

4.2.9**Blackbridge
Road Bridge****Score: 62****City of Cambridge****Documentation****Builder**

The designer and builder of the bridge are unknown.

Age

Blackbridge was probably built circa 1916, but this has not been confirmed by a primary source¹⁷⁴. During the 1989 repairs to the bridge, a wooden timber with '1916' stamped on the bottom was uncovered, suggesting that the bridge was built during this year or after. The 1989 repairs included the re-planking of the wooden deck, which was last replaced in 1931. Also, the single-lane, steel truss design suggests it was built at the beginning of the 20th Century, making it one of our oldest bridges.

Technology**Materials**

Blackbridge is made of steel.

Design/Style

The bridge is a single-lane, pin-jointed, steel truss bridge.

Prototype

The design of Blackbridge Road Bridge was common 100 years ago. However, in today's standards it could be considered unique in that it uses steel truss construction with riveted joints¹⁷⁵.

¹⁷⁴ Spanning the Generations – Phase 1: Inventory, "Blackbridge Road Bridge," May 2004, p. 1.21 – 1.22.

¹⁷⁵ "Cambridge Landmarks: Black Bridge Road" Cambridge Times, January 11, 1997.

Structural Integrity

In 1984, it was determined that the bridge was in poor shape and in need of repair. The supporting walls were weak and needed reinforcement, and all concrete areas needed stabilization to assure safety. Therefore, \$25,000 was allocated for needed repairs to the bridge with the expectation that these repairs would last for five years¹⁷⁶. The bridge was reconstructed in 1996 in light of its impending heritage designation. Later on the bridge got new concrete abutments and steel girders holding up a concrete deck¹⁷⁷. Although repairs to the bridge were significant, they were unobtrusive and the bridge has maintained its original form.

Bridge Aesthetics and Environment

Visual Appeal

The Blackbridge is an excellent example of structural engineering of its time, and the open-concept allows an unrestricted view of the landscape.

Integrity

It remains at its original location.

Landmark

The bridge is locally known because of the publicity generated from oil truck accident in 1987.

Character Contribution

The Blackbridge's appearance contributes to the scenic countryside and makes an important contribution to the streetscape¹⁷⁸.

Historic Association

The Blackbridge Road was part of the historic Block Line. The Block Line was generally the southern boundary of the German Company Tract. The future Waterloo Township was purchased from the Six Nations Indians on May 10th, 1798, by Richard Beasley, James Wilson and John B. Rosseaux. Much of the land was later purchased by the German Company. The Block Line was a very important boundary in Waterloo County, and is shown in several historic maps¹⁷⁹.

The Blackbridge has been repaired over the years as needed. The wooden deck was re-planked in 1931. The steel structure was repaired in 1976, and again in 1982. In 1984 Blackbridge was repainted

¹⁷⁶ "Black Bridge gets \$25,000 facelift" Cambridge Reporter, July 5, 1984.

¹⁷⁷ "Almost Done..." Cambridge Reporter, September 21, 1996

¹⁷⁸ "Committee wants to protect bridge" Cambridge Reporter, February 18, 1997

¹⁷⁹ Nagel, James "The Block Line" WHS, 1959:46.

at a cost of \$25,000. The wooden deck was replaced in 1989. The repairs cost \$675,000 in 1996. On February 22, 1997 the City of Cambridge declared Blackbridge as a heritage site¹⁸⁰ and started the process to get the bridge designated under the Ontario Heritage Act¹⁸¹.

Bridge Group

Blackbridge Road Bridge is the only steel bridge in the City of Cambridge.

Human Interest

In 1987, a very large oil truck rumbled down Town Line Road in winter and made a left turn onto Blackbridge Road. The truck weighed 70 tonnes, and the bridge load limit was posted as 4.5 tonnes. The truck jack-knifed up the hill towards the railway bridge and slid backwards. Stranded, the driver called a taxi, left his truck and went home, leaving the truck imprisoned between the bridges (the Blackbridge Road Bridge and the Railway Bridge). The next day the oil was pumped into smaller trucks to lighten the load¹⁸².

According to Cambridge's local Architecture Conservation Advisory Committee the bridge is a well-preserved example of a construction style now rarely used. It dates from city's early history and it "makes an important contribution to the streetscape¹⁸³."

¹⁸⁰ "Bridge named heritage site." Cambridge Times, February 25, 1997

¹⁸¹ "Council wants to protect bridge." Cambridge Reporter. February 25, 1997

¹⁸² "Trucker tempts fate with 70-tonne tanker." Cambridge Reporter. February 2, 1987.

¹⁸³ "Committee wants to protect bridge" Cambridge Reporter, February 18, 1997

Blackbridge Road Bridge

Location Blackbridge Road over Speed River, 2.4 km East of Regional Road 24 (now Hespeler Road), north end of Cambridge.

General Information

<i>Bridge No.</i>	Blackbridge Road
<i>Jurisdiction</i>	City of Cambridge
<i>Year built</i>	1916
<i>Drawings</i>	Not available

Physical Components

<i>Type</i>	Single Lane Pratt Truss
<i>Spans</i>	1
<i>Dimensions</i>	Length 35 m
<i>Load Limit</i>	4.5 tonnes

Descriptive details

This is a single lane Pratt truss bridge on an old gravel road that connected Cambridge to Guelph. The bridge crosses the Speed River at the north end of Cambridge and is located at the bottom of a gully. The deck consists of laminated wooden timbers covered with tar and chip. (There is some confusion among the media sources as to whether or not this is a steel or iron structure. At a glance the red oxidation of the metal would indicate wrought iron but wrought iron erodes in bubbles whereas steel erodes in layers. This bridge is most likely made of steel). It has undergone extensive repairs in the last 13 years.



Source: Planning Housing and Community Services, Region of Waterloo

Blackbridge Road Bridge

South View



East View



Blackbridge Road's Bridge Bibliography

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