

4.2.2

Conestogo Bridge

Score: 60

Woolwich Township



Documentation

Builder

The Conestogo Bridge was built by the Hamilton Bridge and Tool Company.⁴⁰ See Appendix A for more information about the Hamilton Bridge and Tool Company.

Age

The original Conestogo Bridge spanning the Conestoga River was built in 1886. The current Conestogo Bridge was built in 1928.⁴¹

Technology

Materials

The Conestogo Bridge, also known as Bridge #25 is a “wood-and-metal bridge.”⁴² It has a transverse laminated timber deck, with steel cables and steel welded trusses.⁴³



⁴⁰ Spanning the Generations – Phase 1: Inventory, “Conestogo Bridge,” May 2004, p. 1.35 – 1.36.

⁴¹ Ibid.

⁴² The Record. “Woolwich Seeks Money for Bridge,” July 4, 1991 & “Engineers list Conestogo bridge options”, January 31, 1991.

⁴³ Spanning the Generations – Phase 1: Inventory, “Conestogo Bridge,” May 2004, p. 1.35 – 1.36.

Design/Style

This bridge is a “twin span through double truss bridge” that has a single driving lane spanning the Conestogo River.⁴⁴ The bridge is connected by pin-joints.⁴⁵

Prototype

The Conestogo Bridge is a prototype of a double span through truss bridge in the Region because it is the only such bridge that exists within the Region. It was also one of the first steel truss bridges because it was built during the era when steel was first being used in bridge construction.⁴⁶

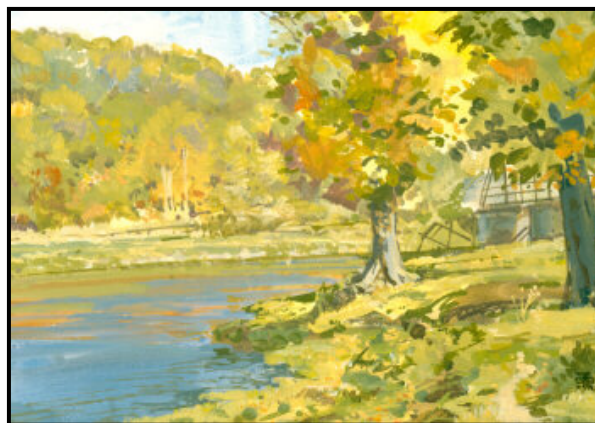
Structural Integrity

In 1989, five options were proposed to deal with the bridge’s natural deterioration. These were either “doing nothing, closing the bridge to traffic, repairing the bridge, tearing the bridge down and replacing it with a new two-lane bridge at the same location, or building an entirely new route and bridge to direct traffic away from Township Road 44.” With further research, the decision was to have the bridge temporarily restored.⁴⁷ Also at this time, a sign was posted on the bridge with a load limit of 5 tonnes, preventing school buses and heavy farm equipment from using the structure.⁴⁸

Bridge Aesthetics and Environment

Visual Appeal

The beauty of the Conestogo Bridge was so intriguing that it attracted two local artists to depict pictures of it: Mr. Carl Hiebert and Mr. Peter Etril Snyder. The following photo displays one painting done by Mr. Peter Etril Snyder entitled, “Conestogo Flats.”⁴⁹ The Conestogo Bridge can be viewed in the right corner of the painting.



“Conestogo Flats” - By Peter Etril

⁴⁴ The Record. “Initial Public Notification: Class Environmental Assessment Bridge #25, Township Road 44 Township of Woolwich” January 18, 1991.

⁴⁵ The Record. “Old steel bridge in Conestogo closed for repairs; [Final Edition]”, May 22, 2002

⁴⁶ Spanning the Generations – Phase 1: Inventory, All Bridges. May 2004.

⁴⁷ The Record. “Engineers list Conestogo bridge options.” January 31, 1991.

⁴⁸ The Elmira Independent. “Bridge in Conestogo needs major repair.” May 29, 1990.

⁴⁹ Snyder, Peter Etril, Online Gallery. “Conestogo Flats” February 10, 2006.

As well, one writer from the Kitchener-Waterloo Record newspaper indicated that she believes that “the prettiest rural panorama in the whole Region is the one seen from this bridge.” She feels it is a very important view because, “such vantage points are rare in this relatively flat part of Ontario.” She also likes bridges like these because “there’s always something going on: patient fishermen, ever hopeful of better luck with the next cast; great blue herons waiting with motionless intensity for a frog or minnow to appear beneath their ready beak; [and] children skipping stones or throwing sticks for their dog to retrieve.” It was also said that these views are important on and near “old bridges [because they] offer welcome glimpses of both our present and our past.”⁵⁰

Integrity

The bridge has high integrity. The same bridge crossing has been used since the bridge’s first construction in 1886.

Landmark

This bridge has also been known as “Bridge 25.”⁵¹ It is located in a historic hamlet with framed views in Mennonite country. The area also has a large floodplain, and a steep hill, which can be seen when you approach the bridge from the north. It also is the only double span Pratt through truss bridge in the Region, which also makes it a significant landmark.

Gateway

The Conestogo Bridge joins Conestogo with Lexington Road in northern Waterloo.⁵² Also, being close to the countryside line, it provides a gateway from the urban to the rural setting.

Character Contribution

The Conestogo Bridge is located on a scenic road that is a rural heritage landscape consisting of a beautiful and pristine environment. The Conestogo Bridge does add to this unique cultural landscape, being a single lane, narrow bridge it calms traffic that travels through this pristine environment.

Historic Association

Bridge Group

There are two other truss bridges in Woolwich, the Winterbourne (two-span) and Chamber’s (single span) Bridges, but they are built using the Polygonal or Camelback Truss style.⁵³ So, the Conestogo Bridge is not part of any through Pratt Truss bridge group in Woolwich Township; it is the only significant through Pratt Truss Bridge left there.

⁵⁰ The Record. “Old bridges add such character.” December 17, 1994.

⁵¹ Ibid.

⁵² The Elmira Independent. “Bridge in Conestogo needs major repair”, May 29, 1990.

⁵³ Historic Bridges of Michigan and Elsewhere, “Promoting the Preservation of our Transportation Heritage.”

In the Region, the Conestogo Bridge belongs to the larger group of Through Pratt Truss bridges. These other bridges include the Nithvale, Piper Street Steel Truss, Wellesley Bridge #6, Holland Mills Road, Haysville (demolished), Hartman, Shade Street and Blackbridge Road Bridges.⁵⁴

Development Pressure

The bridge is located near the Region's countryside line where there is a sharp transition from urban to rural lands. Within the next 20 years it is predicted that the population will increase as well as bridge usage (from 1,000 to approximately 7,000 vehicles using it per day). This increase in bridge use is going to have a significant impact on the future structural integrity of the bridge. Currently there are new plans to build another bridge elsewhere to deal with this increase in "inter-regional traffic."⁵⁵

⁵⁴ Spanning the Generations – Phase 1: Inventory, All Bridges, May 2004.

⁵⁵ The Record. "Engineers list Conestogo bridge options." January 31, 1991.

Conestogo Bridge

Location MTO Site No. 033-0194, Woolwich Twp. Rd. No. 44 (now Glasgow Street S.), 0.3km south of King Street, Conestogo, Township of Woolwich.

General Information

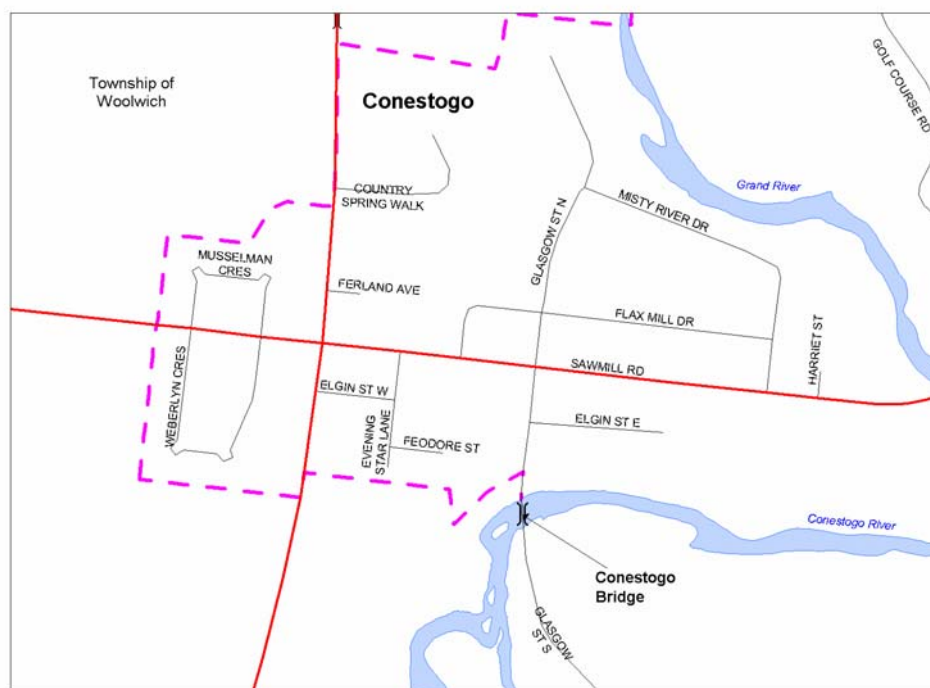
<i>Bridge No.</i>	320144
<i>Jurisdiction</i>	Township of Woolwich
<i>Year built</i>	1886, 1928
<i>Drawings</i>	Not available

Physical Components

<i>Type</i>	Through Truss
<i>Spans</i>	2
<i>Dimensions</i>	Length 39.8 m Width 5.5 m Vertical Clearance 4.5 m
<i>Load Limit</i>	5 tonnes

Descriptive details

This is a two-span through truss bridge, made by the Hamilton Bridge and Tool Co. in 1886. The trusses were welded and steel cables form the boundary walls. The worn surface is made of transverse laminated timber.



Source: Planning Housing and Community Services, Region of Waterloo

Conestogo Bridge

South View



West View



Conestogo Bridge Bibliography

Historic Bridges of Michigan and Elsewhere - Slideshow.” <http://www.historicbridges.org>, 25 January, 2006.

Region of Waterloo: Planning Housing and Community Services Department. Spanning the Generations - Phase 1: Inventory – Conestogo Bridge. May 2004, pp. 1.35-1.36.

Snyder, Peter Etril. Online Gallery: Conestogo Flats. <http://www.snydergallery.com>. 18 July, 2007.

The Elmira Independent. Bridge in Conestogo needs major repair. 29 May 1990.

The Record - Kitchener, Waterloo & Waterloo Region. Engineers list Conestogo bridge options. 31 January 1991.

The Record - Kitchener, Waterloo & Waterloo Region. Initial Public Notification: Class Environmental Assessment Bridge #25, Township Road 44 Township of Woolwich. 18 Jan. 1991.

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The Record - Kitchener, Waterloo & Waterloo Region. Woolwich Seeks Money for Bridge. 4 July 1991.