# **City of Mississauga**

# Heritage Impact Assessment: New Credit River Active Transportation Bridge

#### Prepared by:

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#### **Prepared for:**

City of Mississauga

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# 1. Introduction

# 1.1 Project Context

AECOM was retained by the City of Mississauga to conduct a Heritage Impact Assessment (HIA) for the proposed Credit River Active Transportation (AT) Bridge as part of the AECOM's services for the Detailed Design of the new bridge. The new AT bridge is being constructed as part of the part of the overall Lakeshore Road Transportation Master Plan (TMP) and Implementation Strategy (2019) that was carried out under the Municipal Class Environmental Assessment (EA) process. The TMP (2019) identified the preferred alternative for an active transportation bridge crossing the Credit River linking the east and west side of the river south of the existing railway crossing generally to connect the Front Street and Queen Street rights-of-way.

In January 2023, ASI completed the *Cultural Heritage Report: Existing Condition and Preliminary Impact Assessment for the Lakeshore Transportation Studies New Credit River Active Transportation (AT) Bridge Study* (CHR) (ASI, January 2023), which presented an inventory of known and potential building heritage resources (BHRs) and cultural heritage landscapes (CHLs), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate recommendations. The CHR made the below recommendations, which directly resulted in the production of this HIA.

In January 2023, ASI finalized the "Cultural Heritage Report: Existing Condition and Preliminary Impact Assessment" for the Lakeshore Transportation Studies New Credit River Active Transportation (AT) Bridge Study (referred to as CHR) (ASI, January 2023). This document encompassed an inventory of both known and potential Building Heritage Resources (BHRs) and Cultural Heritage Landscapes (CHLs). It also identified existing conditions of the project study area, provided a preliminary impact assessment, and proposed appropriate recommendations. It is important to note that the recommendations put forth in the CHR directly led to the creation of this HIA. The pertinent recommendations can be found below:

- Complete an HIA per the Standards and Guidelines for Conservation of Provincial Heritage Properties (Ministry of Tourism, Culture and Sport, 2010) for the Credit River Bridge (Lakeshore West Rail Corridor), which is a Metrolinx Provincial Heritage Property of Provincial Significance
- Complete an HIA per the City of Mississauga Official Plan clause 7.4.1.10 for 35 Front Street North (BHR 2). However, given that no structures or apparent landscape features of significant CHVI are anticipated to be impacted on the property, it is recommended that the City consider waiving the requirement of a HIA in this case in favour of suitable mitigation measures including post-construction rehabilitation which could include

sympathetic plantings where required.

### 1.2 Location and Physical Description of the Study Area

The Study Area (**Figure 1** and **Figure 2**) for the proposed New Credit River AT Bridge is situated south of the existing GO rail bridge and spans from the intersection of Mississauga Road and Front Street North to Memorial Park, crossing the Credit River. This Study Area represents the Total Impact Area upon which potential impacts from the Project were assessed.

Within this Study Area, as identified in the *Cultural Heritage Report: Existing Condition and Preliminary Impact Assessment for the Lakeshore Transportation Studies New Credit River Active Transportation (AT) Bridge Study* (CHR) (ASI, January 2023) three properties have been recognized has having the potential for indirect impacts. These properties are the:

- Port Credit Railway Bridge (identified as BHR 1 within the CHR)
- 35 Front Street North (identified as BHR 2 within the CHR)
- Credit River Corridor Cultural Heritage Landscape (identified as CHL 2 within the CHR)

Based on the findings of the CHR, these properties, namely the Credit River Bridge (Lakeshore West Rail Corridor), 35 Front Street North, and the Credit River Corridor Cultural Heritage Landscape, will be the sole subjects of assessment for potential indirect or direct impacts within this HIA. Each of these properties will be briefly described below.

#### 1.2.1 Credit River Bridge (Lakeshore West Rail Corridor)

The Credit River Bridge is located at Mile 13.27 along the Lakeshore West Rail Corridor, where it spans the Credit River between Stavebank Road and Mississauga Road. The known heritage attributes include the three-span railway bridge with a central inverted bowstring arch deck truss with steel beam approach spans on either side. This bridge was erected in the year 1903.

#### 1.2.2 Credit River Corridor Cultural Heritage Landscape

The Credit River Corridor Cultural Landscape encompasses the stretch of the Credit River extending from Port Credit to the northernmost border of Mississauga. This unique landscape forms a central green oasis within the heart of Mississauga, characterized by a diverse topography that ranges from steeply sloping valley walls to expansive floodplains. The known heritage attributes include the river's role as a transportation corridor, as a hunting, fishing, and gathering area, and for influencing settlement patterns by Indigenous peoples for thousands of years. Within the City of Mississauga, the Credit River stands as the most prominent natural landscape, providing crucial wildlife habitat and leaving an indelible mark on Mississauga's history and developmental trajectory (ASI, Final January 2022).

10.1

#### 1.2.3 35 Front Street North – Royal Canadian Legion Branch 82

Located within 35 Front Street North is the Royal Canadian Legion Branch 82 building. The building is located on the northern side of Front Street North, situated to the northeast of the intersection of Front Street North and Peter Street North. The potential heritage attributes include the multi-storey building designed by in the Mid-Century Modern Ontario architectural style by Denis Bowman and built by Milton Townsend contractors in 1966 (Anonymous, 1966). The building sits on the banks of the Credit River.







# 1.3 Present Owner

The Credit River Bridge (Lakeshore West Rail Corridor) is owned by Metrolinx. 35 Front Street North is owned by a private owner. The Credit River Corridor and its adjacent lands are protected, restored and managed by Credit Valley Conservation.

# 1.4 Current Cultural Heritage Recognition

Based on the Metrolinx Heritage Committee Decision Form, the Credit River Bridge (Lakeshore West Rail Corridor) is a Metrolinx Heritage Property of Provincial Significance (PHPPS).

The Credit River Corridor was identified in the 2005 Cultural Landscape Inventory (The Landplan Collaborative Ltd. et al., 2005) for its landscape environment, historical associations, historical or archaeological interest, outstanding features or interest, and significant ecological interest (ASI, 2022). The land identified as part of the Credit River Corridor in the 2005 Cultural Heritage Landscape Inventory is currently listed on the City of Mississauga's Heritage Register. Additionally, 35 Front Street North is Listed on the City of Mississauga's Heritage Register. No Statement of Cultural Heritage Value has been prepared for this property.

# 1.5 Methodology

This HIA adheres to the guidelines set out in the Ministry of Citizenship and Multiculturism (MCM) InfoSheet #5 Heritage Impact Assessment and Conservation Plans as part of the Ontario Heritage Tool Kit (2006) and the City of Mississauga Heritage Impact Assessment Terms of Reference. The HIA will assess the proposed changes to Study Area and evaluate the impact on the cultural heritage value of the surrounding area. The HIA will propose mitigation options and strategies if required to mitigate and limit any negative impacts to the potential heritage attributes of the Credit River Bridge (Lakeshore West Rail Corridor), 35 Front Street North, and the Credit River Corridor Cultural Heritage Landscape (CHL) (areas of avoidance, design measures, construction buffering, commemoration, etc.)

For the purpose of this HIA, AECOM undertook the following key tasks:

- Reviewed appropriate background documents including the:
  - Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment for the Lakeshore Transportation Studies New Credit River Active Transportation (AT) Bridge Study (ASI, January 2023);
  - *Metrolinx Heritage Committee Decision Form and Statement of Cultural Heritage Value* for the Credit River Bridge (Lakeshore West Rail Corridor), Mississauga;
- Consulted with the City of Mississauga Heritage Planner to request previous reports;

- Conducted a field review to document the existing conditions of the Study Area from the public right-of-way, on September 27, 2023;
- Identified and prepared a description of the proposed plan for the new AT Bridge;
- Assess the impacts of the proposed new AT Bridge, based on the draft 90% Detailed Design, on the cultural heritage value and heritage attributes of the Credit River Corridor, the Credit River Bridge (Lakeshore West Rail Corridor), and 35 Front Street North;
- Prepared mitigation options and mitigation measures with recommendations to avoid or reduce any negative impacts to the Study Area; and
- Prepared the Heritage Impact Assessment report.

This report was completed by a team of AECOM's Heritage staff including Liam Ryan, MES, MCIP, RPP, CAHP (Cultural Planner II); Adria Grant, MA, CAHP (Associate Vice President, Environmental); and Samantha Markham, MES (Cultural Resources Manager).

#### 1.5.1 Community Engagement

Below includes a summary of the engagement activities and feedback undertaken for the development of this HIA. The following stakeholders were contacted with inquiries regarding the background of the subject property (**Table 1**).

| Contact  | Contact<br>Information               | Date       | Notes  |
|--|--------------------------------------|------------|--|
| <b>John Dunlop</b> ,<br>Manager, Indigenous<br>Relations         | john.dunlop@mississa<br>uga.ca       | 2023-09-13 | AECOM's Cultural Heritage Lead and Design Team<br>attended a Microsoft Teams meeting with John Dunlop.<br>The discussion included the development of<br>commemoration ideas to be presented in the HIA. John<br>suggested incorporating the Two-Row Wampum into the<br>bridge design, or a Moccasin Identifier under the initiative<br>founded by Carolyn King in partnership with the<br>Mississaugas of the Credit First Nation and the Greenbelt<br>Foundation. These commemoration ideas are presented<br>in <b>Section 6</b> of this HIA. |
| Paula Wubbenhorst /<br>City of Mississauga /<br>Heritage Planner | Paula.Wubbenhorst@<br>mississauga.ca |            |  |

### Table 1: Results of the Community Engagement

| Contact | Contact<br>Information | Date       | Notes   |
|---------|------------------------|------------|---|
|         |                        | 2023-09-29 | Paula Wubbenhorst was unable to provide AECOM with<br>any reports regarding the "Port Credit Railway Bridge" that<br>could potentially indicate its designation as a Provincial<br>Heritage Property of Provincial Significance or contain<br>documentation detailing a Statement of Significance and<br>Heritage Attributes. |

# 2. Policy Context

The authority to request a Heritage Impact Assessment arises from the *Ontario Heritage Act*, Section 2(d) of the *Planning Act*, and the Provincial Planning Statement (2024).

# 2.1 Planning Act and Provincial Planning Statement

The *Planning Act* (1990) and the associated Provincial Planning Statement (2024) provide a legislative framework for land use planning in Ontario. Both documents identify matters of provincial interest, which include the conservation of significant features of architectural, cultural, historical, archaeological, or scientific interest. The *Planning Act* requires that all decisions affecting land use planning matters "shall be consistent with" the Provincial Planning Statement. In general, the Provincial Planning Statement recognizes that Ontario's long-term prosperity, environmental health, and social well-being depend on protecting natural heritage, water, agricultural, mineral, cultural heritage, and archaeological resources for their economic, environmental, and social benefits.

In Section 4.6 of the 2024 Provincial Planning Statement, Cultural Heritage and Archaeology, Policy 1 states that "Protected heritage property, which may contain built heritage resources or cultural heritage landscapes, shall be conserved." The 2024 Provincial Planning Statement states that conserved "means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches should be included in these plans and assessments."

To conserve a cultural heritage resource, a municipality or approval authority may require a heritage impact assessment and/or a conservation plan to guide the approval, modification, or denial of a proposed development or site alteration that affects a cultural heritage resource. Using tools such as heritage impact assessments, municipalities and approval authorities can further enhance their own heritage preservation objectives.

Furthermore, Policy 3 in Section 4.6 of the 2024 Provincial Planning Statement states "Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property unless the heritage attributes of the protected heritage property will be conserved." Pursuant to Policy 4 in Section 4.6 of the 2024 Provincial Planning Statement, planning authorities are encouraged to develop and implement proactive strategies for conserving significant built heritage resources and cultural heritage landscapes.

10.1

# 2.2 Ontario Heritage Act

The Ontario Heritage Act enables municipalities and the province to designate individual properties and/or districts as being of cultural heritage value or interest. The province or municipality may also "list" a property or include a property on a municipal register that has not been designated but is believed to be of cultural heritage value or interest. Ontario Regulation 9/06, Criteria for Determining Cultural Heritage Value or Interest (O. Reg. 9/06) under the Ontario Heritage Act provides criteria for determining cultural heritage value or interest. If a property meets one or more of the criteria it may be designated under Section 29 of the Ontario Heritage Act.

Under section 27(9) of the Ontario Heritage Act it is stated that:

If a property that has not been designated under this Part has been included in the register under subsection (3), the owner of the property shall not demolish or remove a building or structure on the property or permit the demolition or removal of the building or structure unless the owner gives the council of the municipality at least 60 days notice in writing of the owner's intention to demolish or remove the building or structure or to permit the demolition or removal of the building or structure.

# 2.3 City of Mississauga Official Plan

The *Mississauga Official Plan* (March 3, 2023) is the document which guides the growth and development of the city, as required by the *Planning Act.* The plans and policies of the Official Plan are intended to be achieved over the course of twenty-five years, by 2031. The Official Plan provides the basis for land use and urban design decisions in the City. Its policies address the important parts of city-building transportation, housing, culture and heritage, the environment, and the economy.

Section 7.5 of the Official Plan [pertains to Heritage Planning in the City. Under Section 7.5, The following guidelines and policies are applicable and relevant for the Study Area and the potential development therein:

7.5.1.1 The heritage policies are based on two principles: a. heritage planning will be an integral part of the planning process; and b. cultural heritage resources of significant value will be identified, protected, and preserved.

7.5.1.2 Mississauga will discourage the demolition, destruction or inappropriate alteration or reuse of cultural heritage resources.

7.5.1.3 Mississauga will require development to maintain locations and settings for cultural heritage resources that are compatible with and enhance the character of the cultural heritage resource.

7.5.1.9 Character Area policies may identify means of protecting cultural heritage resources of major significance by prohibiting uses or development that would have a

deleterious effect on the cultural heritage resource, and encouraging uses and development that preserve, maintain and enhance the cultural heritage resource.

7.5.1.10 Applications for development involving cultural heritage resources will be required to include a **Heritage Impact Assessment** prepared to the satisfaction of the City and other appropriate authorities having jurisdiction.

7.5.1.12 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.

7.5.1.13 Cultural heritage resources must be maintained in situ and in a manner that prevents deterioration and protects the heritage qualities of the resource.

7.5.1.17 Public works will be undertaken in a way that minimizes detrimental impacts on cultural heritage resources.

7.5.1.18 Mississauga recognizes the Credit River and Etobicoke Creek valleys as heritage corridors with both prehistoric and historical significance.

7.5.2.2 Prior to the demolition or alteration of a cultural heritage resource, documentation will be required of the property to the satisfaction of the City, and any appropriate advisory committee. This documentation may be in the form of a Heritage Impact Assessment.

7.5.2.3 Development adjacent to a cultural heritage property will be encouraged to be compatible with the cultural heritage property.

#### 2.3.1 Port Credit Local Area Plan

In addition, the Study Area is located within the Port Credit Local Area Plan. The Local Area Plan provides additional polices for the management of land in the south-central area of the City of Mississauga. Cultural and heritage resources located within the boundaries of the Local Area Plan include heritage buildings, the Old Port Credit Village Heritage Conservation District, and cultural landscapes that include: Port Credit Harbour, Port Credit Pier, the CN Bridge over the Credit River, Credit River Corridor and Mississauga Road Scenic Route. Section 8.0 of the Local Area Plan states that:

*Cultural resources such as heritage buildings and landscapes associated with the Credit River and Lake Ontario, which help retain a connection to the past* 

### 2.4 City of Mississauga Cultural Heritage Landscapes Inventory

In 2005, the City of Mississauga adopted its *Cultural Landscape Inventory*. This Inventory was based on a study prepared by The Landplan Collaborative Ltd. in association with Goldsmith

Borgal and Company Ltd. Architects (G.B.C.A.), North South Environmental Inc., and Geodata Resources Inc. The study was initiated by the Community Services Department of the City of Mississauga, and analyzed landscapes within the City of Mississauga using the UNESCO definition of cultural landscapes:

Cultural landscapes represent the combined works of nature and of man... They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.

The Inventory identified a total of 39 cultural landscapes and 22 cultural features, which encompassed thousands of individual properties within the City. Following the adoption of the Inventory, these properties were added to the City of Mississauga's Heritage Register as non-designated ("listed") properties (if they were not already listed or designated by the City).

# 3. Statement of Significance - Credit River Corridor

The following represents the full Statement of Significance pertaining to the Credit River Corridor, the geographical area within which the Study Area is situated. This Statement of Significance is an unaltered excerpt extracted from the *Conserving Heritage Landscapes: Cultural Heritage Landscape Project – Volume 3* (ASI, Final January 2022).

#### **Cultural Heritage Value**

The Credit River Corridor has cultural heritage value as a cultural heritage landscape due to its physical value, historical and associative value, and contextual value.

The Credit River Corridor has physical value as a representative and well-preserved example of a natural cultural heritage landscape. The greenspace extends through the core of the City of Mississauga and contains one of the few remaining natural ecosystems in the city. The Credit River Valley has been identified as the most significant natural landscape and wildlife habitat within the city. The Credit River also has physical value for aesthetic and scenic reasons. In some areas of the corridor there are scenic views of towering slopes from the valley floor, and views of the lush valley. Trees and the natural landscape throughout the Credit River Valley add to the scenic qualities of this landscape. The Q.E.W. Credit River Bridge is an unusual and unique example of an inverted bowstring arch deck truss bridge and features multiple types of connections, unusual among the construction of steel bridges.<sup>1</sup>

The Credit River Corridor has historical and associative value due to its direct associations with Indigenous and European land use and settlement activities. The Credit River played a major role in dictating both pre-contact and European settlement patterns. The abundance of fish in the Credit River provided a key component of Indigenous and early European settlers' diets, as well as a source of recreation, as settlement followed. The Credit River also provided a valuable transportation source for early communities and an energy source, first for saw and grist mills and later for steam and hydroelectric projects. The Credit River Corridor also has historical and associative value due to its contributions to an understanding of a community or culture as it has played and continues to play a significant role in the Mississaugas of the Credit First Nation community with fishing, hunting, gathering, and spiritual activities. The Q.E.W. Credit River

<sup>&</sup>lt;sup>1</sup> The Statement of Significance (ASI, 2022) mistakenly identifies the Metrolinx Credit River Bridge (Lakeshore West Rail Corridor) as the Q.E.W. Credit River Bridge.

Bridge<sup>2</sup> is considered to be a notable example of a bridge designed by Joseph Hobson, Chief Engineer of the Grand Truck Railroad and built by the Canadian Bridge Co. Ltd., given its craftsmanship, technical achievement, and unusual and unique design.

The Credit River Corridor also has contextual value as a cultural heritage landscape that is important in defining the character of the area. The Credit River remains a core of greenspace through the heart of Mississauga and plays a large role as a passive recreational area for the city. Recommendations that protect the character of the valley have been implemented to ensure long-term protection and maintenance of the scenic qualities of the Valley. The Credit River is historically, physically, functionally, and visually linked to its surroundings. Within the City of Mississauga, the Credit River flows for approximately 24 kilometres (km) and has shaped the land, both physically and culturally, for the past 10,000 years. The Credit River is considered a landmark in the community. The 1979 Project Planning study highlighted the fact that the valley is the most significant natural landscape and wildlife habitat in the City of Mississauga. There is public consensus on the importance of protecting this ecosystem.

#### **Community Value**

The Credit River Corridor is valued as a cultural heritage landscape due to its community value. The river is a landmark in the community; a greenspace core that contrasts the dense development that characterizes the city. The community exhibits pride and stewardship of the Credit River Valley. Commemorative plaques, designation of properties under Part IV of the *Ontario Heritage Act*, heritage bridge designations, and the establishment of the Credit Valley Conservation in the mid-twentieth century signify the importance of the Credit River to the members of the community. The Credit River Valley is a large expanse of public space, used for various recreation and public events. The Credit River has played a significant role in the lives of the Mississaugas of the Credit First Nation community. Hunting, fishing, gathering, and spiritual activities continue to be carried out by band members today. The river valley is written about in many local history books and tourism in the area draws people to the parks and recreation areas along the Credit River. Finally, planning policies (The Credit River Parks Strategy and The Credit Valley Conservation Strategic Plan) and projects (The Credit River Corridor.

#### **Historical Integrity**

The Credit River Corridor is valued as a cultural heritage landscape due to its historical integrity. The diverse ecosystem found in the Credit River Valley is the only naturally remaining example of this once vast environment. The cultural relationship of the river and the valley with local First

<sup>&</sup>lt;sup>2</sup> See footnote above.

Nations community has been continuous through time. Some band members continue to carry out fishing, hunting, gathering, and spiritual activities today. The natural features and relationships of the Credit River Valley have remained intact since the retreat of the glaciers.

The steep valley walls, benches, and alluvial terraces are the result of thousands of years of erosion and fluvial activities. There are 8 identified viewpoints and 13 overlook points along the corridor. To date 15 archaeological sites are recorded along the Credit River, including the ruins of the Timothy Street Mill, in Streetsville. Also in Streetsville are the ruins of the Hyde Mill which are designated under Part IV of the *Ontario Heritage Act*.

#### **Cultural Heritage Attributes**

- The steep valley walls, benches, and alluvial terraces of the Credit River Valley;
- The meandering river and meander belt;
- The scenic quality of the natural environment, including the river and vegetation of the Valley;
- Existing city and community parks;
- Feature sites, identified in the Credit River Parks Strategy:
  - Sanford Farm
  - Former Harris Lands
  - Credit Meadows
  - Streetsville Memorial Park
  - Former Pinchin Lands
  - Riverwood (including the Oak Savannah)
  - Erindale Park;
- Bridging points:
  - Queen Elizabeth Way Bridge over Credit River<sup>3</sup>
  - Canadian National Bridge over Credit River;
- Existing trail systems;
- Public access to the river;
- Known and potential archaeological sites and ruins;
- Port Credit Pier;
- Wetlands;
- Geological formations, in particular north and south of Dundas Street along the Credit River;
- Port Credit Lighthouse;
- Identified viewpoints:
  - Derry Road West

<sup>&</sup>lt;sup>3</sup> It is believed that this should be the Metrolinx Credit River Bridge (Lakeshore West Rail Corridor).

- Along the trails east of Glamorgan Way
- West side of Mississauga Road, north of Britannia Road West
- Britannia Road West
- Streetsville Cemetery
- Eglinton Avenue West
- Burnhamthorpe Road West
- Dundas Street West Bridge, east of Mississauga Road;
- Identified overlooks:
  - Along Creditview Road, south of Highway 401
  - Four within the Credit Meadows Park
  - One on each east and west bank at Streetsville Cemetery
  - Former Pinchin Lands, north of Highway 403
  - Two within the Riverwood Conservatory, south of Highway 403 and north of Burnhamthorpe Road
  - Two within Erindale Park, on the north and south banks
  - Queen Elizabeth Way, looking north;
- Potential overlooks:
  - Old Derry Road Bridge
  - Barbertown Road Bridge
  - Pedestrian bridge along the trails that intersect with Creditview Road, south of Highway 401
  - Credit River Bridge (Lakeshore West Rail Corridor)
  - Lakeshore Road Bridge
  - Waterfront Trail Bridge.

# 4. Assessment of Existing Conditions

# 4.1 Introduction

On September 27, 2023, an on-site field review was carried out by AECOM's Cultural Heritage Specialists. This field review was conducted to document the existing conditions within the Study Area. AECOM completed the field review from the public right-of-way on Lakeshore Road, and from Port Credit Memorial Park and adjacent parkland on the west side of the Credit River. In addition, permission to enter the parking area and east lawn of the Royal Canadian Legion at 35 Front Street North was granted for the duration of the field review. The field review focused on the Credit River Bridge (Lakeshore West Rail Corridor), 35 Front Street North, the Credit River Corridor Cultural Heritage Landscape and the surrounding landscape. These resources were selected due to their known/potential heritage significance and their susceptibility to potential project-related impacts. Photographs of Study Area and its adjacent landscape are located in the subsequent sections for reference.

# 4.2 Description of the Study Area and Surrounding Context

#### 4.2.1 Credit River Bridge (Lakeshore West Rail Corridor)

The Credit River Bridge (Lakeshore West Rail Corridor) carries the eastbound and westbound tracks of the Metrolinx Lakeshore West Rail Corridor across the Credit River. The bridge is approximately 80 metres in length and consists of a single main span with single approach spans on each end. The main span of the bridge is constructed of riveted steel with a Warren Truss configuration. It is approximately 50 metres in length, with an unusual polygonal bottom chord which has been referred to as an inverted bowstring arch (**Photograph 1**, **Photograph 2** and **Photograph 3**). The approach spans are of simple girder/beam construction. The deck is approximately 270 metres long, and 50 metres wide. A metal walkway and railing have been installed on the south side of the bridge deck. The bridge sits on abutments made of rusticated stone blocks (**Photograph 4**). A tightly woven metal fence has been recently installed around the bridge abutments, and they are therefore not easily visible.

The areas surrounding the east and west ends of the bridge are covered with dense vegetation, including mature trees and high grass (**Photograph 5**). The Credit River Bridge (Lakeshore West Rail Corridor) is visible from the Credit River Cultural Heritage Landscape. Views of the bridge can be observed from Port Credit Memorial Park, the parkland on the west side of the Credit River, the north sidewalk of the Lakeshore Road Bridge and the eastern (rear) lawn and dock area of the Royal Canadian Legion at 35 Front Street North.

A newer deck-truss bridge is located on the immediate north side of the Credit River Bridge (Lakeshore West Rail Corridor). This bridge is approximately the same length as the 1903 Credit River Bridge and carries a single track across the Credit River. This bridge is not easily visible from within the Study Area.

Photograph 1: View of the Credit River Bridge (Lakeshore West Rail Corridor), illustrating the Warren Truss configuration and the inverted bowstring arch, looking west (AECOM, 2023) Photograph 2: View of the Credit River Bridge (Lakeshore West Rail Corridor), illustrating the Warren Truss configuration and the inverted bowstring arch, looking southwest (AECOM, 2023)



Photograph 3: View of the Credit River Bridge (Lakeshore West Rail Corridor), illustrating the Warren Truss configuration and the inverted bowstring arch, looking northeast (AECOM, 2023)



Photograph 4: View of the Credit River Bridge illustrating one of the rusticated stone block abutments, looking west (AECOM, 2023)



Photograph 5: View of the Credit River Bridge and Credit River Corridor, illustrating the surrounding dense vegetation, including mature trees and high grass, looking west (AECOM, 2023)



#### 4.2.2 Credit River Cultural Heritage Landscape

The Credit River is approximately 90 km in length, originating in Orangeville, Mono, and Erin. The river flows south through Peel Region and the City of Mississauga into Lake Ontario at Port Credit. Within the Study Area, the Credit River follows a northwest to southeast orientation and is approximately 60 metres in width. The northeast and southwest sides of the Credit River are composed largely of parkland. Port Credit Memorial Park is located on the northeast side of the river. Port Credit Memorial Park is a large, landscaped public park with open lawns and areas of trees punctuated by concrete-surfaced walking paths and public areas (**Photograph 6**). A large gazebo is located in the southwest corner of the park. Along the river's edge, stone blocks and landscaping have been installed to prevent erosion. A series of wooden-decked viewing areas with metal railings and public benches have been installed along the river's edge, as well as several interpretive storyboards which communicate the cultural and natural history of the Credit River. During the field review, one of these panels was noted to have been vandalised.

At the north end of the park, an unmarked trail has been worn into the vegetation, providing access to the river's edge, and the underside of the Credit River Bridge (**Photograph 7**). A second unmarked trail extends to the northeast across the top of the park, roughly paralleling the rail corridor and connecting to the parking lot of the Port Credit Memorial Arena on Stave bank Road (**Photograph 8** and **Photograph 9**). During the time of the field review in September

2023, Port Credit Memorial Park was being used for a music festival and access to the remainder of the park was limited.

The southwest side of the Credit River consists of the Port Credit Legion (which maintains a patio for outdoor events along the river), the Don Rowing Club (which maintains a dock for their rowboats), and the Mississauga Canoe and Paddle Club (which also maintains a dock). Parking is located on Front Street North. As on the northeast side of the Credit River, concrete blocks and landscaping have been installed to prevent erosion.

Photograph 6: View of the Credit River, illustrating the concrete-surfaced walking paths and public areas, looking west (AECOM, 2023) Photograph 7: View of the unmarked trail that provides access to the river's edge, and the underside of the Credit River Bridge, looking northwest (AECOM, 2023)



Photograph 8: View of the second unmarked trail that parallels the rail corridor and connects to the parking lot of the Port Credit Memorial Arena, looking northeast (AECOM, 2023) Photograph 9: View of the second unmarked trail that parallels the rail corridor and connects to the parking lot of the Port Credit Memorial Arena, looking southwest (AECOM, 2023)



#### 4.2.3 35 Front Street North – Royal Canadian Legion Branch 82

Royal Canadian Legion Branch 82, also known as the Port Credit Royal Canadian Legion is located at 35 Front Street North, on the northeast side of Front Street between Park Street West and Peter Street North.

The Legion building is a two-and-a-half storey Mid-Century Modern style building constructed in 1966 (**Photograph 10**). The building is constructed into the southwest bank of the Credit River, with northeast side of the building's basement open to ground level. The building features and irregularly-shaped floor plan and a flat roof. The southeast corner of the building is comprised of a twelve-sided, roughly circular wing with a flat roof. The building features significant glazing, consisting of fixed windows set into wood frames. Glazing is punctuated by spandrel panels in white and pale-yellow colour, with blue-painted flashing at the roofline. Additional exterior cladding consists of vertically-oriented strips of dark-stained wooden boards.

At the rear (north) of the property is a large open lawn. This lawn slopes gently downward from the rear of the Legion building to the edge of the Credit River (**Photograph 11** and **Photograph 12**). A floating dock is located on the edge of the river. Unlike other locations within the Study Area, the edge of the river at this location has been left natural, with grass and vegetation to the water's edge. Views of the Credit River and the Credit River Bridge (Lakeshore West Rail Corridor) are visible from the lawn area (**Photograph 12**).

The property is screened from the adjacent property to the southeast by a dense area of mature trees, and from the rail corridor to the northwest by more mature trees.

The western area of the Legion property is comprised of an asphalt-surfaced parking lot (**Photograph 13**). The Lakeshore West Rail corridor runs directly along the northwest edge of the parking lot, and it is in this area that the new trail associated with the AT bridge will pass through. The rail corridor is screened from the parking lot by a black-painted metal fence and a row of vegetation. Looking north from the parking lot, a row of mature trees obscures views of the Credit River Bridge (Lakeshore West Rail Corridor) and the Credit River.

Photograph 10: View of the two-and-a-half storey Mid-Century Modern style Royal Canadian Legion Branch 82 building, looking north (AECOM, 2023)



Photograph 12: A rear view of the Royal Canadian Legion Branch 82 building, illustrating the gently sloping lawn, the Credit River and the Credit River Bridge, looking west (AECOM, 2023) Photograph 11: A rear view of the Royal Canadian Legion Branch 82 building, illustrating the gently sloping lawn, looking southwest (AECOM, 2023)



Photograph 13: View of the Royal Canadian Legion Branch 82, illustrating the asphalt-surfaced parking lot, looking northeast (AECOM, 2023)





# 5. Impact Assessment

# 5.1 Description of the Proposed Project

AECOM was retained by the City of Mississauga to conduct a Heritage Impact Assessment (HIA) for the proposed Credit River Active Transportation (AT) Bridge as part of the AECOM's services for the Detailed Design of the new bridge. The new AT bridge is being constructed as part of the part of the overall Lakeshore Road Transportation Master Plan (TMP) and Implementation Strategy (2019) that was carried out under the Municipal Class Environmental Assessment (EA) process. The TMP (2019) identified the preferred alternative for an active transportation bridge crossing the Credit River linking the east and west side of the river south of the existing railway crossing generally to connect the Front Street and Queen Street rights-of-way.

Based on the evaluation of alternative solutions, the preferred alternative for the new AT Bridge is a signature bridge that would span across the Credit River, connecting the existing multi-use path within Port Credit Memorial Park to Front Street North and includes a new multi-use path along Front Street North and extending to the existing trail starting at the intersection of Mississauga Road with Front Street North. The crossing would facilitate a future direct connection to the Port Credit GO Station, as well as connecting to amenities at Memorial Park and Memorial Arena. The crossing will also ease parking congestion around Memorial Park by making it easier for local residents to walk or cycle to the park and the arena.

The final concept for the bridge was enhanced following the public consultation to improve durability and reduce future maintenance costs. This includes changing the bridge configuration from a true through-truss bridge to a false through-truss integral abutment bridge. This allowed for the elimination of expansion joints and permitted the use of a continuous monolithic deck. This enhancement maintained the original aesthetics of the bridge while protecting the primary support elements and substructure of the bridge from exposure to deicing chemicals. A rendering of the final concept is provided below and a General Arrangement drawing is included in **Appendix A**.

#### Image 1: Rendering of the proposed New Credit River AT Bridge with the Credit River Bridge (Lakeshore West Rail Corridor) in the background (AECOM, 2024)



# 5.2 Assessment of Impacts

### 5.2.1 Screening for Potential Impacts

To assess the potential impacts of the undertaking, identified cultural heritage resources are considered against a range of possible impacts based on the *Ontario Heritage Tool Kit, Heritage Resources in the Land Use Planning Process, InfoSheet #5 Heritage Impact Assessments and Conservation Plans* (MCMI 2006:3) which include, but are not limited to:

- Destruction, removal, or relocation of any, or part of any, significant heritage attributes or features
- Alteration that is not sympathetic, or is incompatible, with the historic fabric or appearance
- Shadows created that alter the appearance of a heritage attribute or change the exposure or visibility of a natural feature or plantings, such as a garden
- Isolation of a heritage attribute from its surrounding environment, context, or a significant relationship

- Direct or indirect obstruction of significant views or vistas from, within, or to a built or natural heritage feature
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource
- Is a landmark.

Positive impacts are those that may positively affect a property by conserving or enhancing its cultural heritage value or interest and/or heritage attributes. Examples of positive impacts may include, but are not limited to:

- Changes or alterations that are consistent with accepted conservation principles, such as those articulated in MCM's *Eight Guiding Principles in the Conservation of Historic Properties, Heritage Conservation Principles for Land Use Planning,* Parks Canada's *Standards and Guidelines for the Conservation of Historic Places in Canada;*
- Adaptive re-use of a property alteration of a provincial heritage property to fit new uses or circumstances of the property in a manner that retains its cultural heritage value or interest; or
- Public interpretation or commemoration of the provincial heritage property.

#### 5.2.2 Assessment of Potential Impacts on the Study Area

The impact assessment of the proposed development in **Table 2, Table 3** and **Table 4** presents the possible impacts to the Credit River Bridge (Lakeshore West Rail Corridor), 35 Front Street North, and the Credit River Corridor (Cultural Heritage Landscape) based on the preferred alignment. The impact assessment utilizes the *Ontario Heritage Tool Kit, Heritage Resources in the Land Use Planning Process, InfoSheet #5 Heritage Impact Assessments and Conservation Plans* (MCM 2006:3):

#### Table 2: Impact Assessment – Credit River Bridge (Lakeshore West Rail Corridor)

| Impact                  | Discussion of Impacts  | Potential Mitigation Measures       |
|-------------------------|--|-------------------------------------|
| Destruction,            | No direct adverse impact.  | No mitigation measures required.    |
| Removal, or             |  |                                     |
| Relocation              | Based the preferred alignment of the proposed Credit River AT bridge, it is anticipated  |                                     |
|                         | that none of the heritage attributes associated with the Credit River Bridge will undergo demolition, removal, or relocation.  |                                     |
|                         |  |                                     |
| Alteration              | No indirect adverse impact.  | No mitigation measures required.    |
|                         | Based the preferred alignment of the proposed Credit River AT bridge, it is anticipated  |                                     |
|                         | that none of the heritage attributes associated with the Credit River Bridge will result in  |                                     |
|                         | the alteration.  |                                     |
| Shadows                 | No indirect adverse impact.  | No mitigation measures required.    |
|                         | The preferred alignment will not result in any shadow impacts to the heritage attributes   |                                     |
|                         | associated with the Credit River Bridge.   |                                     |
| Isolation               | No indirect adverse impact.  | No mitigation measures required.    |
|                         | The preferred alignment will not result in any isolation impacts to the heritage attributes associated with the Credit River Bridge.   |                                     |
| Direct or Indirect      | Potential indirect adverse impact.   | Additional Mitigation Required. See |
| Obstruction of          |  | Section 7.2.1.                      |
| Significant Views       | There are no significant views identified in the Metrolinx Interim Heritage Committee  |                                     |
|                         | Statement of Cultural Heritage Value as heritage attributes of the Credit River Bridge (Lakeshore West Rail Corridor). However, the overlook from the Credit River Bridge is |                                     |
|                         | recognized as a heritage attribute of the Credit River Corridor CHL (see <b>Table 3</b> ,  |                                     |
|                         | below). While it was not identified as a significant view, the project will also obstruct  |                                     |
|                         | views of the Credit River Bridge from the southeast, such as the view for pedestrians  |                                     |
|                         | and motorists crossing the Lakeshore Road East Bridge over the Credit River.   |                                     |
| A Change in Land<br>Use | No indirect adverse impact.  | No mitigation measures required.    |

| Impact           | Discussion of Impacts  | Potential Mitigation Measures    |
|------------------|--|----------------------------------|
|                  | The preferred alignment will not result in a change in land use of the Credit River Bridge.              |                                  |
| Land Disturbance | No indirect adverse impact.  | No mitigation measures required. |
|                  | The preferred alignment will not result in any land disturbance associated with the Credit River Bridge. |                                  |

### Table 3: Impact Assessment – Credit River Corridor CHL

| Impact       | Discussion of Impacts  | Potential Mitigation Measures       |
|--------------|--|-------------------------------------|
| Destruction, | Potential direct adverse impact.   | Additional Mitigation Required. See |
| Removal, or  |  | Section 7.2.2.                      |
| Relocation   | <ul> <li>The Total Impact Area of the proposed Credit River AT bridge will result in the removal of a portion of land (300 m<sup>2</sup>) within the Credit River Corridor Cultural Heritage Landscape (CHL). This area of the Credit River Corridor CHL encompasses the alluvial terrace of the Credit Valley, featuring a woodlot of mature trees, low lying vegetation, an unmarked pathway and stone blocks that have been installed to prevent erosion on the water's edge. A total of 300 metres squared (m<sup>2</sup>) of land in Memorial Park owned by the City of Mississauga will be changed from woodlot to trail for the proposed AT Bridge. The anticipated conversion of this land will result in the partial destruction of the alluvial terrace and the removal of mature trees and low-lying vegetation. The features of the landscape comprising of the alluvial terrace and associated vegetation within the Credit River Valley that provide a scenic quality to the natural environment (i.e. mature trees and low lying vegetation) and are recognized as heritage attributes of the Credit River Corridor CHL.</li> <li>Therefore, the destruction or removal of a portion of these heritage attributes results in an adverse direct impact. However, it's important to note that this impact does not entail the complete removal or destruction of the heritage attributes within the Credit</li> </ul> |                                     |
|              | River CHL.   |                                     |
| Alteration   | No direct adverse impact.  | No mitigation measures required.    |

| Impact                               | Discussion of Impacts  | Potential Mitigation Measures                              |
|--------------------------------------|--|--|
|                                      | The preferred alignment will not result in any adverse alteration impacts on the heritage attributes associated with the Credit River CHL as the alterations will be sympathetic with the historic fabric and appearance of the landscape.   |  |
| Shadows                              | No indirect adverse impact.  | No mitigation measures required.                           |
|                                      | The preferred alignment will not result in any shadow impacts on the heritage attributes associated with the Credit River CHL.   |  |
| Isolation                            | No indirect adverse impact.  | No mitigation measures required.                           |
|                                      | The preferred alignment will not result in any isolation impacts on the heritage attributes associated with the Credit River CHL.  |  |
| Direct or Indirect<br>Obstruction of | Potential direct adverse impact.   | Additional Mitigation Required. See <b>Section 7.2.2</b> . |
| Significant Views                    | Based on the conceptual plan and the preferred alignment of the proposed Credit River<br>AT bridge, it is anticipated that the bridge will result in the partial obstruction the<br>southern view of the Credit River Corridor CHL from the Credit River Bridge (Lakeshore<br>West Rail Corridor). The overlook from the Credit River Bridge is recognized as a<br>heritage attribute of the Credit River CHL and therefore, the partial obstruction of the<br>Credit River CHL from the Credit River Bridge is a potential direct adverse impact.   |  |
| A Change in Land<br>Use              | No indirect adverse impact.  | No mitigation measures required.                           |
|                                      | Based on the Total Impact Area, the proposed Credit River AT Bridge will cause a change in land use to the Credit River CHL as a parcel of land (300 m <sup>2</sup> ) within the Credit River Cultural Heritage Landscape (CHL) will be acquired for the construction of the Credit River AT Bridge. The change in land use is an indirect impact resulting in the destruction or removal of a portion of the alluvial terrace, associated vegetation and woodlot within the Credit River Valley and changing the landscape into a trail for the AT Bridge. Although the land will be used now for the AT Bridge, the acquisition of the land will not change the overall land use of the Credit River CHL. Therefore, the indirect impact is not adverse and does not require mitigation. |  |
| Land Disturbance                     | No indirect adverse impact.  | No mitigation measures required.                           |

| Impact | Discussion of Impacts   | Potential Mitigation Measures |
|--------|---|-------------------------------|
|        | Based on the Total Impact Area, the proposed Credit River AT Bridge will cause a change in land use to the Credit River CHL as a parcel of land (300 m <sup>2</sup> ) within the Credit River Cultural Heritage Landscape (CHL) in Memorial Park will be converted from woodlot to trail as part of the project. While a portion of land will be acquired for the project, the land disturbance, including change in grade that alter soils and drainage patterns will not adversely impact the overall cultural heritage attributes within the Credit River CHL. |                               |

### Table 4: Impact Assessment – 35 Front Street North

| Impact                                    | Discussion of Impacts   | Potential Mitigation Measures    |
|---|---|----------------------------------|
| Destruction,<br>Removal, or<br>Relocation | No direct adverse impact.         The Total Impact Area of the proposed Credit River AT bridge will require the acquisition of a portion (559 m²) of 35 Front Street North. Of the land that will be acquired, approximately 300 m² currently consists of woodlot and 259 m² consists of an asphalt-surfaced parking lot. Based on the Total Impact Area, it is anticipated that none of the potential heritage buildings or significant landscape features within 35 Front Street North will undergo demolition, removal, or relocation.   | No mitigation measures required. |
| Alteration                                | No direct adverse impact.           The Total Impact Area of the proposed Credit River AT bridge will require the acquisition of a portion (559 m²) of 35 Front Street North. Of the land that will be acquired, approximately 300 m² currently consists of woodlot and 259 m² consists of an asphalt-surfaced parking lot. Based on the Total Impact Area, it is anticipated that none of the potential heritage buildings or significant landscape features within 35 Front Street North will undergo demolition, removal, or relocation. |                                  |
| Shadows                                   | No indirect adverse impact.<br>The preferred alignment will not result in any shadow impacts on the heritage attributes<br>associated with the potential heritage buildings or significant landscape features within<br>35 Front Street North.  | No mitigation measures required. |
| Isolation                                 | No indirect adverse impact.   | No mitigation measures required. |

| Impact                               | Discussion of Impacts   | Potential Mitigation Measures    |
|--------------------------------------|---|----------------------------------|
|                                      | The preferred alignment will not result in any isolation impacts on the heritage attributes associated with the potential heritage buildings or significant landscape features within 35 Front Street North.  |                                  |
| Direct or Indirect<br>Obstruction of | No indirect adverse impact.   | No mitigation measures required. |
| Significant Views                    | The preferred alignment will not result in any adverse direct or indirect obstruction of significant views associated with the potential heritage buildings or significant landscape features within 35 Front Street North.   |                                  |
| A Change in Land<br>Use              | No direct adverse impact.The Total Impact Area of the proposed Credit River AT bridge will require the<br>acquisition of a portion (559 m²) of 35 Front Street North. Of the land that will be<br>acquired, approximately 300 m² currently consists of woodlot and 259 m² consists of an<br>asphalt-surfaced parking lot. Although this portion of land will be acquired for the<br>proposed Credit River AT Bridge, the acquisition will not impact any of the potential<br>heritage buildings or significant landscape features within 35 Front Street North and will<br>not change the overall land use of the property.   |                                  |
| Land Disturbance                     | No adverse direct impact.<br>A portion of 35 Front Street North is within the Total Impact Area of the proposed Credit<br>River AT Bridge. A portion (259 m <sup>2</sup> ) of 35 Front Street North which is currently being<br>used as an asphalt-surfaced parking lot will be acquired for the project to<br>accommodate the proposed Credit River AT Bridge. A further portion of 35 Front Street<br>North consisting of woodlot (300 m <sup>2</sup> ) will also be acquired for the project. Being that the<br>Total Impact Area only includes the asphalt-surfaced parking lot and a portion of the<br>woodlot along the Credit River within 35 Front Street North, the acquirement of the<br>property causing a land disturbance does not have an adverse impact on the potential<br>heritage buildings or significant landscape features within 35 Front Street North. |                                  |

# 6. Commemoration

The proposed AT Bridge project presents a unique opportunity to not only provide vital infrastructure but also to commemorate and celebrate the rich Indigenous heritage and history of the surrounding area. As discussions unfold among stakeholders, Indigenous representatives, and our design team, it becomes evident that the bridge holds the potential to serve as a symbol of unity, reconciliation, and cultural pride. In this introduction, we outline a commemoration options that have the potential to integrate Indigenous cultural elements, engage local communities, and ensure authenticity and respect in the portrayal of Indigenous heritage. Through collaborative efforts and careful design considerations, the AT Bridge will not only connect physical landscapes but also bridge cultural divides, fostering a deeper appreciation for the Indigenous peoples who have inhabited and cared for the land for generations.

- 1. Incorporate Indigenous Cultural Elements:
  - Utilize the Two-Row Wampum, which has been adapted by Indigenous communities across Ontario, to symbolize unity and mutual respect. This idea was suggested by Indigenous Relations Manager John Dunlop at the City of Mississauga.
  - Develop a theme that resonates with all stakeholders, with a focus on engaging the Six Nations of the Grand River and Mississaugas of the Credit First Nation (MCFN) communities.
- 2. Relocation of Plaques:
  - Consider relocating plaques from Snug Harbour to a lookout point on the bridge, enhancing visibility and accessibility for visitors to appreciate the historical significance of the area.
- 3. Design Integration:
  - Review the proposed truss arch design, ensuring compatibility with commemorative elements such as the Two-Row wampum.
  - Incorporate rounded members into the design, if feasible, to accommodate the inclusion of Indigenous symbols.
  - Consider etching moccasin patterns onto the concrete abutments and adding plaques on vertical truss members without obstructing the view of the river.
- 4. Colour Scheme:
  - The proposed truss of the AT Bridge should be painted blue to match the blue paint used in Memorial Park and to evoke the waters of Snug Harbour. This colour will
complement the natural landscape of the river and surrounding environment by blending in with the blue sky. By minimizing the visual presence of the proposed truss of the AT Bridge, this colour scheme will also serve to mitigate the obstruction of views to and from the Credit River Bridge.

- 5. Additional Opportunities:
  - Explore the possibility of adding art installations or Indigenous-themed artwork on abutments, visible only from the perspective of canoeists passing underneath.
  - Install a lower barrier with a wheelchair view, allowing for the incorporation of Indigenous symbols like the Two-Row Wampum in a non-intrusive manner.
  - Consider stamping symbolic imagery or messages into the concrete approaches, further enhancing the cultural significance of the bridge.

By incorporating these elements into the design and construction process, the AT Bridge can serve as a meaningful commemoration of Indigenous heritage and history, fostering a sense of pride and inclusivity within the community.

# 7. Summary Statement and Mitigation Measures

# 7.1 Summary Statement

Based on the results of the field review and an analysis of impacts of the proposed undertaking, the Credit River AT bridge project will result in the direct adverse impact to the Credit River Corridor CHL. These impacts include the partial destruction of the alluvial terrace and the removal of mature trees and the associated vegetation within the Credit River Valley, which collectively contribute to the landscape's scenic quality. Both these features have been recognized as a heritage attributes of the Credit River Corridor CHL.

Additionally, the proposed project will indirectly have adverse impacts by partially obstructing southern view of the Credit River Corridor CHL from the Credit River Bridge (Lakeshore West Rail Corridor). The particular overlook from the Credit River Bridge is recognized as a heritage attribute of the Credit River Corridor CHL.

While the Credit River Corridor CHL will be subject to both direct and indirect adverse impacts, neither the Credit River Bridge nor the property located at 35 Front Street North will be adversely impacted by the proposed project.

# 7.2 Mitigation Measures

# 7.2.1 Credit River Bridge (Lakeshore West Rail Corridor)

# 7.2.1.1 Direct or Indirect Obstruction of Views

To mitigate the partial obstruction of views to the Credit River Bridge from the southeast, such as from the Lakeshore Road East Bridge, the proposed truss of the AT Bridge will be designed in a Warren Truss configuration that is complementary to the inverted bowstring arch of the Credit River Bridge. The proposed truss of the AT Bridge will appear to mirror the inverted Warren Truss of the Credit River Bridge when viewed from the southeast, along the Credit River Corridor. The colour scheme described below in **Section 7.2.2.2** will complement the natural landscape and blend in with the blue sky, which will serve to mitigate the obstruction of views from the Credit River Bridge overlooking the Credit River. Furthermore, the construction of the AT Bridge as a pedestrian bridge immediately to the southeast of the Credit River Bridge will also positively impact its cultural heritage value, since it will create a new opportunity for people to view the heritage attributes of the Credit River Bridge up close from a new vantage point. 10.1

Therefore, the current draft 90% design of the AT Bridge mitigates any alterations to views of the Credit River to and from the Credit River Bridge and no further mitigation strategies are required.

# 7.2.2 Credit River Corridor CHL

# 7.2.2.1 Destruction, Removal or Relocation

To mitigate the partial destruction of the alluvial terrace and the removal of mature trees and low-lying vegetation within the Credit River Valley due to construction activities, comprehensive post-construction landscaping and rehabilitation plans, such as restoration drawings that include new tree plantings, will be implemented in a manner that is sympathetic to the landscape's scenic natural environment. The landscape elements noted above contribute to the scenic quality of the natural environment within the Credit River Corridor CHL. Landscaping and rehabilitation plans to conserve the landscape's natural environment should encompass, but not be limited to, the following components:

- Conducting a thorough assessment of the existing landscape conditions.
- Establishing clear and specific objectives for the rehabilitation efforts.
- Developing preliminary design concepts or proposals for the landscape's restoration.
- Providing specific details regarding the selection and placement of plant species.
- Incorporating plans for hardscape elements as necessary.

Furthermore, to minimize potential adverse impacts on the remaining portions of the Credit River Corridor CHL, it is advisable to create a protective buffer zone along the perimeter of the Study Area (Total Impact Area). The strategy requires the below:

- Establish a no-go-zone (buffer zone) to the remainder of the Credit River CHL. Ensure no equipment transects the no-go-zone. Include the no-go zone in the site plan or similar document for the project;
- Erect temporary construction fencing around the Study Area to safeguard the heritage attributes of the Credit River CHL from potential destruction, removal, or relocation; and
- Remove the temporary protective fencing post-construction.

# 7.2.2.2 Direct or Indirect Obstruction of Significant Views

To mitigate the partial obstruction of the southeastern view of the Credit River CHL from the overlook of the Credit River Bridge, which is recognized as a heritage attribute of the Credit River Corridor CHL, it is recommended that the proposed truss of the AT Bridge be painted blue (as seen in **Image 1**). This colour will complement the natural landscape of the river and surrounding environment by blending in with the blue sky. In doing so, the colour scheme will

minimize the presence of the proposed truss of the AT Bridge and mitigate the impact on views of the Credit River Corridor CHL from the Credit River Bridge.

The AT Bridge will also include new accessible viewing areas with benches and lookouts to allow the public to observe the southeastern view of the Credit River CHL. This is superior to the views that are being partially obstructed as the views from the Credit River Bridge are not accessible to the public. Views from the window of a passenger train are from a higher elevation and as a result will not be impacted to the degree as that of a person standing on the bridge.

# 7.2.3 35 Front Street North – Royal Canadian Legion Branch 82

No further heritage requirements for 35 Front Street North, and therefore no mitigation measures were prepared.

# 7.3 Recommendations

Based on the results of this HIA, the following is recommended:

# **Credit River Bridge**

1. As discussed in **Section 7.2.1**, continue to design the AT Bridge with a steel truss to be complementary and sympathetic to the existing Credit River Bridge but with the use of contemporary technology and materials.

# **Credit River Corridor CHL**

- 2. As discussed in **Section 7.2.2**, employ measures to protect the natural environment of the Credit River Corridor.
- 3. Complete a Landscape Plan or Tree Protection Plan to identify the contributing vegetation to the scenic quality of the landscape (i.e. native species). The plan should include a detailed vegetation protection methodology and strategies to mitigate any direct impacts to the vegetation, if necessary.

# AT Bridge

4. Consider commemorative options proposed in **Section 6** and incorporate public interpretation and commemoration elements into the design of the truss arch bridge.

# General

5. Provide this HIA to the Heritage Planning Unit of the MCM for review. The HIA should also be sent to the City's Heritage Advisory Committee for information or review.

# 8. Sources

### Primary and Secondary Sources:

- Archaeological Services Inc. (ASI), January 2022. Conserving Heritage Landscapes: Cultural Heritage Landscape Project – Volume 3. Retrieved from: https://www.mississauga.ca/wpcontent/uploads/2022/02/25094322/Conserving-Heritage-Landscapes-Volume-3.pdf
- Archaeological Services Inc. (ASI), January 2023. Cultural heritage Report: Existing Condition and Preliminary Impact Assessment for the Lakeshore Transportation Studies New Credit River Active Transportation (AT) Bridge Study
- City of Mississauga, August 2015. *Mississauga Official Plan.* Retrieved from: https://www.mississauga.ca/wp-content/uploads/2023/04/Mississauga-Official-Plan\_Chapter07-Complete-Communities-March3-2023.pdf
- City of Mississauga, N.d. *Heritage Impact Assessment Terms of Reference*. Retrieved from: https://www.mississauga.ca/wp-content/uploads/2022/03/21155656/Heritage-Impact-Assessment-Terms-of-Reference.pdf
- The Landplan Collaborative Ltd., Goldsmith Borgal & Company Ltd., Architects Ltd., North South Environmental Inc., and Geodata Resources Inc, 2005. *Cultural Landscape Inventory: City of Mississauga. Retrieved from*: http://www5.mississauga.ca/pdfs/Cultural\_Landscape\_Inventory\_Jan05.pdf.

## **Provincial Standards and Resources:**

## Government of Ontario

- 2006 O. Reg. 9/06: Criteria for Determining Cultural Heritage Value or Interest; made under the Ontario Heritage Act. Available online at https://www.ontario.ca/laws/regulation/060009
- 2021 *Ontario Heritage Act, R.S.O. 1990, c.0.18.* Available online at https://www.ontario.ca/laws/statute/90o18
- 2021 *Planning Act, R.S.O. 1990, c. P.13.* Available online at https://www.ontario.ca/laws/statute/90p13

2024 Provincial Planning Statement. Available online at https://www.ontario.ca/files/2024-10/mmah-provincial-planning-statement-en-2024-10-23.pdf

# Ministry of Citizenship and Multiculturism (MCM)

- 2006 Ontario Heritage Tool Kit. http://www.mtc.gov.on.ca/en/heritage/heritage\_toolkit.shtml
- 2007 *Heritage Conservation Principles for Land Use Planning*. Available online at: http://www.mtc.gov.on.ca/en/publications/InfoSheet\_Principles\_LandUse\_Planning .pdf
- 2010: Standards & Guidelines for the Conservation of Provincial Heritage Properties Available online at: http://www.mtc.gov.on.ca/en/heritage/MTCS\_Heritage\_IE\_ Process.pdf



# **Appendix A**

# Select Drawings – 90% Detailed Design



| METROLINX<br>SOUTHERN TRACK OF  |   | SERVICE DATA   |
|---|---|--|
| $ FOC \xrightarrow{3} FOC $ | <u> <u> <u> </u> <u> <u> </u> <u></u></u></u></u>   | SERVICE     DATE     INIT.     SERVICE     DATE     INIT.       SAN. SEWERS     GAS MAINS  |
| = - FOC -   |   | WATERMAINS HYDRO U/G CABLE<br>M.O.E. ROGERS U/G CABLE<br>REVISIONS   |
|   | -ROGERS -ROGERS SOUTH EDGE OF C SOUTH - RAIL CORRIDOR PROTECTION<br>RELOCATE -ROGERS - SOUTH - RAIL CORRIDOR PROTECTION<br>RELOCATE - ROGERS - SOUTH - RAIL CORRIDOR PROTECTION<br>CORRIDOR RAIL - ROGERS | DATEDETAILSINIT.APR./05/202460%SUBMISSIONJ.W.  |
| DROP R DROP R DROP  | STORM SEWER VER VER VER VER VER VER VER VER VER V   | SEPT./20/2024         90%         SUBMISSION         J.W.           MAR./28/2025         ISSUE FOR TENDER         J.W.   |
|   | METROLINX   |  |
| 23 24   | C8000<br>CEAST-ABUTMENT<br>79.300<br>79.300<br>79.300<br>78.680   | /  |
|   | 78.650<br>78.620<br>78.620<br>78.050  | retion   |
| 3 2 1 31 30 29 20 <b>9 9 9</b>  | WP No. 6 WP No. 6   | orth   |
| BOLLARD   |   |  |
| NEW CURB  |   | N N  |
|   |   |  |
|   | TT  | WORKING POINTS   |
| <u>PLAN</u>   |   | WP No.         NORTHING         EASTING           1         4,822,941.005         613,697.856  |
| SCALE 1:500   |   | 2     4,822,984.801     613,731.673       3     4,822,984.801     613,731.673  |
|   | SUGGESTED CONSTRUCTION SEQUENCE:  | 3         4,822,992.395         613,753.643           4         4,823,002.984         613,761.658  |
| TRACTOR SHALL APPLY FOR AND   |   | 54,823,000.471613,743.14964,823,049.346613,787.504   |
| K PLAN REVIEW, REVISION, AND  | <ol> <li>INSTALL ENVIRONMENTAL PROTECTIONS (DOES NOT INCLUDE COFFERDAM).</li> <li>PREPARE SITE, INCLUDING GRUBBING OF STUMPS IN MEMORIAL PARK AND RECONSTRUCTION OF CURB AND GUTTER ON SOUTH SIDE</li> </ol>  | 6 4,823,049.346 613,787.504  |
| DRMATION FOR REVIEW AND<br>DUTSIDE OF RAILWAY SERVICE   | 2. PREPARE SITE, INCLUDING GRUBBING OF STUMPS IN MEMORIAL PARK AND RECONSTRUCTION OF CURB AND GUTTER ON SOUTH SIDE<br>OF FRONT STREET, PLACING GRAVEL WORKING SURFACE IN MEMORIAL PARK AND CONSTRUCTING ACCESS ROADS IN RCL PARKING<br>LOT AND MEMORIAL PARK.   |  |
| RIOR TO CONSTRUCTION:   | <ul> <li>3. LINE EXISTING STORM SEWER UNDER FRONT STREET.</li> <li>4. JULY 15 - CONSTRUCT COFFERDAM.</li> </ul>   | <u>GENERAL NOTES</u>   |
|   | 5. CONSTRUCT STORMSEWER OUTLET AND NEW STORMSEWER CONNECTING TO EXISTING SYSTEM.  | 1. ALL DRIVEWAYS ASPHALT UNLESS OTHERWISE NOTED  |
|   | 6. EXCAVATE FOR ABUTMENTS.  | 2. ALL SERVICE LOCATIONS ARE APPROXIMATE<br>AND MUST BE LOCATED ACCURATELY IN FIELD  |
| NX FOR REVIEW AND ACCEPTANCE  | <ol> <li>DRIVE PILES.</li> <li>CONSTRUCT ABUTMENTS.</li> </ol>  | 3. ALL MEASUREMENTS FOR THIS PROJECT ARE IN<br>METRES_AND/OR MILLIMETRES UNLESS OTHERWISE  |
| AILWAY FLAGGING PROTECTION;   | 9. CONSTRUCT TEMPORARY PIERS.   | INDICATED  |
|   | 10. ASSEMBLE AND LAUNCH GIRDERS.<br>11. REMOVE TEMPORARY PIERS.   | 4. ALL SINGLE C.B. LATERALS TO BE 250mm Ø CL<br>65-D ALL OTHERS TO BE 300mm Ø CL 65-D  |
| THE SATISFACTION OF AECOM /   | 12. CONSTRUCT CONCRETE DECK.  | 5. ALL TREES AND SHRUBS NOT MARKED IN THE FIELD FOR REMOVAL, PROTECT   |
| RIGHT-OF-WAY FOR METROLINX  | 13. CONSTRUCT MSE WALLS AND BACKFILL ABUTMENTS.   |  |
|   | <ul><li>14. ARMOUR RIVERBANK AND COMPLETE FINAL GRADING ALONG RIVERBANK.</li><li>15. RECONSTRUCT NORTH SIDE OF FRONT STREET.</li></ul>  | 6. ALL SEWERS AND LATERALS TO HAVE CLASS 'B'<br>BEDDING AND SAND COVER BACKFILL UNLESS<br>OTHERWISE INDICATED  |
|   | 16. CONSTRUCT STEEL TRUSS.  | 7. ALL UTILITY RELOCATION BY OTHERS  |
|   | 17. ERECT BARRIERS.<br>18. FINAL PAVING.  | 8. DURING SEWER CONSTRUCTION, WATERMAINS TO<br>BE PROTECTED TO THE SATISFACTION OF THE<br>PUBLIC WORKS DEPARTMENT OF THE REGIONAL<br>MUNICIPALITY OF PEEL  |
|   | 19. FINAL GRADING AND LANDSCAPING (IN SPRING OF 2026).  | 9 INFORMATION SHOWN HEREON IS FOR LISE BY  |
| IBILITY OF TRAIN CREWS OPERATING;<br>ES AND RIGHT-OF-WAY. THE PROJECT<br>S/GRADING;   |   | THE CITY OF MISSISSAUGA, TRANSPORTATION AND<br>WORKS DEPARTMENT, AND IS NOT INTENDED FOR<br>USE BY ANY OTHER PARTIES UNLESS<br>EXPRESSED WRITTEN CONSENT IS OBTAINED.<br>MEASUREMENTS SHOWN MUST BE CONFIRMED BY |
| ACCEPTANCE FROM AECOM /   |   | EXPRESSED WRITTEN CONSENT IS OBTAINED.<br>MEASUREMENTS SHOWN MUST BE CONFIRMED BY<br>FIELD SURVEY BEFORE USE.  |
|   |   | 10. PROTECTED BY COPYRIGHT. MAY NOT BE<br>REPRODUCED WITHOUT PERMISSION  |
|   | C ABUT. BRGS.   | 11. THIS IS NOT A PLAN OF SURVEY   |
| € ABUT. B   |   |  |
| TRANSITION  |   |  |
|   | 1.67 - 1.          |  |
|   | <u>2.95%</u> <u>EL.76.740</u><br>WI <u>VI</u> <u>80</u>   |  |
|   | EL. 74.792  |  |
|   |   |  |
|   |   | MISSISSAUGA  |
| 83.574 81.977   | 80.030       79.330 →       78.650 →       78.030 →       77.400 →       PROPOSED CL OF         ROAD ELEV.       79.300 →       78.620 →       78.000 →       77.400 →       PROPOSED CL OF   | PRODUCED FOR - T&W, ENGINEERING AND WORKS  |
| 83.574 81.977   | 80.030 79.300 78.030 78.030 77.400 PROPOSED CL OF<br>←79.300 ←78.620 ←78.000 TOP OF STORMSEWER<br>ELEV.   | AND PEDESTRIAN BRIDGE  |
|   | SEWER INVERT<br>ELEVATION   | SITE PLAN  |
| WP No. 5=171.37 -   | WP No. 6=237.37         PROPOSED SEWER LENGTH           0+190         0+200         0+210         0+230         0+240         0+250         0+260         0+270         0+280         0+290         0+300         0+310         CL OF CONSTRUCTION CHAINAGE   | SCALE         HOR.1:500<br>VERT. 1:250         AREA         PROJECT No. 60710388           C.A.D.D. BY         A.P.         CHECKED BY         J.W.         PLAN No.   |
| 0 0+140 0+150 0+160 0+170 0+180   | 0+190 0+200 0+210 0+220 0+230 0+240 0+250 0+260 0+270 0+280 0+290 0+300 0+310 CHAINAGE  | DATE MAR., 2025 SHEET 2 OF 59  |



METROLINX ACCESS

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 METROLINX IS DRILLING BOREHOLES FOR A GEOTECHNICAL INVESTIGATION BETWEEN APRIL 1ST AND MAY 31 2025. ACCOMMODATE ACCESS TO METROLINX PROPERTY AS NEEDED INCLUDING ENSURING THAT ACCESS IS NOT BLOCKED FOR A DRILLING RIG TO ENTER AND EXIT METROLINX PROPERTY.

2.METROLINX CONDUCTS WEEKLY MONITORING OF THEIR BRIDGES. PERMIT METRLINX INSPECTORS TO WALK ACROSS WORK ZONE AS NEEDED TO COMPLETE THEIR INSPECTIONS.

|         |            |             | ן 1. AC           |
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| POINT * | EASTING    | NORTHING    | CC<br>DC<br>2. TR |
| 21      | 613869.732 | 4823070.558 | OF                |
| 22      | 613867.543 | 4823109.502 | ] 3.IMI           |
| 23      | 613902.140 | 4823106.798 | ] 4.LA            |
| 24      | 613897.309 | 4823070.692 | 5. AR             |
| 25      | 613866.614 | 4823079.935 | 6.NC              |
| 26      | 613866.535 | 4823086.258 | 7.NC              |
| 27      | 613814.832 | 4823074.003 |                   |
| 28      | 613814.012 | 4823081.462 | 8.NC              |
| 29      | 613798.888 | 4823042.490 | 9.LA              |
| 30      | 613779.462 | 4823046.482 | ET                |

# ACCESS NOTES

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POINT \*29

LIMIT OF CONTRACT WORK ZONE

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POINT \*30-







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| W.P. |          | COORD         | INATES     |
| W.F. | STATION  | NORTHING      | EASTING    |
| S1   | 0+171.37 | 4823000.471   | 613743.149 |
| S2   | 0+237.37 | 4823049.346   | 613787.504 |
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|             |                |             |          |       |
| GENERAL ARR |                |             |          | RIDGE |
|             |                |             |          |       |



SERVICE DATA SERVICE DATE INIT. SERVICE DATE INIT. GAS MAINS SAN. SEWERS ELL U/G CABLE YDRO U/G CABLE STM. SEWERS WATERMAINS ROGERS U/G CABLE M.O.E REVISIONS INIT. DETAILS DATE APR./05/ 60% SUBMISSION J.W. J.W. 90% SUBMISSION FPT /20/ SSUE FOR TENDER MAR./28/2 9000 <u>NOTES:</u> 1. ALUMINIUM BARRIERS SHALL BE 6061 ALLOY T-6 HEAT TREATED. STAINLESS STEEL BOLTS WASHER AND NUTS SHALL BE TYPE 304 ACCORDING TO ASTM A314. 9500 1390 3 SPACE AT 2240 = 6720 1390 NORTHEAST CYCLE PATH BARRIER SCALE 1:50 -20mm EXPANSION JOINT TYPICAL EVERY 20000±500 67500 29 SPACE AT 2210 = 64090 1555 150 1555 SOUTH CYCLE PATH BARRIER SCALE 1:50 31 150 300 SLIDE FIT 90 100 680 EXPANSION JOINT <u>/2</u>\ SCALE 1:20 \_\_\_\_\_ MISSISSAUGA

-16Ø POST-INSTALLED STAINLESS STEEL ANCHORS W/ 95 EMBEDMENT IN HILTI HIT-HY200 EPOXY (TYP.FOR ANCHORS IN PRECAST UNITS)

PORT CREDIT MUP TRAIL AND PEDESTRIAN BRIDGE BARRIER DETAILS I PROJECT No. 60710388 SCALE AS NOTED AREA PLAN No.

J.W.

CHECKED BY

MAR., 2025 SHEET 43 OF 59

A.P.

C.A.D.D. BY

RODUCED FOR - T&W, ENGINEERING AND WORKS

10.1

C57732





# NOTES:

- 1. THE TREES IN THE MITIGATION PLANT LIST ARE TO BE PLANTED ALONG THE PERIPHERY OF THE LARGE OPEN EVENT SPACE IN THE PARK OR ELSEWHERE AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR/CITY OF MISSISSAUGA STAFF.
- 2. MITIGATION SHRUB PLANTINGS SHOULD BE LOCATED WITHIN, BUT NOT LIMITED TO, THE AREAS INDICATED ON THE PLAN. FINAL PLACEMENT IS AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR/CITY OF MISSISSAUGA STAFF.
- 3. MAINTAIN A MINIMUM 1.5m SETBACK FROM THE EDGE OF TRAIL FOR ALL MITIGATION SHRUB PLANTINGS TO ENSURE CLEARANCE FOR MAINTENANCE AND TRAIL USERS.
- 4. ALL PROPOSED TREE LOCATIONS ARE SUBJECT TO FIELD FIT DUE TO POTENTIAL CONFLICTS.
- 5. REFER TO DRAWING SITE RESTORATION II (SHEET 50) FOR PLANT LISTS, SEED MIX, PLANTING DETAIL AND LANDSCAPE NOTES.
- 6. REFER TO CIVIL DRAWING SHEET 9 FOR PARKLING LOT AREAS.
- 7. ALL DISTURBED AREAS WITHIN FORESTED AREA TO BE RESTORED WITH CVC1 UPLAND SEED MIX; ALL OTHER DISTURBED AREAS TO BE RESTORED WITH SOD UNLESS NOTED OTHERWISE.
- 8. ALL TREES AND SHRUBS NOT MARKED IN THE FIELD FOR REMOVAL SHALL BE PROTECTED.
- 9. TREE REMOVALS AND PROTECTION AS PER PORT CREDIT ACTIVE TRANSPORTATION BRIDGE ARBORIST REPORT AND TREE PROTECTION PLAN DATED FEBRUARY 2024.
- 10. INFORMATION SHOWN HEREON IS FOR USE BY THE CITY OF MISSISSAUGA, TRANSPORTATION AND WORKS DEPARTMENT, AND IS NOT INTENDED FOR USE BY ANY OTHER PARTIES UNLESS EXPRESSED WRITTEN CONSENT IS OBTAINED. MEASUREMENTS SHOWN MUST BE CONFIRMED BY FIELD SURVEY BEFORE USE.
- 11. PROTECTED BY COPYRIGHT, MAY NOT BE REPRODUCED WITHOUT PERMISSION.
- 12. THIS IS NOT A PLAN OF SURVEY.

C57735



# **Appendix B**

**Key Qualifications** 

# Adria Grant, MA, CAHP/ Associate Vice-President, Environment / Senior Report Reviewer.

Adria Grant is a cultural heritage specialist and professional archaeologist who has been active in the field of cultural resource management since 1999, specializing in Stages 1 through 4 archaeological assessments and cultural heritage assessments for provincial and federal government, municipal corporations, and private sector organizations. Adria is an experienced project manager having completed formal project management training through the Project Management Institute (PMI) as well as comprehensive and stringent company specific project management courses during her employment at Golder Associates, Stantec and AECOM. Adria consistently applies the knowledge, tools, and techniques of project management practices to the archaeological field, streamlining processes and procedures to achieve client objectives. Adria has a wealth of experience working with municipal heritage planners in the context of development activities and has the ability to provide sound technical advice to proponents on the heritage process in Ontario.

Adria is a member of the Canadian Association of Heritage Professionals (CAHP), professionally licensed by the Ontario MCM (P131), and the Ontario Association of Professional Archaeologists (APA). In addition to professional memberships Adria actively participates in the Canadian Archaeological Association and Ontario Archaeological Society events and is active and well known within the heritage and archaeological communities. She currently acts as the Technical Lead for Cultural Resources and Heritage Management in Canada, and is the Canadian lead for AECOM's North American cultural resources team.

# Liam Ryan, MES, MCIP, RPP, CAHP / Cultural Planner II / Report Writer & Researcher.

Liam Ryan holds a master's degree in Environmental Studies: Planning with a specialization in both urban and regional planning and heritage planning from York University. He is currently a Register Professional Planners (RPP) and a Professional Member of the Canadian Association of Heritage Professionals (CAHP). As a Heritage Planner at AECOM, Liam provides his expertise on heritage policy reviews for public and private sector clients. He has gained practical experience and managed heritage planning projects including; numerous Heritage Impact Assessments (HIA), Conservation Plans, and assisted in a policy review for a Heritage Conservation District Study, currently underway. Liam, as a dedicated Heritage Planner, has also assisted in Cultural Heritage Evaluation Reports (CHER) and Cultural Heritage Resource Assessments (CHRA) for municipal stakeholders as well as large infrastructure projects for clients such as Metrolinx and the Ontario Ministry of Transportation. He completes all deliverables to the satisfaction of the development proponent, the cultural heritage community, and all stakeholder groups.

# Appendix C

Metrolinx Heritage Committee Decision Form and Metrolinx Interim Heritage Committee – Statement of Cultural Heritage Value

10.1



| Property Name: Mississauga Road Bridge (Mile 1  | 1.8)  |
|---|---|
| The Metrolinx Heritage Committee has decided th   | at this property:   |
| ⊠is identified as a Metrolinx Heritage Property; C  | DR  |
| □ is identified as a Metrolinx Heritage Property of   | f Provincial Significance; OR   |
| □ is NOT a Metrolinx Heritage Property  |   |
| <b>Recommendations and Rationale:</b>   |   |
| • The Metrolinx Heritage Committee (MHC) agree<br>Mississauga Road Bridge (Mile 11.8) is a Metrolin<br>Ontario Regulation 9/06 but not Ontario Regulation | nx Heritage Property and meets the criteria outlined in   |
| The boundaries of the Metrolinx Heritage Propert  | y are:  |
| ■ the same as the legal property boundaries of the  | Metrolinx installation; OR  |
| $\Box$ new boundaries, as shown in the attached map.  |   |
| The significant cultural heritage value(s) of the Me  | etrolinx Heritage Property is/are:  |
| Regulation 09/06.   | ge (Mile 11.8) meets the criteria contained in Ontario<br>ge (Mile 11.8) did not meet the criteria contained in |
| The following realty assets contribute to the cultur<br>Property:   | al heritage value(s) of the Metrolinx Heritage  |
| Asset Name  | Land parcel   |
| N/A   | N/A   |
| The following realty assets DO NOT contribute to<br>Heritage Property:  | the cultural heritage value(s) of the Metrolinx   |
| Asset Name  | Land parcel   |
| N/A   | N/A   |
| Attachments:  |   |
| $\boxtimes$ a Statement of Cultural Heritage Value for the $\Box$ a map showing the boundaries and contributing   |   |

| valuators:               |   |  |
|--------------------------|---|--|
| Name                     | Position and Organization                                       |  |
| Rebecca MacDonald, Chair | Manager, Environmental Programs & Assessment,<br>Metrolinx      |  |
| Michael Wolczyk          | Vice President, Technical Resource Management,<br>Office of CEO |  |
| Chris Uchiyama           | Internal Heritage Specialist                                    |  |
| Dan Schneider            | External Heritage Specialist                                    |  |



## **Metrolinx Heritage Committee Decision Form**

### Property Name: Credit River Bridge (Lakeshore West Rail Corridor), Toronto:

### The Metrolinx Heritage Committee has decided that these four properties:

- □ is identified as a Metrolinx Heritage Property; OR
- is identified as a Metrolinx Heritage Property of Provincial Significance; OR
- □ is NOT a Metrolinx Heritage Property

### **Recommendations and Rationale:**

- The Metrolinx Heritage Committee (MHC) agrees with the consultant recommendation that the Credit River Bridge is a Metrolinx Heritage Property of Provincial Significance as it satisfies the criteria outlined in both Ontario Regulation 9/06 and Ontario Regulation 10/06 (By ASI, July 2016).
- The MHC disagrees with the consultant assessment to the following Criterion in Ontario Regulation 9/06 (By ASI, July 2016).
  - Criteria 1.i: "unusual" should not be included in the analysis as it is not part of the criteria.
    Criteria 2.iii: contradicts with Criterion 1.ii regarding craftsmanship.
- The MHC disagrees with the consultant assessment to the following Criteria in Ontario Regulation 10/06 (By ASI, July 2016).
  - Criteria 3: the analysis should delete the work "unusual" and should only include "unique". Clarify the statement about featuring both riveted work and pin connections is "unusual". Many pin connected structures used riveted members.
  - Criteria 7: Assuming the design as noted above is unique, then the design which is attributed to Hobson must reflect an association with him and the railway organization. Comparisons with the St. Clair Tunnel or the International Bridge at Fort Erie are not required by the test for this criteria and must stand on its own.

### The boundaries of the Metrolinx Heritage Property are:

- The same as the legal property boundaries of the Metrolinx installation; OR
- □ New boundaries, as shown in the attached map (See Statement of Cultural Heritage Value).

### The significant cultural heritage value(s) of the Metrolinx Heritage Property is/are:

- It was determined that Credit River Bridge meets the criteria contained in Ontario Regulation 09/06.
- It was determined that Credit River Bridge meets the criteria contained in Ontario Regulation 10/06.

The following realty assets contribute to the cultural heritage value(s) of the Metrolinx Heritage Property:

Asset Name

Land parcel

|           | 10. | 1 |
|-----------|-----|---|
| Page 2 of | 2   |   |

| N/A   |  | N/A  |  |
|---|--|--|--|
| The following realty assets DO NOT contribute to the cultural heritage value(s) of the Heritage Property: |  |  |  |
| Asset Name  |  | Land parcel  |  |
| N/A   |  | N/A  |  |
| Attachments:  |  | L  |  |
|   | •  | Metrolinx Heritage Property<br>g assets of the Metrolinx Heritage Property.<br>Position and Organization |  |
| Michael Wolczyk, Chair  | Vice President, C                          | Vice President, Corridor Infrastructure, Metrolinx   |  |
| Witchaci Wolczyk, Chan  | Manager, Environmental Programs, Metrolinx |  |  |
| Don Forbes  | Manager, Enviro                            |  |  |
|   | Manager, Enviro<br>External Heritag        | nmental Programs, Metrolinx  |  |
| Don Forbes  | External Heritag                           | nmental Programs, Metrolinx  |  |



# Metrolinx Interim Heritage Committee – Statement of Cultural Heritage Value

## Property Name: Credit River Bridge (Lakeshore West Rail Corridor), Mississauga

# **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 historic village of Port Credit, in the City of Mississauga. The three-span railway 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. The bridge features a central inverted bowstring arch deck truss with steel beam approach spans on either side. It was widened to the north in 2008 to accommodate a third track. The bridge 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.

It is recommended that Metrolinx/GO Transit proceed with identifying the Credit River Bridge as a Provincial Heritage Property of Provincial Significance.

# **Cultural Heritage Value:**

The Credit River Bridge spans the Credit River, listed as a cultural heritage landscape by the City of Mississauga, in the village of Port Credit. The bridge is a landmark in Port Credit and it contributes significantly to the scenic character of the river and the community. Further, given the age of the bridge, proximity to Port Credit GO Station, and the role of the railway corridor in the community, this bridge retains significant physical, functional, visual and historical links to the Credit River and to Port Credit.

The Credit River Bridge is directly associated with the GTR's program to double track its route from Montreal to Sarnia in the late nineteenth and early twentieth century. The current bridge was built to replace the original wooden railway bridge at this location. This was a significant improvement to railway infrastructure in southern Ontario that contributed to economic and population growth, particularly in the Greater Toronto Area.

The Credit River Bridge is an unusual and unique example of an inverted bowstring arch deck truss bridge and is thought to be one-of-a-kind in Ontario. The low curved chord underneath the bridge gives a sense of floating above the water as it extends over the Credit River, for an unsupported 210 ft (63 m). The unique design, combined with the span of the deck truss, demonstrates that the Credit River Bridge has a high degree of technical achievement. Distinctive features of this style of bridge construction include: combination of pin and riveted connections; heavy duty steel ten panel truss with diagonal members forming a Warren truss configuration; lower curved chord composed of lighter, less robust, steel; and massive eyebar bundles.

The Credit River Bridge was designed by Chief Engineer of the GTR, Joseph Hobson, and fabricated

by the Canadian Bridge Company Limited of Walkerville, in 1903. Given its noted craftsmanship, technical achievement, and unusual and unique design, the Credit River Bridge is considered to be a notable example of a bridge designed by Hobson, the GTR, and the Canadian Bridge Company Limited.

# Heritage Attributes:

A list of heritage attributes that contribute to the cultural heritage value of the Credit River Bridge include its:

- Steel and masonry bridge design and construction;
- Stone masonry substructure;
- Three-span scale and dimension, including the 210 ft (63 m) central deck truss span and two steel beam approach spans (30 ft or 9 m each); Unique and unusual steel deck truss centre span with an inverted bowstring arch shape; and
- Combination of pin and riveted connections.



Figure showing the location of the Credit River Bridge.