

# KETTLEBY BRIDGE REPLACEMENT PROJECT

## KETTLEBY BRIDGE REPLACEMENT:

**Hyprescon#:** 3641-00

**Project:** HY-SPAN (12.2m span)

**Location:** Town of Kettleby

**Engineer:** Ainley & Associates Ltd.  
(Ainley Group)

**Contractor:** G.C. Romano & Sons Ltd.



6 HY-SPAN units.

Each HY-SPAN unit had a clear span of 12.2 m (40ft), a clear height of 2.4 m (8ft), a unit width of 1.2 m (4ft) and an approximate weight of 31,000 kg (68,000 lbs). The HY-SPAN units were delivered and installed in July 2000. The entire bridge structure was in service as requested by the contract documents.

In the early months of 2000, the consulting engineers of Ainley & Associates Ltd. contacted HYPRESCON to provide assistance in the planning of their design of the Kettleby Bridge Replacement Project.

The existing bridge structure was built in 1914 and had to be replaced due to structural concerns. The Town of Kettleby is divided in two parts by the Kettleby Creek and this bridge provides the only link between both parts.

The engineers main design criteria were to have the existing

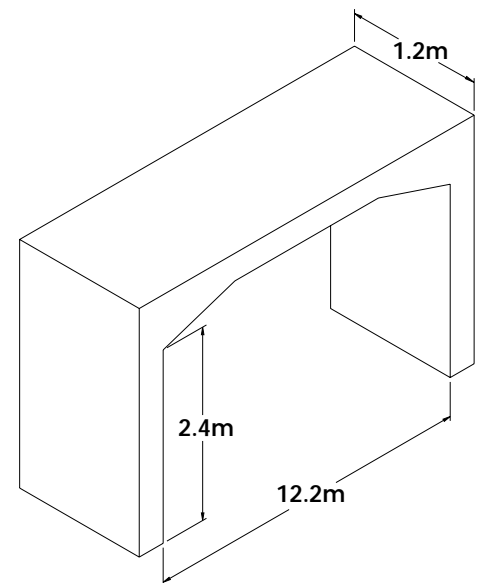


bridge structure replaced as quickly as possible, to have a clear span of 12.2 meters (40ft), and to keep the disruption of the Kettleby Creek to a minimum.

The Project tendered in May and was later awarded to G.C. Romano for construction. HYPRESCON's HY-SPAN product was the ideal and only solution for the construction of the new bridge structure. The construction schedule was not flexible. The commencement of the construction for the bridge structure could not begin until June 15th due to fisheries concerns. Also the structure had to be completed for the town's annual community event in early September. While the contractor was removing the existing structure and constructing the foundation for the new structure, Lafarge designed and manufactured the required

According to the consulting engineers, HYPRESCON HY-SPAN product was the selected product for various reasons:

1. The speed of precast concrete products is very beneficial for the narrow time constraint set by the fisheries and the planned community event.
2. A clear span of 12.2 m allowed the contractor to work outside the creek limits behind the existing abutments. A cast-in-place rigid frame structure would require in-stream shoring and would disturb the natural stream flow.
3. The HYPRESCON HY-SPAN is the only available pre-cast product that can span the required length of 12.2 metres (40 ft)



**For more information on this or any other HYPRESCON product, visit our web site or contact us directly.**



HYPRESCON 5387 Bethesda Road, Stouffville, Ontario, Canada L4A 7X3 (905) 640-5151 Fax: (905) 640-5154  
HYPRESCON INC. 699 Boulevard Industriel, St.Eustache, Quebec, Canada Tel. (450) 623-2200 [www.hyrescon.com](http://www.hyrescon.com)

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