinx. The bridge, built in 1903 and twinned in 2008, carries three tracks of rail traffic in an east and west direction across the Credit River, between Stavebank Road and Mississauga Road, in the City of Mississauga.

Part 1 of this CHER provides a description of the property, including a summary of its historical and current context (Section 1), a description of methodology and sources (Section 2), existing heritage recognition of the resource (Section 3), a description of adjacent lands (Section 4), summary of previous archaeological assessment (Section 5), community input (Section 6), and discussion of cultural heritage value (Section 7). A data sheet is provided in Section 8 and figures, including mapping and photographs, are provided in Section 9. Part 2 of this CHER contains the Recommendations Report which presents the evaluation tables outlining criteria set out in Ontario Regulations 9/06 and 10/06 and recommended outcome of the evaluation, including the draft statement of cultural heritage value and recommended list of heritage attributes (as appropriate).

The CHER was conducted by Lindsay Graves, Cultural Heritage Specialist and Assistant Manager of the Cultural Heritage Division, ASI. Information from the CHER was used in the decision making for the CHERR.

1 Introduction

ASI was contracted by Morrison Hershfield on behalf of Metrolinx to conduct a Cultural Heritage Evaluation Report (CHER) and Cultural Heritage Evaluation Recommendation Report (CHERR) of the Credit River Bridge on the Lakeshore West rail corridor as part of the GO Rail Network Electrification Transit Project Assessment Project (TPAP). Metrolinx is undertaking a TPAP study under *Ontario Regulation 231/08 - Transit Projects and Metrolinx Undertakings* for electrification of the GO Rail Network. The Credit River Bridge was identified as a Potential Provincial Heritage Property as part of the Cultural Heritage Screening Report completed for the GO Rail Network Electrification TPAP.

The objective of this CHER is to provide evidence about reasons why the subject resource may be of cultural heritage value or interest, and identify the physical elements that contribute to its heritage value. Research for this CHER was conducted under the senior project management of Lindsay Graves, Assistant Manager of the Cultural Heritage Division, ASI.

1.1 Description of Property

The Credit River Bridge is located at Mile 13.27 of the GO Transit Lakeshore West rail corridor, and is located in the City of Mississauga (Figure 1-1 and Figure 1-2). The bridge, built in 1903 and twinned in 2008, carries three tracks of rail traffic in an east and west direction across the Credit River, between Stavebank Road and Mississauga Road. While rail traffic travels in an east-west direction, it should be noted that at this segment of the rail corridor, the bridge and corridor is on a northeast-southwest alignment, and the Credit River flows northwest to southeast under the bridge. The Credit River Bridge is located within Metrolinx-owned parcel PIN 13456-0580.

1.2 Historical Summary

The Credit River Bridge is located in part of Lot 6, Concession II in the historic Township of Toronto South in the former County of Peel. The bridge is located in the historic village of Port Credit, which developed at the mouth of the Credit River between Hurontario Street and Mississauga Road. The Credit River Bridge was built in 1903 to the designs and specifications of the Grand Trunk Railway Company, and it was constructed by the Canadian Bridge Company Limited of Walkerville, Ontario.

1.3 Current Context

The Credit River Bridge is located in Port Credit, Mississauga. The general area around the Credit River Bridge is mixed residential and recreational. The residential areas primarily consist of single family homes with some multi-dwelling buildings. The recreational areas feature a combination of historic mixed use recreational space and more recently constructed recreational businesses.

The properties adjacent to the bridge include: the Port Credit Memorial Park to the east; a single family residential building to the north and to the west, and the Royal Canadian Legion (Port Credit Branch) and parking area to the south. All of these adjacent features appear to have been constructed more than 40 years ago.

Figure 1-1: Location of the Credit River Bridge study area in the City of Mississauga, Ontario (Open Street Map)



Figure-1-2: South elevation of the Credit River Bridge in the City of Mississauga, Ontario



2 Methodology and Sources

2.1 Legislation and Policy Context

This cultural heritage screening considers cultural heritage resources in the context of improvements to specified areas, pursuant to *Ontario Regulation 231/08: Transit Projects and Metrolinx Undertakings (Transit Projects Regulation)* and the *Ontario Environmental Assessment Act* (EAA 1990). Pursuant to the *Environmental Assessment Act*, applicable infrastructure projects are subject to assessment so as to determine related impacts on above ground cultural heritage resources (MTO 2006). Infrastructure projects have the potential to impact cultural heritage resources in a variety of ways such as loss or displacement of resources through removal or demolition and the disruption of resources by introducing physical, visual, audible or atmospheric elements that are not in keeping with the resources and/or their setting.

When considering cultural heritage resources in the context of improvements to specified areas, a 40 year old threshold is used as a guiding principle when identifying cultural heritage resources. While identification of a resource that is 40 years old or older does not confer outright heritage significance, this threshold provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from retaining heritage value.

The TPAP is defined in sections 6-17 in *Ontario Regulation 213/08: Transit Projects and Metrolinx Undertakings*, and provides a series of relevant provisions and definitions. The TPAP Guide (January 2014) includes provisions to consider when the proposed project may have a negative impact on a matter of provincial importance, which is defined as follows (2014: 2):

“...a matter of provincial importance that relates to the natural environment or has cultural heritage value or interest...”

The TPAP Guide further notes that identification and assessment of potentially impacted built heritage resources, cultural heritage landscapes, and protected heritage properties are relevant in determining if a matter is of ‘provincial importance’ (2014: 10). It should be noted that the TPAP Guide acknowledges that a built heritage resource, cultural heritage landscape, or protected heritage property does not necessarily need to meet criteria set out under *Regulation 10/06* of the *Ontario Heritage Act* to be considered of ‘provincial importance’.

The analysis used throughout the cultural heritage resource assessment process addresses cultural heritage resources under other various pieces of legislation and their supporting guidelines:

- *Environmental Assessment Act* (R.S.O. 1990, Chapter E.18)
 - *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (MCC – MOE 1992)
 - *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (MCR – MOE 1981)
- *Ontario Heritage Act* (R.S.O. 1990, Chapter O.18) and a number of guidelines and reference documents prepared by the Ministry of Tourism and Culture (MTC):
 - *Standards and Guidelines for the Conservation of Provincial Heritage Properties* (MTC 2010)
 - *Ontario Heritage Tool Kit* (MCL 2006)
- *Planning Act* (R.S.O. 1990, Chapter P.13) and the 2014 *Provincial Policy Statement*

This assessment was also guided by the *Metrolinx Interim Cultural Heritage Management Process* (Metrolinx 2013b), and the *Draft Terms of Reference for Consultants: Cultural Heritage Evaluation Report and Cultural Heritage Evaluation Report Recommendations* (Metrolinx 2014).

2.2 Approach to Cultural Heritage Evaluation Report

The scope of a CHER is guided by the Ministry of Tourism, Culture and Sport’s *Ontario Heritage Toolkit* (2006) as well as the Metrolinx *Draft Terms of Reference for Consultants: Cultural Heritage Evaluation*

Report and Cultural Heritage Evaluation Report Recommendations (2014). Generally, CHERs include the following components:

- A general description of the history of the study area as well as a detailed historical summary of property ownership and building(s) development;
- A description of the cultural heritage landscape and built heritage resources;
- Representative photographs of the exterior and interior of a building or structure, and character-defining architectural details;
- A cultural heritage resource evaluation guided by the *Ontario Heritage Act* criteria;
- A summary of heritage attributes;
- Historical mapping, photographs; and
- A location plan.

A site visit was conducted by John Sleath, Cultural Heritage Assistant, ASI, on 22 June 2016, to conduct photographic documentation of the subject resource. While the Credit River Bridge was accessible from the public right-of-way, it was only accessible from the south. As such, the bridge abutments and the north elevation of the bridge were not viewed during the site visit.

Using background information and data collected during the site visit, the cultural heritage resource is evaluated using criteria contained within Ontario Regulations 9/06 and 10/06 of the *Ontario Heritage Act*. The two criteria sets share a requirement to fully understand the history, design and associations of all cultural heritage resources of the property. The following differences between the two sets of criteria should be noted (Metrolinx 2014: 12):

- Regulation 9/06 requires a consideration of the community context
- Regulation 10/06 requires a consideration of the provincial context

2.2.1 List of Key Sources and Research Limitations

Key Sources

Background historical research, which includes the consultation of primary and secondary source documents, photos, and historic mapping, was undertaken to identify early settlement patterns and broad agents or themes of change in a study area. In addition, on-site archival research was undertaken at the following libraries and archives to build upon information gleaned from other primary and secondary materials:

- Canadiana Room at the City of Mississauga's Central Library;

- Mississauga Heritage Foundation; and
- Archives of Ontario.

Where available, comprehensive bridge inventories were consulted for comparative analysis purposes to determine the potential design value of the subject bridge. The Metrolinx Master Bridge List (August 31, 2015) recording information such as bridge name, location, construction date, material, bridge type, number of spans and overall bridge length, was provided by Metrolinx and utilized for comparative purposes. Additional sources were considered for comparative analysis where relevant.

Available federal, provincial and municipal heritage inventories and databases were also consulted to obtain information about the property. These included:

- The City of Mississauga's Heritage Register;
- The Ontario Heritage Trust's *Provincial Plaque Program* database;
- Park's Canada's *Directory of Federal Heritage Designations*, a searchable on-line database that identifies National Historic Sites, National Historic Events, National Historic People, Heritage Railway Stations, Federal Heritage Buildings, and Heritage Lighthouses; and
- Park's Canada's *Canada's Historic Places* website: a searchable on-line register that provides information on historic places recognized for their heritage value at the local, provincial, territorial and national levels.

Previous consultant reports associated with potential above-ground cultural heritage resources and archaeological resources within and/or adjacent to the GO Rail Network Electrification TPAP included the following:

- Cultural Heritage Screening Report: GO Rail Network Electrification TPAP (ASI 2016)

A full list of references consulted can be found in Section 11 of this CHER.

Research Limitations

No research limitations were identified.

2.3 Consultation

Consultation with the Ontario Heritage Trust, the Ministry of Tourism, Culture, and Sport (MTCS), and heritage staff at the City of Mississauga regarding the subject property took place as part of the Cultural Heritage Screening Report (ASI 2016). However, given that the Credit River Bridge in Mississauga is identified as retaining municipal heritage recognition, additional consultation with heritage staff was undertaken as part of this CHER.

Paula Wubbenhorst, Senior Heritage Coordinator at the City of Mississauga was consulted on June 9, 2016, via email. Ms. Wubbenhorst confirmed that the Credit River Bridge is listed on the City of Mississauga's Cultural Landscape Inventory (2005), and that there is no additional information about the bridge on file at the municipality.

3 Heritage Recognitions

3.1 Municipal

The subject resource retains heritage recognition at the municipal level for the following reasons:

- The property is listed on the City of Mississauga's Cultural Landscape Inventory (2005), and as such it is listed on the City's Municipal Heritage Register.¹ In the Cultural Landscape Inventory, it is identified as F-SLF-4 and called the CN Bridge over Credit River. It is recognized as an unusual bridge type (See Appendix A for the Inventory Description).

3.2 Provincial

The subject resource does not retain heritage recognition at the provincial level for the following reasons:

- The property is owned by Metrolinx, however, it has not previously been identified as a Provincial Heritage Property; and
- The property has not been commemorated by the Ontario Heritage Trust.

3.3 Federal

The subject resources do not retain heritage recognition at the federal level for the following reasons:

- The property does not contain a Federal Heritage Building; and
- The property is not a National Historic Site.

4 Adjacent Lands

The Credit River Bridge is adjacent² to the following known heritage properties:

- The Credit River Corridor is listed on the City of Mississauga's Cultural Landscape Inventory (2005, L-NA-2);

¹ This property is flagged in the building or development application process. Should an application be made for demolition, it would require a heritage permit and 60 days notice to Council. The 60 days is legislated by the Province of Ontario to allow time for Council to consider heritage designation.

² Adjacent land means those lands contiguous to a protected heritage property.

- The Mineola Neighbourhood, located north of the subject bridge, is listed on the City of Mississauga's Cultural Landscape Inventory (2005, L-RES-6); and
- The Royal Canadian Legion, located south of the subject bridge at 35 Front Street North, is listed on the City of Mississauga's Heritage Register.

As per the City of Mississauga's Official Plan (2015) regarding municipal obligations triggered by development on a property adjacent to a listed property or cultural heritage landscape on the City's Heritage Register, Section 7.4.1.12 reads as follows (City of Mississauga 2015:7-7):

"The proponent of any construction, development, or property alteration that might adversely affect a listed or designated cultural heritage resource or which is proposed adjacent to a cultural heritage resource will be required to submit a Heritage Impact Assessment, prepared to the satisfaction of the City and other appropriate authorities having jurisdiction."

5 Summary of Archaeological Assessments

The Stage 1 Archaeological Assessment for the GO Rail Network Electrification TPAP is currently underway (ASI, in progress). Once completed, this report will be on file with Metrolinx and will provide information about archaeological potential in the study area.

6 Community Input

A number of stakeholder groups were contacted and asked to complete a questionnaire to collect any information relating to the Credit River Bridge along the Lakeshore West Corridor. See Appendix B for questionnaire responses received and Table 6-1 for a list of organizations contacted and a description of information received. At the time of writing, responses were received from the Mississauga Heritage Foundation and the Port Credit Village Project. These responses indicate that there is an interest in the cultural heritage value of the bridge, and in the conservation of the bridge.

A review of various online sources did not reveal any interest from the community in the potential heritage value of the Credit River Bridge.

Table 6-1: Results of Community Consultation for Bridge in Mississauga

Contact	Organization	Contact Information	Date(s) of Communications	Description of Information Received
n/a	Port Credit BIA	info@portcredit.com	June 3, 2016	No response received to date
John McKinnon	Credit Reserve Association	jmckinnon@credit-reserve.com	June 3, 2016	No response received to date
Matthew Wilkinson	Mississauga Heritage Foundation	history@heritagemississauga.org	June 3, 2016	Response received June 14 and 24 (email and questionnaire).

				Matthew provided historic photographs of the bridge and a history of railways in Port Credit, and indicated that the bridge has cultural heritage value.
n/a	Mississauga South Historical Society	missysouth@rogers.com	June 3, 2016	No response received to date
Deborah Greenfield and Jim Danahy	Town of Port Credit Association	TOPCA@topca.net	June 3, 2016	No response received to date
Andrew Beattie	Port Credit Village Residents Association	andrew.beattie@rogers.com	June 3, 2016	No response received to date
Dorothy Tomiuk	Viva Port Credit	dtomiuk@sympatico	June 3, 2016	No response received to date
Janis Alton	Port Credit Village Project	janis.alton@sympatico.ca	June 3, 2016	Response received June 3, 2016.
n/a	Credit Valley Conservation Authority	June 3, 2016	June 3, 2016	No response received to date

7 Discussion of Cultural Heritage Value

7.1 Discussion of Historical or Associative Value

7.1.1 Settlement History

Township of Toronto South

In 1788, the County of Peel was part of the extensive district known as the “Nassau District.” After the province of Quebec was divided into Upper and Lower Canada in 1792, the Nassau District became known as Home District. The same year, Upper Canada was subdivided into nineteen counties by its first Lieutenant Governor, Colonel John Graves Simcoe, and by 1852, the Home District was replaced by the Counties of York, Ontario and Peel (Robb 2003; Gibson 2002).

The Township of Toronto was originally surveyed in 1806 by Mr. Wilmot, Deputy Surveyor. The first settler in this Township, and also the County of Peel, was Colonel Thomas Ingersoll. The whole population of the Township in 1808 consisted of seven families scattered along Dundas Street. The number of township inhabitants gradually increased until the War of 1812 broke out, which gave considerable check to its progress. When the war was over, Toronto Township continued to grow and the rear part was surveyed and called the “New Survey.” Along the lakeshore, the pre-existing trail was widened and improved as a public road by 1798, but bridges were lacking. By 1826, a regular stagecoach

service ran between York and Niagara. The Toronto Road Company purchased the Lakeshore Road in 1850, turning it into a toll road (Robb 2003; Gibson 2002).

A review of nineteenth-century historic mapping reveals that the subject rail bridge was located on the northern fringe of the village of Port Credit (Figures 9-1 and 9-2). Lakeshore Road, to the south of the bridge, is depicted as the commercial hub of Port Credit, with densely surveyed residential lots located north and south of the thoroughfare. Major north-south roads include Mississauga Road and Stavebank Road, which are depicted to the west and east of the subject bridge crossing. Larger residential property parcels were developed to the north of the bridge along these roads, while institutional, commercial and public spaces are depicted along the south of the tracks. Much of the land around the bridge was low and occupied by marshland until the late twentieth century.

A review of twentieth-century historic mapping (Figures 9-3 to 9-6) demonstrates that the village of Port Credit was well established and densely settled by the early 1900s. Little changed in the next 50 years, with the exception of an increase in density through housing infill. To the north of the railway tracks, residential properties along Mississauga Road and Stavebank Road had appeared, and the neighbourhood of Mineola to the northeast had been established. By 1975, changes to the former marshland to the south and east of the bridge had begun to take place, which included construction of a municipal library and arena, and flood control through construction of gabion retaining walls along the edge of the Credit River. This was followed by construction of Memorial Park which is comprised of a network of pathways, open green space, and recreational spaces that link to the marina and downtown Port Credit.

The Credit River

The Credit River itself was named “*Mis.sin.ni.he*” or “*Mazinigae-zeebi*” by the Mississaugas. The surveyor Augustus Jones said that this signified “the trusting creek,” although a better translation is “to write or give and make credit.” This is said to refer to the fur trading period, when the French or British would meet with the Aboriginal peoples here “extending credit for supplies until the following spring if the Indians did not have sufficient furs to pay in full.” It is said that the French military engineer, Chaussegros de Lery, suggested that a trading post be established at the Credit in 1749. The French name for this place, when the river was first mapped in 1757, was “*Riviere au Credit*” (Jameson 1923:73-74; Smith 1987:255-257; Rayburn 1997:84; Scott 1997:182; Gibson 2002:177; Robb 2003:6).

Lieutenant Governor Simcoe and his wife, Elizabeth, stopped at the mouth of the Credit River on June 16, 1796. The Simcoes walked along the Credit, and explored the river by canoe about as far upstream as Streetsville. Mrs. Simcoe noted that “the banks were high one side covered with pines & pretty piece of open rocky country on the other.” She also wrote that the river provided a multitude of salmon. Mrs. Simcoe sketched and painted the first known view of the Credit at this time (Robertson 1911:328-331; Gibson 2002:177).

Port Credit

Around 1804, Col. Ingersoll, the first settler, built a trading store. At around the same time, a Government Inn was established on the east bank of the river to accommodate and direct new settlers. Port Credit was officially surveyed and established as a village in 1834. The land on the west side of the Credit River was the first to be surveyed and developed. However, a disastrous fire in 1855 halted its growth. In 1856, a survey of the land on the east side of the river was undertaken, and surveyed lots between the lakefront and the railway were quickly occupied. Port Credit attained status as a police village by 1909, and in 1961, it was incorporated as a town. In 1974, Port Credit amalgamated with the City of Mississauga (Hicks 2007: 3; Gibson 2002:188).

7.1.2 Significant Themes, Events and/or People

Railway Development

The Lakeshore West rail corridor follows the tracks initially laid in the mid 1850s from Toronto to Hamilton by the Great Western Railway (GWR), who were leasing the land from the Hamilton & Toronto Railway Company (H&TRC). The H&TRC was established by Sir Allan MacNab and a number of other investors, with additional financial support from England, and a charter was granted in 1852. Construction on the line began in 1853 and it was completed in 1855. The line was initially leased to the Great Western Railway (GWR), who in turn supplied railway stations along the corridor and constructed the GWR branch between Hamilton and Toronto (Paterson & George 1988:13). Given that the GWR was headquartered in Hamilton, mileage started in Hamilton. Extending from Hamilton, the first train stations were as follows (Reynolds 2011):

- Hamilton, Stuart St. (Mile 0.00);
- Bronte (Mile 13.33);
- Oakville (Mile 17.57);
- Clarkson (Mile 22.82);
- Lorne Park (Mile 23.89)
- Port Credit (Mile 25.84);
- Mimico (Mile 32.26); and
- Sunnyside (Mile 35.18).

In Port Credit, local teamsters were hired by the railway as labourers to build the rail bridge spanning the Credit River, to clear the land, build and level the roadbed, and lay the track through this part of the township. The first train to come through Port Credit Station, which at that time was located on the east side of Stavebank Road, took place on December 3, 1855. The first bridge at the Credit River was a wooden trestle bridge mounted on red brick piers (Clarkson 1967:108; Hicks 2007: 53). It is reported that this trestle dipped lower than the mainline, which caused accidents where rail cars being switched off at Port Credit could roll back down the track towards the bridge (Reynold 2011). Unfortunately, no images of this bridge are known to exist.

The establishment of the railway through Port Credit brought great change to the village. Prior to the 1850s, much of Port Credit's prosperity was reliant on the Credit River as the village served primarily as a shipping port. Mills and farms to the north used the Credit River to access the port at Port Credit, though the arrival of the railroad and the construction of the trestle bridge, ended easy access to the port (Reynolds 2011). The village continued to prosper, however, as it shifted to an emphasis on the railway which linked Port Credit to larger economic centres, brought daily mail, provided more efficient transportation, and attracted people, business and industry to the village.

By the 1870s, there were five trains running daily between Toronto and Hamilton (Hicks 2006). Locomotives were now powered by coal rather than wood and air brakes had been developed which allowed for trains to attain greater speeds. By 1872, iron rails were being replaced by the more resilient steel rails, greatly improving safety standards and reducing expenses. It was also around this time that the H&TR was absorbed into the GWR and the single track between Hamilton and Toronto became known as the Toronto Branch. Other lines constructed by, or purchased by, the GWR included: the Galt & Guelph Railway; the London & Port Sarnia Railway; and the Canada Air Line Railway (Reynolds 2011).

In 1882, the Grand Trunk Railway (GTR) merged with the GWR. Track mileage was reversed at this time, with Union Station in Toronto now at Mile 0.00. In the 1880s and 1890s, a plan was developed by the GTR to fix the 'Dip' at the Credit River, in which the tracks would be raised by 12 feet. At the same time, the Toronto Branch rail corridor was doubled and to accommodate the new track and the raised roadbed, the old wooden trestle spanning the Credit River was replaced by the existing metal bridge in 1903 (Figures 9-7 to 9-10). In about 1900, the location of the Port Credit GTR Station (Mile 12.81) was moved from Stavebank Road easterly, closer to Hurontario Street near the present GO Station (Clarkson 1967; Reynolds 2011; see Figure 9-11).

Due to financial difficulty, control of the GTR was assumed by the Canadian Government in 1919 and by 1923, the GTR was amalgamated with Canadian National Railways (CNR) (Andreae 1997). The CNR continued to operate freight and passenger trains along the Lakeshore West rail corridor on a regular basis, making this one of the busiest rail corridors in Canada. By the 1950s, automobiles and highways were replacing trains and railways as the preferred mode of transportation, which meant that it was becoming economically unviable for the CNR to continue passenger services. The following decades saw the introduction of GO Transit commuter rail service and the creation of VIA Rail Canada by the federal government to ensure the continuity of intercity passenger train services (VIA Rail n.d.).

GO Transit service began in May 1967, and the old train station at Port Credit was demolished to make way for parking for the new GO station.

In the early 2000s, increase rail traffic on the Lakeshore West rail corridor necessitated the addition of a third track. Triple tracking was completed by 2008 and consisted of more than 29 miles (48 kilometres)

of new track, 15 interlockings, and 25 bridges (AECOM n.d.). Work on a new bridge to carry the third track over the Credit River, on the north side of the existing bridge, began in 2007. The concrete substructure was completed in the fall of 2007 and work on the deck truss span began in spring of 2008 (Figure 9-12). The new bridge was lowered into place on August 9th/10th, 2008, between 1:00 am and 8:00 am. According to Reynolds (2011):

“The building of this bridge is a unique undertaking as this is the first time a railway bridge has been built using this method. The main span was constructed on the west side of the river and on the north side of the mainline. It is a Deck Truss Span and measures 20 feet wide and 22 feet high, and 143 feet long. The span weighs 330 tons.

When completed it was moved by equipment rollers and beams onto four heavy equipment flat cars on the mainline. It was then rolled out onto the existing bridge and again using beams and the equipment rollers it was moved between two towers constructed for the installation at each end. Once moved between the towers it was attached to them and lowered into place on the base. Concrete trays were then placed across the top, a total of 24, each weighing 20 thousand pounds. The rails will then be laid across these trays.”

Joseph Hobson and the Grand Trunk Railway

Drawings for the “Double Track Bridge over Credit River, Toronto Branch, Port Credit” were drawn in 1901 by the GTR and signed by Joseph Hobson, Chief Engineer. These included details regarding the repairs necessary to the existing abutments, and demonstrated how the new bridge would raise the base of the rail by 12 feet.

Joseph Hobson began his career as a land surveyor and worked as a provincial land surveyor on the GTR between Toronto and Guelph in the mid 1850s. Hobson became county engineer for the County of Waterloo in 1858. In 1866, he relocated to Guelph and then Hamilton in 1875, working as assistant engineer for the GWR in various capacities. Over the next few decades, he continued up the ranks at the GWR and later the GTR, becoming chief engineer of the GTR west of Toronto in 1882, and finally chief engineer at the entire GTR in 1896. He is attributed to several significant engineering works in Ontario, including the St. Clair Tunnel (1881-1891), the International Bridge at Fort Erie, and the Victoria Bridge in Montreal. He retired as chief engineer in 1906, although continued to consult until his death in Hamilton in 1917 (Irwin 2009).

The Canadian Bridge Company Limited, Walkerville ON

The Canadian Bridge Co. Ltd. of Walkerville, Ontario, fabricated the steel for the deck truss span and the four 30 foot single track deck girder spans forming two double track spans. All steelwork was completed to the specifications of the GTR (dated November 22, 1900).

The Canadian Bridge Co. Ltd. was founded by Francis McMath, a third-generation civil engineer from St. Louis, Missouri. He worked with the Detroit Bridge & Iron Works before establishing the Canadian Bridge Company in 1900 in Walkerville, Ontario. He remained president until 1922, with Willard Pope serving as vice president and chief engineer. In 1923, the company became a subsidiary of the United States Steel Corporation, and in 1937, it was sold to Dominion Steel and Coal Corporation (DOSCO). It operated as a division of DOSCO until 1962, when it was dissolved. Under the direction of McMath and Pope, the Canadian Bridge Company fabricated steel road and rail bridges across Canada including the notable Quebec Bridge in 1917 (a joint venture with the Dominion Bridge Company), the Lethbridge Viaduct, the St. Louis Bridge in Saskatchewan, the Little Current Swing Bridge, and the High Level Bridge in Edmonton (Disher & Smith 2001: 123).

7.2 Discussion of Design and Physical Value

7.2.1 Physical Characteristics

The following description of the Credit River Bridge is based on the available bridge drawings (9-13 to 9-18), site visit (Figures 9-19 to 9-27), inspection reports, and bridge inventory. The following drawings were available for review:

- Plan of Abutments, Credit River Bridge, GTR, GW Division, 1883;
- Plan of Piling for Credit River Bridge Abutments, engineers office, 1883;
- Cross section of Credit River at 25.5 MP, Shewing [showing] position of abutments for iron superstructure, 1884;
- Supplementary Abutments, Credit River Bridge, by Joseph Hobson, Chief Engineer, 1901
- Double Track Bridge over Credit River, Toronto Branch, Port Credit. Joseph Hobson, Chief Engineer, G.T.Ry., Montreal, 1901, 16th District, GTR.
- One (1) 208'-0" double track deck truss span and four (4) 30'-00" single track deck girder spans forming two double track spans, Credit River Bridge, Port Credit, Ont., Grand Trunk Railway, Toronto Branch, 1903, The Canadian Bridge Co. Ltd. of Walkerville Ont. (Series of drawings; note: Specifications for the steel bridge are attributed to the GTR, Nov 22. 1900)
- 1951 – "Credit River Bridge, Precast Reinforced Concrete Slabs for backwalls of east and west abutments" & reinforced concrete slabs for bridge seats... (repairs) CNR, office of bridge engineer, Toronto.
- 1998, Feb 27: View of structure showing the position of the temporary work platform. Credit River Bridge. Oakville Sub.
- Bridge over Credit River, M.13.27 Oakville Subdivision, Mississauga, CN Office of the Chief Engineer. Bridge Widening Design, 2002

Although local history books claim that the subject bridge was built in about 1898 (Hicks 2007; Reynolds 2011) it would appear that the Credit River Bridge was built in 1903 to the designs and specifications of the GTR. The Credit River Bridge was constructed 1903 to carry two tracks of the GTR's Toronto Branch over the Credit River at Port Credit, Ontario. The three-span bridge features a middle deck truss span with steel beam approach spans. The abutments are masonry and according to the drawings, the original bridge abutments for the former wooden bridge were altered to accommodate the new steel bridge.

The middle deck truss is unusual. It was fabricated by the Canadian Bridge Company as a single 208 ft (63 m) double track deck truss span. It is comprised of a ten panel inverted bowstring deck truss with diagonal members forming a Warren truss configuration. The curved lower chord forms a distinctive arch shape. The bridge also features multiple-types of connections; the bridge is riveted, however, the curved lower chord features massive eyebar bundles. To have both a riveted and pin-connected steel truss bridge is unusual and the reasoning behind this particular design is unknown. It was also observed that the steel construction of this truss span is very robust. Unfortunately, a review of the *Canadian Engineer*, and the *Annual Report of the Department of Railways and Canals* did not find any articles about this bridge, and Annual Reports for the Canadian Bridge Company are not available.

As part of the design for the new double track bridge at the Credit River, new masonry piers were constructed to accommodate the new steel deck truss span and the four single track 30 ft (9 m) approach deck girder spans (forming double track spans at each approach).

Modifications

In 1951, the CNR undertook repairs to the bridge abutments and bridge seats. This work involved precast reinforced concrete slabs for backwalls of the east and west abutments. In 2007-8, the bridge was widened with the addition of a three-span bridge to the north side of the existing 1903 bridge, to accommodate a third track. This new steel structure rests on concrete piers and abutments and features a middle deck truss span with two approach deck plate girder spans.

Existing Conditions

According to a 2013 Bridge Inspection Report (Metrolinx 2013), the 1903 structure carrying Track 2 and 3 of Oakville Subdivision of the Lakeshore West rail corridor, is generally in fair condition. The bridge deck is in poor condition, and the report indicates that at that time, the ties were in poor to bad condition overall. The superstructure was in fair condition overall, and the substructure consisting of masonry stone abutments and piers was in fair condition and the abutments showed evidence of minor movement. Of particular note is that the approaches were identified as being 'low', and that the abutment bearings for spans 1 and 3 consisted of welded pedestals and layers of shims which were in poor condition. It recommended that the approaches be lifted and the deck replaced.

7.2.2 Comparative Analysis

The three-span, 1903 Credit River Bridge is comprised of a central deck truss bridge of unusual design with two approach beam spans. The individual span lengths are 30 ft, 210 ft, and 30 ft (9 m, 63, 9 m) for an overall length of 270 ft (82 m). Deck truss railway and road bridges were introduced to the Ontario landscape in the late nineteenth century and become more popular in the early part of the twentieth century, when steel was becoming more affordable and available (Cuming 1984). This type of bridge is typically used to span waterways and/or valleys, where overhead clearance is not necessarily an issue.

According to a review of the Metrolinx Bridge Inventory (2015), there are five other deck truss railway bridges owned by Metrolinx. These are summarized as follows:

- Five-span Rouge River Bridge, Toronto, Lakeshore East Corridor, which included a 140 ft (43 m) double track central deck truss span (b.1898) with four double track approach spans (b.1902), with a total bridge length of 236 ft (72 m);
- Five-span, Sixteen Mile Creek Bridge, Oakville, Lakeshore West Corridor, built 1900-1902, 98 ft (30 m) span length, and 490 ft (149 m) total bridge span length;
- Six-span Bronte Creek, Oakville, Lakeshore West Corridor, built 1900-1902, 93 ft (28 m) span length, and 558 ft (170 m) total bridge length;
- Single-span Mimico Creek Bridge, Toronto, Lakeshore West Corridor, built 1902, measuring 100 ft (31m); and
- Two-span Etobicoke Creek Bridge, Toronto, Lakeshore West Corridor, built 1903, with a 92 ft (28m) span length, and total bridge length of 184 ft (56 m).

According to the bridge inventory maintained by www.historicbridges.org, there are over twenty deck truss road highway bridges in Ontario. A summary of these is provided in Appendix C. It is important to note that this list should not be considered exhaustive, as a complete inventory of bridges in Ontario is not available. In addition, an inventory of rail bridges currently owned/maintained by the CNR or CPR is not available for further comparison.

Based on this review, the subject bridge is not considered to be the oldest example of a deck truss, or significant in terms of individual span length or overall bridge length. However, the inverted bowstring arch design appears to be unique to Ontario, and possibly rare in North America. A significant example of this bridge type is found in the Little Hell Gate spans of the Hell Gate Bridge in New York, which was built in 1916 to the designs of engineer Gustav Lindenthal and built by the American Bridge Company of New York (Holth 2013).

The images included in Section 9.5 of this report illustrate the Rouge River Bridge on the Lakeshore East rail corridor on the Toronto/Pickering border, and Little Hell Gate Bridge in New York. The Rouge River

Bridge is a typical example of a deck truss bridge (which is not arched) for comparison purposes (Figure 9-28), while the Little Hell Gate Bridge (Figure 9-29) is similar to the Credit River Bridge.

7.3 Discussion of Contextual Value

7.3.1 Description of Setting and Character of the Property and Surroundings

The Credit River Bridge is located on the outer fringe of the historic village of Port Credit in Mississauga, Ontario. The Credit River is predominantly used for recreational purposes, and is a significant waterway in the City of Mississauga and an important part of its history and development. Upriver, the Credit River is bounded by residential properties that front Mississauga Road or Stavebank Road. The QEW Credit River Bridge, a concrete open spandrel deck arch bridge built in 1934, is located approximately 1.5 km upriver (northwest) from the subject bridge. The QEW Credit River Bridge is a Provincial Heritage Property.

Downriver, from the Credit River Bridge to where it opens into Lake Ontario, the land use adjacent to the river is a combination of commercial and recreational. On the southwest side of the river is the Royal Canadian Legion (Branch 82), the Mississauga Canoe Club, the Don Rowing Club of Mississauga, and some open green space and parking areas. The Port Credit Memorial Park is located on the northeast side of the river and is comprised of paved pathways, passive and active parkland, a library, an arena, and interpretive plaques providing information on the history of the river and Port Credit. The commercial core of Port Credit spreads out from the river along Lakeshore Road, with a marina and additional residential properties, parkland, and commercial parcels to the south of Lakeshore Road.

Another bridge in the vicinity of the subject bridge is the Lakeshore Road West Bridge over the Credit River. Located approximately 42 metres downstream (southeast) of the subject bridge, the Lakeshore Road West Bridge is a steel beam bridge built in 1960 (Figure 9-30). Previous bridges at this location include the two-lane concrete bowstring arch bridge built in 1919 (Figure 9-31), the 1895 iron through truss bridge built by the Peterborough Bridge Engineering Company, and pre-1895 there were at least two wooden trestle bridges which each were destroyed by storms and flooding (Mississauga Library System n.d.).

The Port Credit GO Station is located approximately 50 m northeast of the Credit River Bridge along the rail corridor. Another bridge, located approximately 15 m southwest of the subject bridge along the rail corridor, was built in 1923 to carry the rail lines over Mississauga Road. This is a deck plate girder bridge with stone abutments which was widened in 2008.



In summary, the character of the general vicinity of the Credit River Bridge is strongly tied to the natural and recreational elements of the Credit River, to the mouth of the Credit River where it meets Lake

Ontario, and to the village of Port Credit. Further, the bridge is well-proportioned and fits easily into the landscape.

7.3.2 Community Landmark

Significant views upriver and downriver from the Credit River Bridge are noted, as well as views to the bridge from Lakeshore Road West and Memorial Park in particular. Given its unusual design, size, prominent location, association with the rail corridor and the Credit River, it is considered to be a community landmark. In particular, given that it dates to the early 1900s, it can be considered to be a cornerstone structure in the Port Credit community given that so much of its surrounding landscape has changed over the past 100 years, yet the bridge remains intact and relatively unaltered. Finally, it is listed on the City of Mississauga's Heritage Register.

8 Data Sheet

 	
Property Name:	Credit River Bridge
Municipal Address:	43.3436742, -79.80512282, Datum WGS84
Municipality:	City of Mississauga
Metrolinx/GO Transit Rail Corridor:	GO Transit Lakeshore West rail corridor
PIN:	13456-0580
Ownership:	Metrolinx
Date of Construction:	1903 (Metrolinx Bridge Inventory; Structural Drawings)
Date of Significant Alterations:	2008 (expanded); Air photo review
Architect/Designer/Builder:	GTR, Canadian Bridge Co. Ltd. (Structural Drawings)
Previous Owner(s)/Occupant(s):	GTR, CNR
Current Function:	Railway Bridge
Previous Function(s)	Railway Bridge
Heritage Recognition/Protection:	Listed on Mississauga's Heritage Inventory
Local Heritage Interest:	Listed on Mississauga's Heritage Inventory
Adjacent Lands:	Port Credit Memorial Arena (By-law 40-2011)

9 Figures

9.1 Historic Map Review

Figure 9-1: View of the study area on 1859 historic mapping (Tremaine 1859)

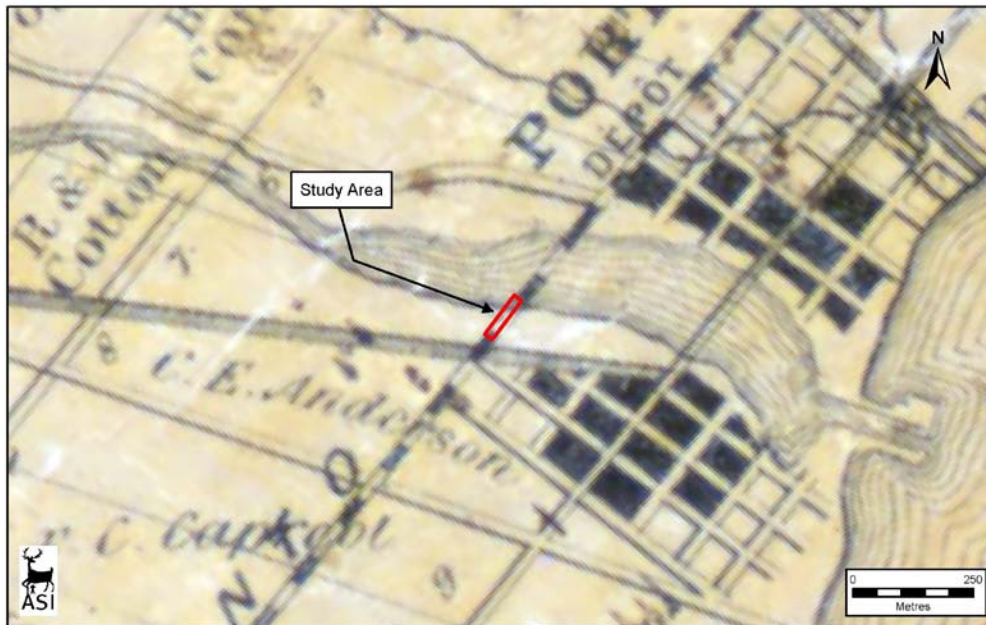


Figure 9-2: View of the study area on 1877 historic mapping (Walker & Miles 1877)



Figure 9-3: View of the study area on 1909 Topographic Map (Ministry of Militia and Defence, 1909)

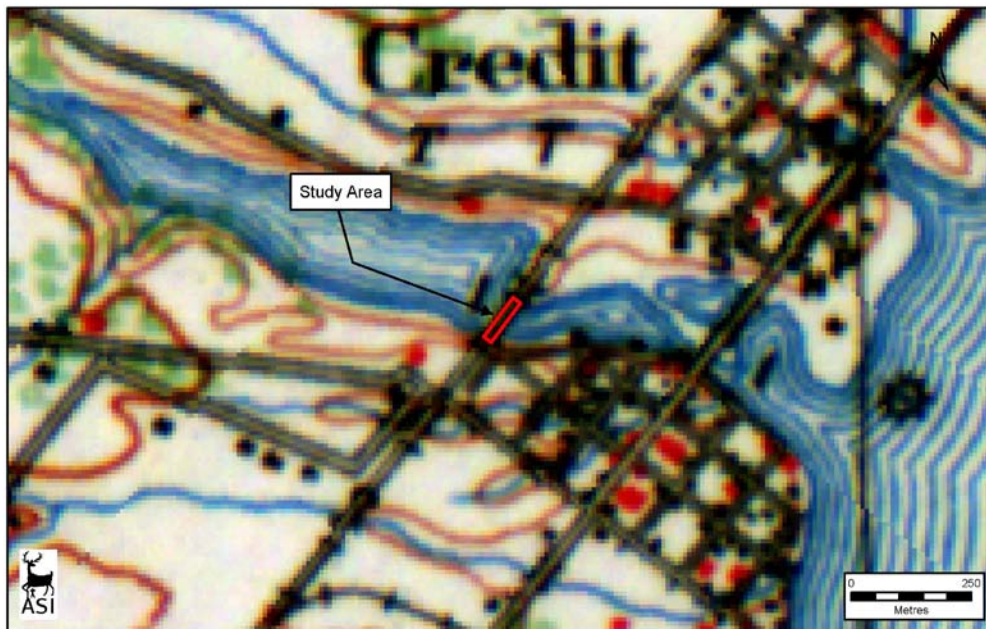


Figure 9-4: View of the study area on 1954 aerial photograph (City of Mississauga, Online Maps)

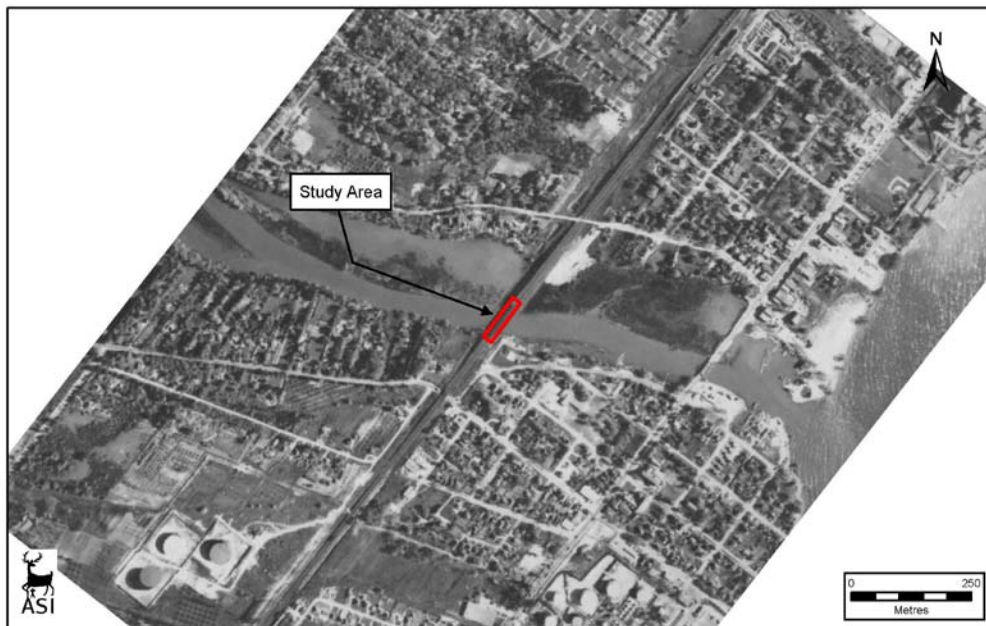


Figure 9-5: View of the study area on 1975 aerial photograph (City of Mississauga, Online Maps)

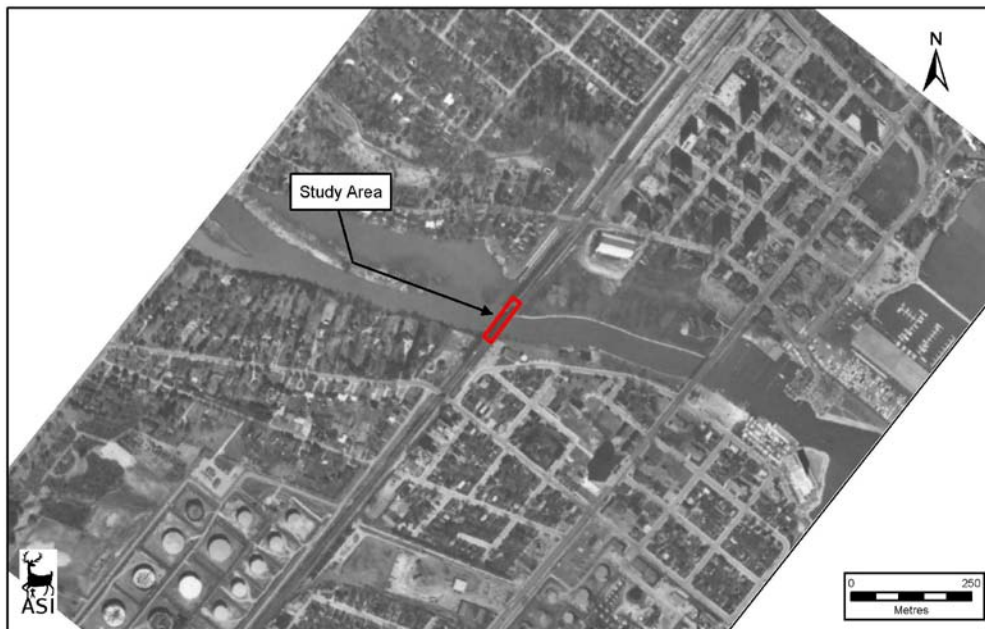


Figure 9-6: View of the study area on 2010 aerial photograph (City of Mississauga, Online Maps)



9.2 Historical Photographs

Figure 9-7: View of the new iron bridge at Port Credit, looking north, date unknown (provided by Mississauga Heritage Foundation)

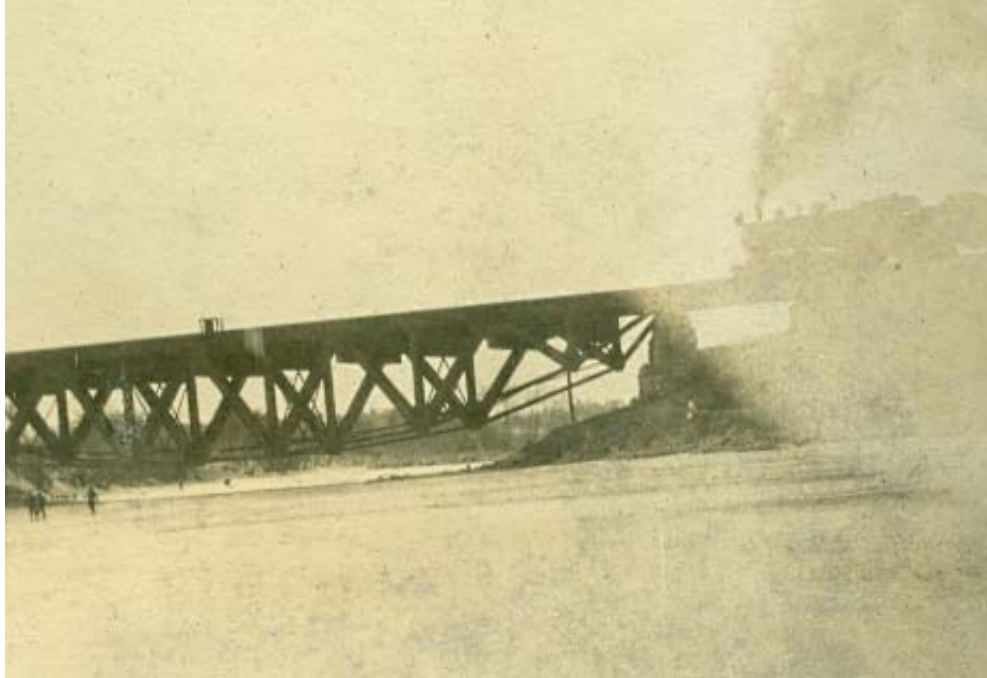


Figure 9-8: View of the Credit River Bridge, looking south, c.1910 (provided by Mississauga Heritage Foundation)

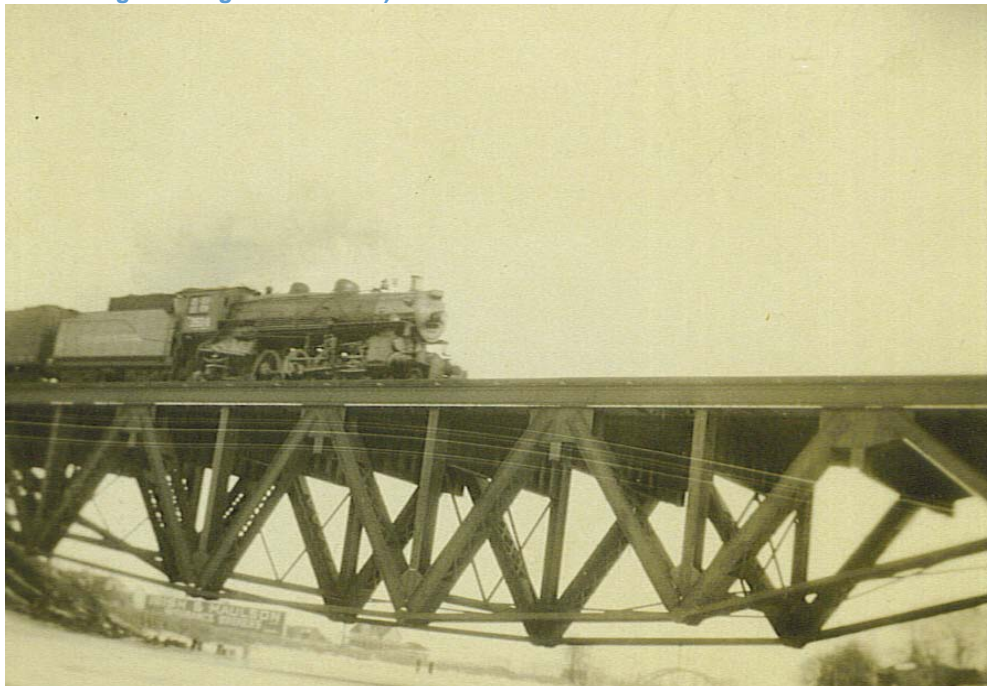


Figure 9-9: Mountain Type Locomotive 6060 crossing the Credit River, looking northeast, c.1950s (Reynolds 2011)



Figure 9-10: Credit River Bridge, looking north, 1978 (Adeney 1978)



Figure 9-11: View of the Port Credit Train Station, c.1950s (Reynolds 2011)



Figure 9-12: View of the new bridge to accommodate a third track, looking east, 2008 (Reynolds 2011)



9.3 Select Structural Drawings

Figure 9-13: Plan of Piling for Credit River Bridge Abutments, 1883 (GTR 1883)

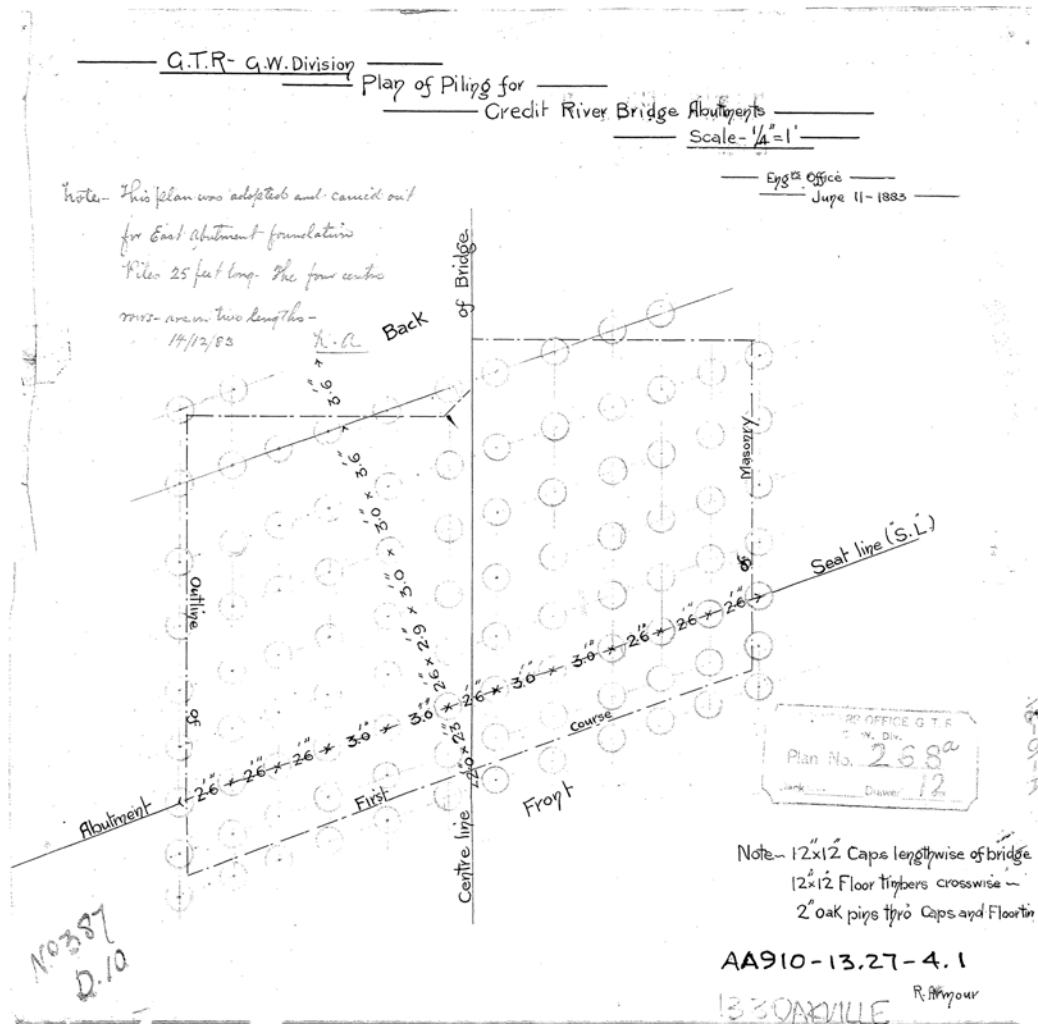


Figure 9-14: Cross Section of Credit River at 25 ½ M.P. showing position of Abutments for Iron Superstructure, 1884 (GTR 1884)

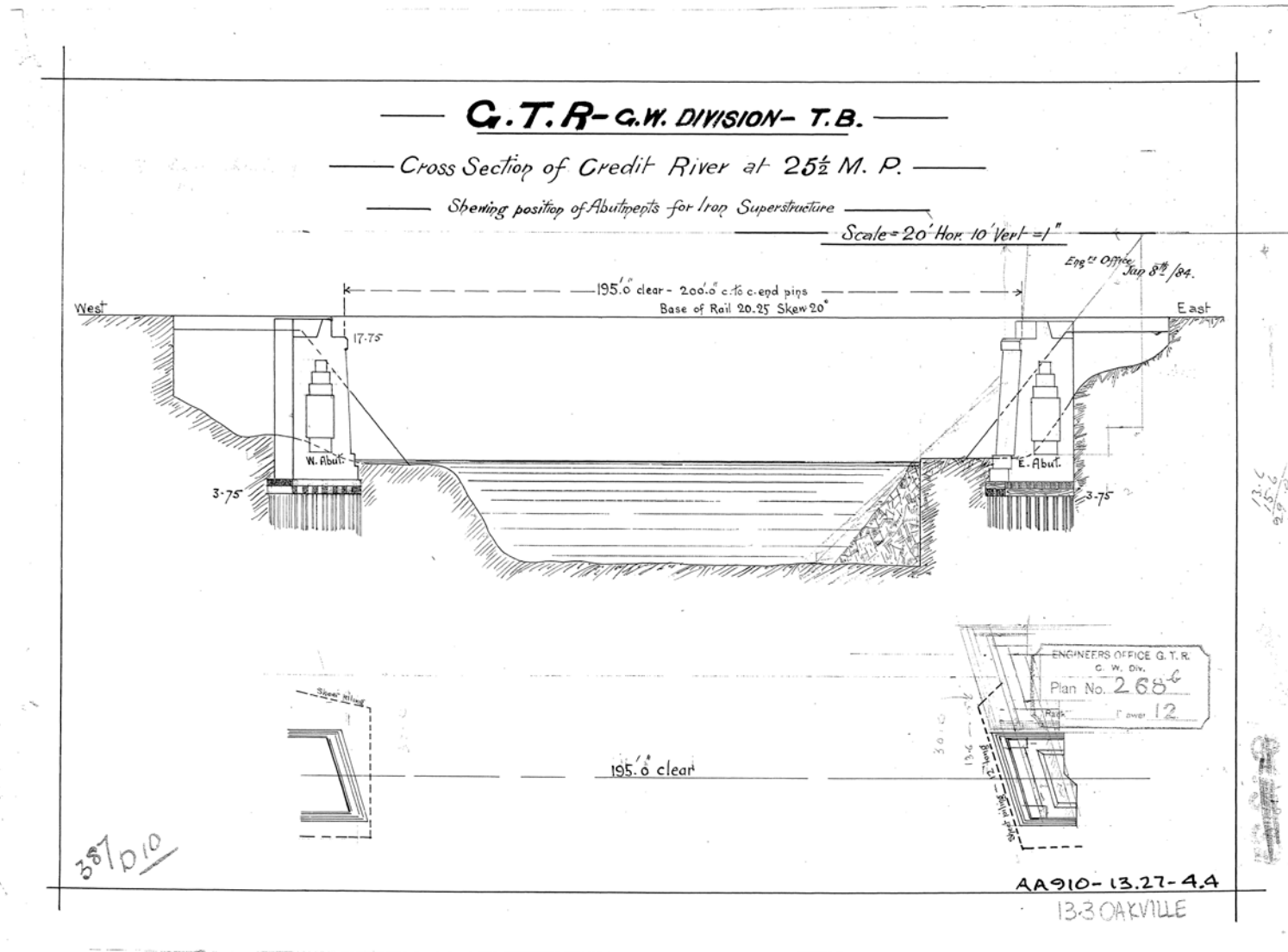


Figure 9-15: Abutment Piers – Credit River Bridge, 1901 (GTR 1901)

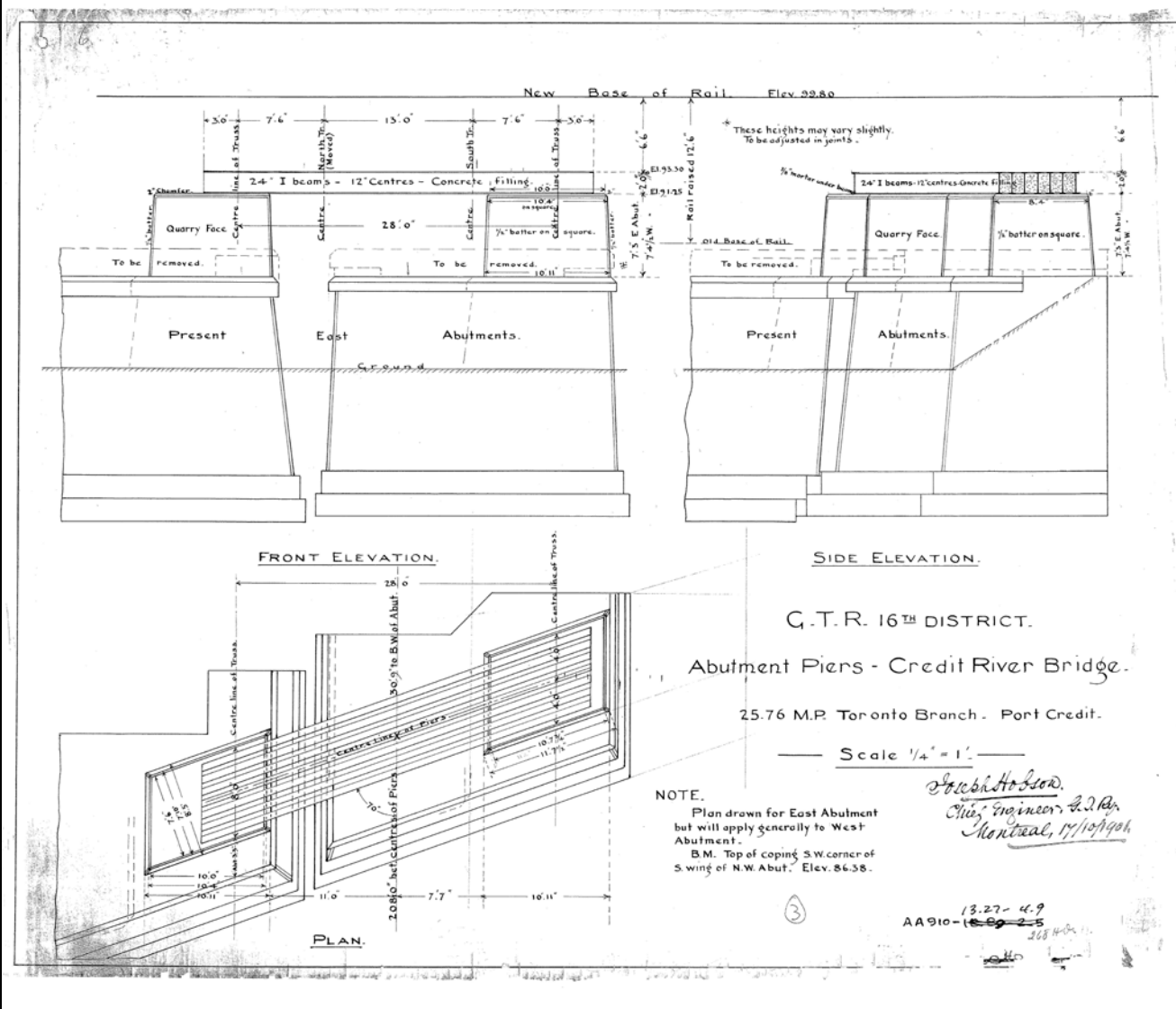
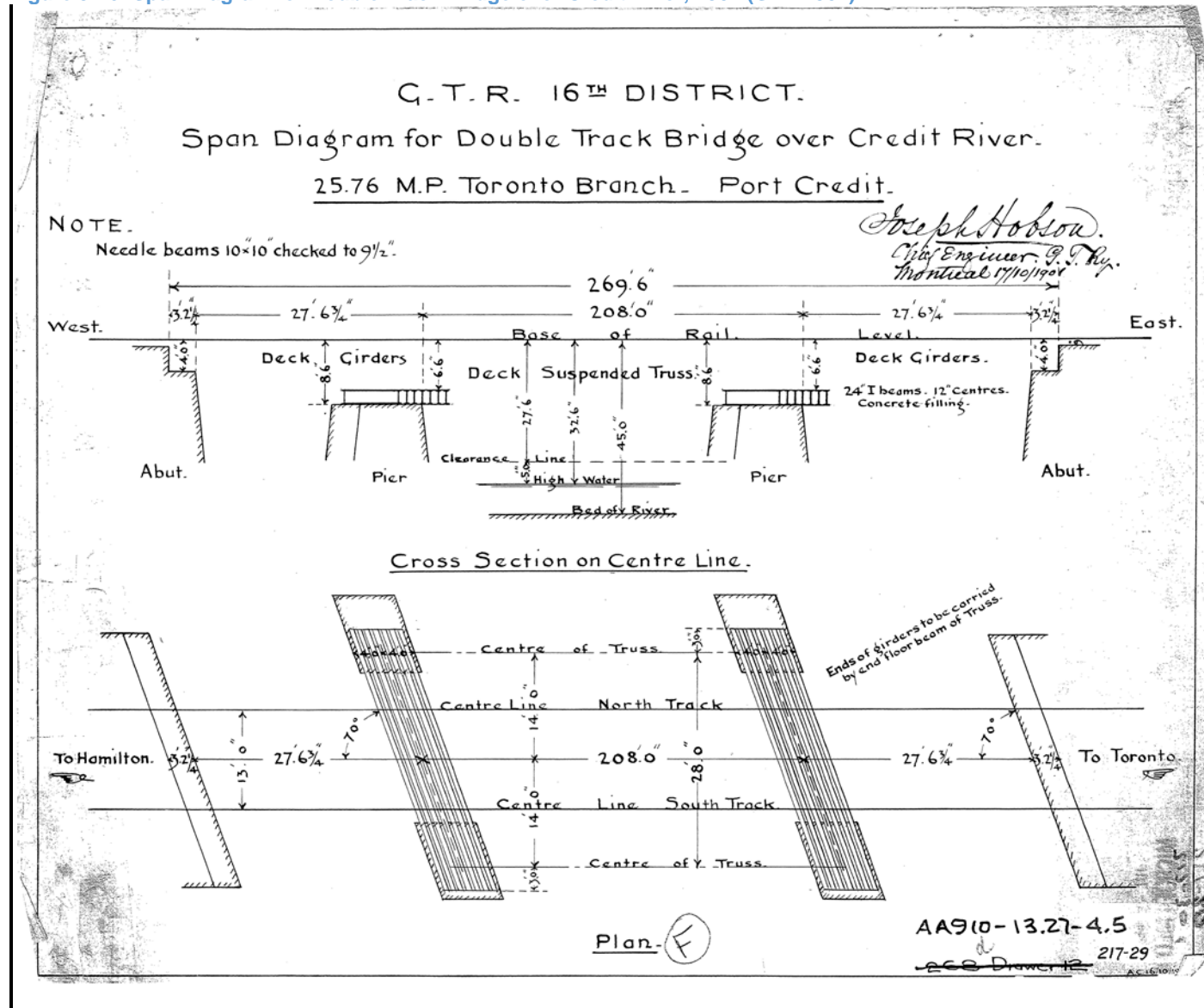
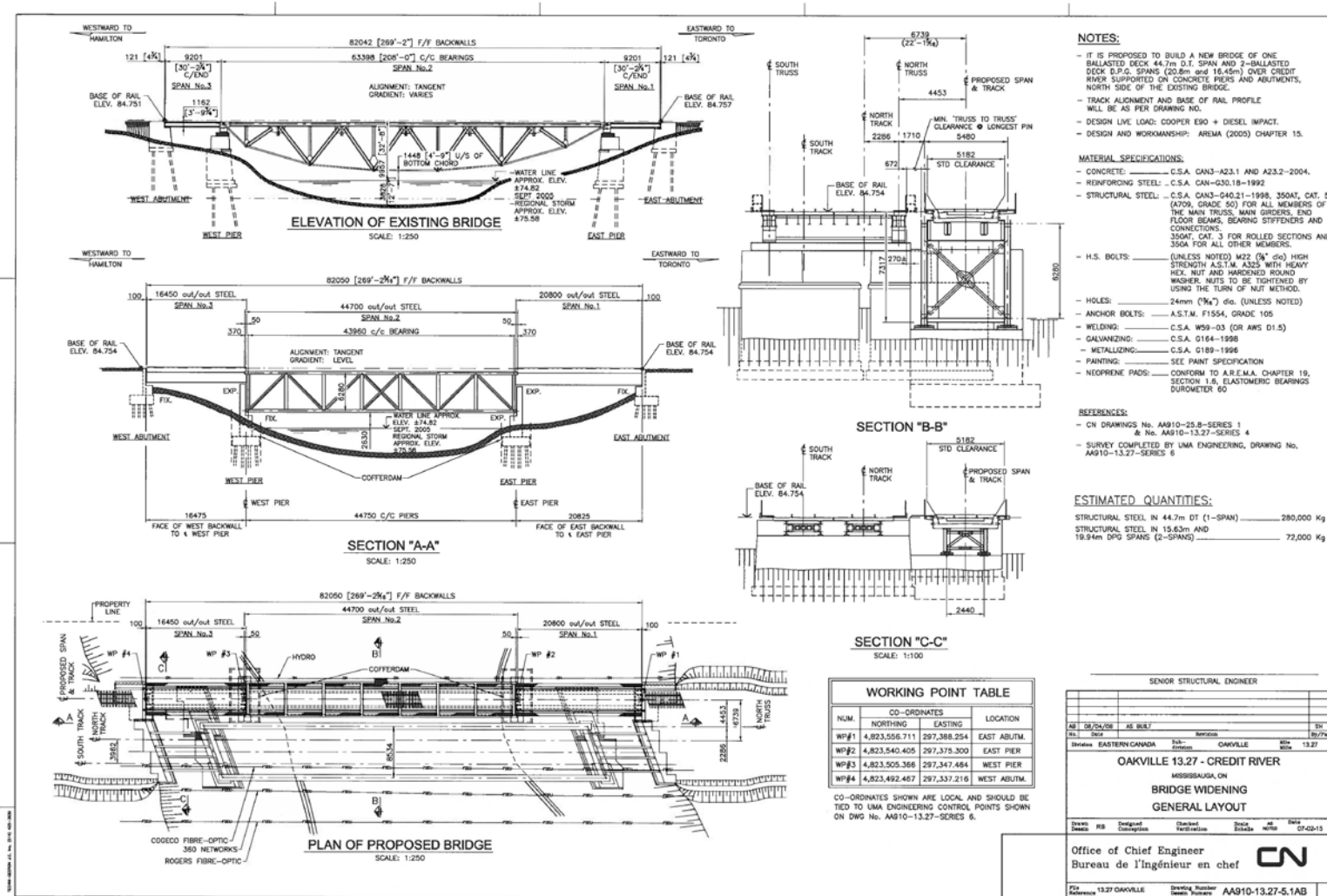


Figure 9-16: Span Diagram for Double Track Bridge over Credit River, 1901 (GTR 1901)



[illegible]

Figure 9-18: Credit River Bridge Widening, General Layout, 2008 (CN 2008)



9.4 Site Visit Photographs

Figure 9-19: View of south elevation, from west bank.



Figure 9-20: View of south elevation, from Lakeshore Road West



Figure 9-21: View of the south elevation, from east bank.



Figure 9-22: Detail of the central section of the deck truss, south elevation.



Figure 9-23: Detail of eastern-part of the deck truss, south elevation.



Figure 9-24: Detail of truss members at west pier, south elevation.



Figure 9-25: Detail view of eyebar bundles.



Figure 9-26: East pier of 2008 bridge addition, south elevation.



Figure 9-27: East pier of 1903 bridge, south elevation.



9.5 For Comparative Contextual Analysis

Figure 9-28: Rouge River Bridge, Lakeshore East rail corridor, City of Toronto, Ontario (ASI 2015)



Figure 9-29: Little Hells Gate Bridge, New York (Holth 2013)



Figure 9-30: View of the c.1960 Lakeshore Road West Bridge, north elevation (ASI 2016)



Figure 9-31: Birds Eye View of the Credit River, 1949, looking northwest (Mississauga Historic Images)



10 Chronology

Date	Event	Reference
1855	Completion of Lakeshore West rail corridor by the Great Western Railway (leased from the Hamilton and Toronto Railway Company (H&TRC)); First bridge built at Credit River on the rail line	Clarkson 1967:108; Hicks 2007: 53
1870s	H&TRC merged with GWR	Hicks 2007; Reynolds 2011
1882	GTR merged with the GWR	Clarkson 1967; Reynolds 2011
1903	Metal inverted bowstring arch bridge built	Mx Bridge Inventory; Bridge drawings
1923	GTR amalgamated with the CNR	Andreae 1997
1967	GO Transit service begins on Lakeshore West	Hicks 2007
2008	Bridge widened to accommodate a third track	AECOM n.d.; Reynolds 2011

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12 Project Personnel

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<i>Cultural Heritage Specialist:</i>	Lindsay Graves
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Cultural Heritage Assistant

Lindsay Graves

Graphics:

Blake Williams, MLitt
Geomatics Specialist

Report Reviewer:

Joel Konrad, PhD
Cultural Heritage Specialist

APPENDIX A: Cultural Heritage Landscape Inventory Excerpt



Cultural Landscape Inventory

CN Bridge Over Credit River

F-SLF-4

Location Located north of Lakeshore Road on the north side of Port Credit Memorial Park

Heritage or Other Designation None

Landscape Type Special Landscape Feature (Railway Bridge)

LANDSCAPE ENVIRONMENT

- ☒ Scenic and Visual Quality
- ☐ Natural Environment
- ☐ Horticultural Interest
- ☒ Landscape Design, Type and Technological Interest

HISTORICAL ASSOCIATION

- ☒ Illustrates Style, Trend or Pattern
- ☐ Direct Association with Important Person or Event
- ☐ Illustrates Important Phase in Mississauga's Social or Physical Development
- ☐ Illustrates Work of Important Designer

BUILT ENVIRONMENT

- ☒ Aesthetic/Visual Quality
- ☒ Consistent Early Environs (pre-World War II)
- ☒ Consistent Scale of Built Features
- ☒ Unique Architectural Features/Buildings
- ☐ Designated Structures

OTHER

- ☒ Historical or Archaeological Interest
- ☒ Outstanding Features/Interest
- ☐ Significant Ecological Interest
- ☒ Landmark Value





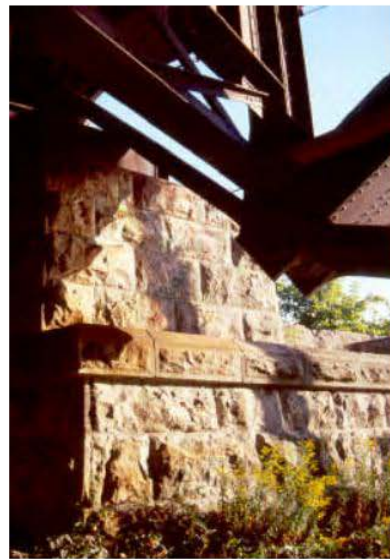
Cultural Landscape Inventory

CN Bridge Over Credit River

F-SLF-4

SITE DESCRIPTION

This unusual bridge is located just north of Port Credit Harbour on the Credit River. It is supported by two abutments constructed of massive cut and rock-faced stone. The main deck is supported by a reverse suspension structure made up of a series of steel links that support vertical columns attached to the deck. The lowest point of the supporting arch is approximately two to three metres (6-10') above the surface of the Credit River. This is identified as a significant cultural feature because there is no other bridge like it in the City of Mississauga and maybe no other like it in the country.



APPENDIX B: Completed Questionnaires

Cultural Heritage Evaluation Report Questionnaire

Subject *

Credit River Railway Bridge

Response By *

Matthew Wilkinson, Historian

Name of Organization *

Heritage Mississauga

Date *

MM DD YYYY

06 / 24 / 2016

1. Have you collected any historical information on the property? *

☒ Yes

☐ No

If yes, please provide a short description of this collection:

Some historic images, basic date information

2. Is there any local interest in the history of the property relating to (please check all that apply): *

☒ Historical or Associative Value

☒ Design or Physical Value

☒ Contextual Value

☐ Other: _____

If yes, please provide additional information regarding your selection(s) above:

The unique design of the bridge has been a community landmark for years, particularly visible from the south (looking north) from Port Credit Memorial Park. The new twinned bridge structure on the north side of the historic railway bridge obscures the view of the north side of the older bridge.

3. Do you know whether the lands where the property is located may be valued by a community, including First Nations? *

☒ Yes

☐ No

If yes, please provide a short description:

The bridge is built within what were once the Credit Indian Reserve lands, and the Credit River Valley was traversed by Native peoples for thousands of years prior to the treaty period (1805-1820) and the Port Credit survey (1835) and the sale of the Indian Reserve lands (1847). There have been aboriginal archaeological finds in close proximity in the past.

4. Please provide any additional comments you think are relevant.

The bridge is also in close proximity to the Mineola West Cultural Landscape, and of course is identified within the Credit River Corridor Cultural Landscape.

Cultural Heritage Evaluation Report Questionnaire

Subject *

Credit River Railway Bridge

Response By *

[Janis Alton

Name of Organization *

Port Credit Village Project

Date *

MM DD YYYY

06 / 04 / 2016

1. Have you collected any historical information on the property? *

☐ Yes

☒ No

If yes, please provide a short description of this collection:

2. Is there any local interest in the history of the property relating to (please check all that apply): *

- ☒ Historical or Associative Value
- ☐ Design or Physical Value
- ☐ Contextual Value
- ☐ Other: _____

If yes, please provide additional information regarding your selection(s) above:

This line is very old and represents the northern boundary of Port Credit. The bridge spans the Credit River itself a place of historical relevance to the peoples who have long used this waterway - the Mississaugas and later the settlers. The bridge links this community to our neighbouring and far-flung towns and cities.

3. Do you know whether the lands where the property is located may be valued by a community, including First Nations? *

- ☒ Yes
- ☐ No

If yes, please provide a short description:

Local citizens for a number of years now have requested a pedestrian link here to facilitate the link to the GO Station. Environmentally, this is to be applauded.

In reverse, the link from the Port Credit Go Station to Credit River/riverside- events (and there are many, and increasing) is a convenience.

4. Please provide any additional comments you think are relevant.

APPENDIX C: Comparative Analysis

The Information in this table is compiled from www.historicbridges.org	
16 Mile Creek Railway Bridge	<p>Railroad (Canadian National and Go Transit) Over 16 Mile Creek and Cross Avenue</p> <p>Oakville: Halton Region, Ontario Metal 8 Panel Rivet-Connected Warren Deck Truss, Fixed Length: 490 ft Main Spans: 5 Built By: Unknown This deck truss bridge noted for its very shallow trusses was more recently widened on one side with girders.</p>
Bayfield Bridge	<p>KH-21 (Bluewater Highway) Over Bayfield River</p> <p>Bayfield: Huron County, Ontario Metal Rivet-Connected Warren Deck Truss, Fixed Main Spans: 2 Built 1949 By: Unknown An attractive two-span deck truss with v-lacing hidden under an ugly deck.</p>
Bayview Avenue Bridge	<p>Bayview Avenue Over West Branch Don River</p> <p>Toronto: Toronto City, Ontario Metal 10 Panel Bolt-Connected Warren Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed Length: 900 ft Main Span: 155 ft Built 1929 By: Unknown and Margison and Babcock This multi-span deck truss bridge was widened with a very similar looking parallel set of trusses in 1960.</p>
Bracebridge Railway Bridge	<p>Railroad (Canadian National) Over North Branch Muskoka River</p> <p>Bracebridge: Muskoka District, Ontario Metal 6 Panel Pin-Connected Pratt Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed Main Spans: 1 Built By: Unknown This is a rare example of a pin-connected deck truss in Ontario.</p>
Burgoyne Bridge (Demolished)	<p>St. Paul Street Over 12 Mile Creek</p> <p>St. Catharines: Niagara Region, Ontario Metal 6 Panel Rivet-Connected Warren Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed Length: 1236 ft</p>

	<p>Main Span: 120 ft Roadway: 30 ft Main Spans: 7 Built 1915 By: Dominion Steel and Coal Corporation and Sprague and Reppert of Pittsburgh, Pennsylvania</p>
Cayuga Railway Bridge	<p>Railroad (Abandoned Canadian National) Over Grand River</p> <p>Cayuga: Haldimand County, Ontario Metal 5 Panel Rivet-Connected Pratt Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed Main Spans: 5 Built By: Unknown An impressive multi-span deck truss with a pleasing trapezoid truss shape and stone piers.</p>
Dorchester Bridge	<p>Bridge Street Over South Branch Thames River</p> <p>Dorchester: Middlesex County, Ontario Metal 6 Panel Rivet-Connected Warren Deck Truss, Fixed Main Spans: 1 Built 1923 By: Unknown This bridge is an uncommon example of a highway deck truss in Ontario.</p>
Forks of the Credit Railway Bridge	<p>Railroad (Canadian Pacific) Over Erin Branch Credit River and Forks of the Credit Road</p> <p>Caledon (Near Belfountain): Peel Region, Ontario Metal 12 Panel Rivet-Connected Warren Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed Main Spans: 1 Built By: Unknown This bridge is located in a scenic area where railway and river wind through the Niagara Escarpment. Homer Lift Bridge</p>
Welland Canal Bridge #4 / Queenston Street Bridge	<p>Queenston Street Over Welland Canal</p> <p>St. Catharines: Niagara Region, Ontario Metal Rivet-Connected Pratt Deck Truss, Movable: Double Leaf Bascule (Rolling Lift) and Approach Spans: Metal Deck Girder, Fixed Main Spans: 1 Built By: Unknown A rare Ontario example of a deck truss bascule bridge, this is a rolling lift.</p>
Leaside Bridge / Confederation Bridge	<p>Millwood Road Over Don River, Don Valley Parkway, and Railroad</p> <p>Toronto: Toronto City, Ontario Metal 8 Panel Rivet-Connected Warren Deck Truss, Fixed Length: 1443 ft</p>

	<p>Main Span: 125 ft Main Spans: 11 Built 1927 By: Unknown and Frank Barber of Toronto, Ontario This tall and long bridge was widened significantly in the late 1960s.</p>
London Thames River Railway Bridge	<p>Railroad (Canadian National) Over Thames River</p> <p>London: Middlesex County, Ontario Metal 8 Panel Rivet-Connected Warren Deck Truss, Fixed and Approach Spans: Metal Stringer (Multi-Beam), Fixed Main Spans: 2 Built By: Unknown Setting new standards for massive, this bridge has gargantuan members and connections.</p>
Constable Rick Hopkins Memorial Bridge	<p>KH-6 (Main Street) Over South Saugeen River</p> <p>Wellington North (Mt. Forest): Wellington County, Ontario Metal 10 Panel Bolt-Connected Pratt Deck Truss, Fixed Main Spans: 1 Built 1961 By: Unknown This is a rare example of a highway deck truss in this region of Ontario.</p>
Mt. Pleasant Road Bridge	<p>Mt. Pleasant Road Over Rosedale Ravine, Rosedale Valley Road, Castle Frank Brook</p> <p>Toronto: Toronto City, Ontario Metal 8 Panel Rivet-Connected Warren Deck Truss, Fixed Length: 440 ft Main Span: 100 ft Main Spans: 3 Built 1948 By: Unknown This is a later but uncommon example of a riveted deck truss bridge with good integrity.</p>
KH-11 Northbound Bridge	<p>KH-11 Northbound Over South Branch Muskoka River</p> <p>Bracebridge: Muskoka District, Ontario Metal 12 Panel Rivet-Connected Warren Deck Truss, Fixed and Approach Spans: Metal Stringer (Multi-Beam), Fixed Main Spans: 2 Built 1952 By: Unknown This deck truss crosses over an impressive gorge and waterfall.</p>
Paisley Railway Bridge	<p>Railroad (Rail-Trail) Over Teeswater River</p> <p>Paisley: Bruce County, Ontario Metal 10 Panel Rivet-Connected Warren Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed</p>

	<p>Length: 607 ft Main Spans: 1 Built 1926 By: Unknown Although a nice looking high level deck truss, also noteworthy are remains of Phoenix columns under the bridge.</p>
Paris Railway Bridge	<p>Railroad (Canadian National) Over Grand River</p> <p>Paris: Brant County, Ontario Metal 8 Panel Rivet-Connected Warren Deck Truss, Fixed Main Spans: 5 Built By: Unknown This is a large high level deck truss that remains in heavy use by trains.</p>
Penetangore River Bridge / Huron Terrace Bridge	<p>Huron Terrace Over Penetangore River</p> <p>Kincardine: Bruce County, Ontario Metal 8 Panel Rivet-Connected Warren Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed Main Spans: 1</p> <p>Built 1934 By: Hamilton Bridge Company of Hamilton, Ontario</p> <p>This impressive deck truss retains excellent historic integrity and is a significant part of Canadian heritage and innovation.</p>
Port Credit Railway Bridge	<p>Railroad (Go, Canadian National) Over Credit River</p> <p>Mississauga: Peel Region, Ontario Metal 10 Panel Multiple-Type-Connected Inverted Bowstring Deck Truss, Fixed and Approach Spans: Metal Stringer (Multi-Beam), Fixed Length: 270 ft Main Spans: 1 Built By: Unknown This bridge's extremely unusual design gives it a very high level of heritage significance.</p>
Southampton Bridge	<p>KH-21 (Albert Street) Over Saugeen River</p> <p>Southampton (Saugeen Shores): Bruce County, Ontario Metal Continuous 14 Panel Bolt-Connected Warren Deck Truss, Fixed Main Spans: 3 Built 1959 By: Unknown and Reginald Arthur Blyth A rare, and relatively late example of continuous deck bridge construction.</p>
St. Thomas Canadian National Railway Bridge	<p>Railway (Canadian National) Over Kettle Creek</p> <p>St. Thomas: Elgin County, Ontario Metal 6 Panel Rivet-Connected Pratt Deck Truss, Fixed and Approach Spans: Metal Deck Girder, Fixed</p>

	<p>Main Spans: 1 Built By: Unknown One of two large high level rail bridges in St. Thomas, this bridge appears to be built of imported German steel.</p>
Tansley Bridge / Dundas Street Bridge	<p>Dundas Street (RR-5) Over Bronte Creek</p> <p>Burlington: Halton Region, Ontario Metal Continuous 16 Panel Rivet-Connected Warren Deck Truss, Fixed Length: 700 ft Main Spans: 4 Built 1948 By: Unknown Although it has been widened on one side with ugly beams, the original part of this bridge is a beautiful example of a deck truss bridge.</p>
Thomas B. McQuesten High Level Bridge	<p>York Boulevard Over Desjardins Canal</p> <p>Hamilton: Hamilton City, Ontario Metal Cantilever Rivet-Connected Deck Truss, Fixed Roadway: 54 ft Main Spans: 3 Built 1932 By: Hamilton Bridge Company of Hamilton, Ontario and James, Proctor, and Redfern of Toronto, Ontario This highly decorated landmark bridge is very beautiful and also has a high level of heritage and technological significance.</p>
Wingham Railway Bridge	<p>Railroad (Wingham Community Rail-Trail, Former Canadian National) Over Maitland River</p> <p>Wingham (North Huron): Huron County, Ontario Metal 10 Panel Pin-Connected Warren Deck Truss, Fixed and Approach Spans: Metal 8 Panel Rivet-Connected Warren Deck Truss, Fixed Main Spans: 1 Built 1915 By: Unknown A variety of spans were relocated here in 1915 to construct this unique bridge, including a rare pin-connected Warren truss.</p>