Transportation

Highways and Bridges

Client

City of Edmonton

Location

Edmonton, Alberta, Canada

Fort Edmonton Footbridge and Trails Project

Project Highlights

- Signature quality suspension footbridge crossing of the North Saskatchewan River
- Application of bridge engineering and architecture design expertise to extend trails and park facilities within a sensitive urban greenway

For more than 75 years, municipal, regional, and provincial authorities have sought to protect the North Saskatchewan River Valley's natural open space from conventional urban development and provide a park system suitable for the metropolitan area. With millions of annual visits, the trails and park facilities are a major recreation and tourism destination within Edmonton and the Capital Region.

The Fort Edmonton Footbridge and Trails Project provides a major new signature quality, cross-river link and extend the river valley trails system west to areas not currently served. On the east shore the development links to the multi-use Trans Canada Trail adjacent to Fort Edmonton Park, and on the west shore it provides new trails extending north into the nearby Patricia Ravine, and it is positioned to connect to future trails planned for areas south and west through the Capital Region.

CH2M HILL led the project consulting team of in-house and sub-consultant specialists, including bridge engineering, bridge architecture, landscape architecture, geotechnical engineering, hydrotechnical engineering, environmental assessment, project visualization, and value engineering.

A three-span, 800-foot-long suspension bridge was selected for the river crossing design with towers situated in stream near to both river banks. The suspension bridge with a thin concrete deck was selected as the crossing of choice, providing a low, organic, and light visual profile suitable to the forested river valley site, compared to other long-span structures. The incorporation of belvederes and seating at both towers, as well as plazas at both shoreline entrances, accommodates groups of people and accomplishes a project objective to create a bridge that is a gathering place as well as a way across the river.

The project team completed detailed design in the spring of 2008 and the footbridge was opened to the public in 2010.