Guelph officials praise new bridge construction

Jason Spencer

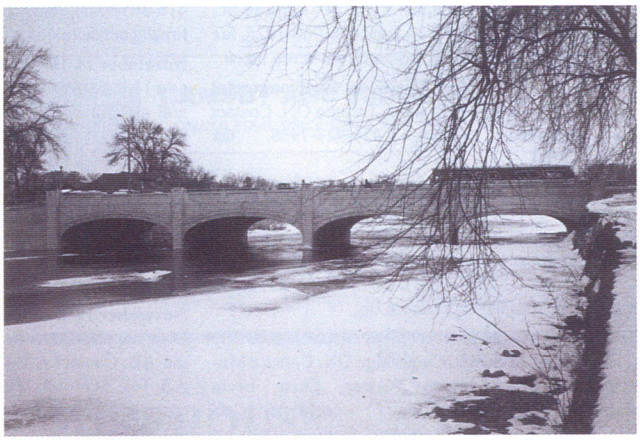
Access to the downtown core of the City of Guelph, Ontario became much easier on December 1, 2000 with the opening of the new Gordon Street Bridge. When Gordon Street was reopened after three months of construction, residents, merchants, and city officials were quick to praise the engineers and contractor about their speed in getting the job done before the busy Christmas season and winter weather.

Gordon Street is the major link between the University of Guelph and the city centre. It crosses the Speed River, one of the major tributaries of the Grand River, which is recognized in Canada as a heritage river. The Speed River and its watershed form a major catchment area that flows from Guelph Lake, through the heart of the city.

Advisory committees consulted by city staff favoured a bridge that would blend with the existing character of the area because the crossing is a gateway to the downtown core. To local residents, merchants, and elected representatives, it was imperative that the construction take place as quickly as possible within the parameters of a compressed construction schedule.

A CON/SPAN system was the preferred alternative for the bridge replacement, primarily because of its arched architecture and speed of installation, requiring less disruption to the aquatic habitat and traffic to the downtown core. Since the system requires very little construction activity in the riverbed and can be installed swiftly, permits are often acquired more quickly from the approval agencies, including Ministry of Natural Resources, Department of Fisheries and Oceans, and conservation authorities.

The new bridge improves safety for vehicles and pedestrians, and complements the architecture of downstream flow control structures, Edinburgh Street Bridge, mature trees, and historic channel walls. The bridge blends so well with the environment that over a short period, people using the park and its amenities are unlikely to be aware of the new structure.



Construction began on September 17, 2000, immediately following Labour Day, with the closure of Gordon Street. After decommissioning the existing bridge, the contractor began construction of the bridge by pouring the footings in three separate pours. Once the footings were ready to receive the precast units, trucks began to deliver them to the site for immediate installation.

Just-in-time delivery was necessary because there was no room on site for stockpiling material. In addition, the margin of safety for workers, and installation efficiency were increased significantly with just-in-time delivery. Trucks delivered the system one unit at a time.

The 40 units that make up the bridge are divided into four cells comprised of 10 units each. The units were installed with a 400 tonne crane, over a period of two days. On the first day, the 20 units of the south cells were installed, and on the second, the remainder was placed to form the two north cells.

As a gateway to the downtown core, the new bridge on Gordon Street had to be designed to last for another 100 years to serve a growing city, and function as an amenity within a significant greenbelt that winds through the city. Now, city officials and citizens have an asset that will meet these expectations. *MW*

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