

PRESS RELEASE

Stantec Receives Engineering Excellence Award for Design of Mathew J. Lanigan Bridge, Connecting Tourist Destinations Kennebunkport and Kennebunk

New England engineering firm Stantec received an Engineering Excellence Award for its design of the accelerated replacement bridge for a heavily used crossing between two popular Maine tourist destinations. The award, from the American Council of Engineering Companies (ACEC) of Maine, recognized the design of the Mathew J. Lanigan bridge, connecting Kennebunkport and Kennebunk in Maine.

The \$2.75 million bridge project overcame technical and timeline challenges to open in May 2017 with old time fanfare—including a guest appearance by Former President George H. W. Bush and First Lady Barbara Bush.

The existing bridge was an 88' two-span former swing bridge, originally built in 1933. Over time, it had deteriorated and the narrow sidewalks and open steel grid decking were not conducive to the heavy pedestrian and cyclist use.

Originally programmed as a bridge replacement project, the design team determined this would result in a drawn out, three-season construction project with a full detour bridge and work limited to the winter and spring.

Stantec, the Maine Department of Transportation (MaineDOT), town officials, a public Bridge Advisory Committee, and subconsultants, including geotechnical subconsultant GZA GeoEnvironmental and hydraulics subconsultant Northstar Hydro, convened to develop an alternative approach.

The solution: undertake a major upgrade to the bridge structure instead of complete replacement. This approach allowed the MaineDOT to build the new partial replacement with a full closure of only 40 days during the winter season. Stantec also reduced the bridge to a single span, limiting complicated in-water work.

The project demonstrates the seasonal flexibility of accelerated bridge construction. Winter construction adds challenges to the process, but it can be done with meticulous construction planning and use of precast concrete and other materials that are less prone to cold weather restrictions. This opens up possibilities for other future bridge replacement sites in Maine, where extensive summer construction can have significant impacts to the economic vitality of tourism-driven communities.

Today's new Lanigan bridge is a pedestrian-friendly design, with wider bridge sidewalks and added shoulder width. Mid-span viewing outlooks provide an area for tourists to take their time sightseeing without blocking other pedestrians.

It also pays homage to its past. The previous steel through-girder swing bridge was eligible for the National Register of Historic Places. Three new interpretive panels were mounted to the bridge, one on each viewing outlook and one at the former site of the operator's gate house. The panels depict the past ship-building industry, and the historical significance of the swing bridge and its timber draw bridge predecessor.

Excellent teamwork and communication with MaineDOT and design and construction partners, including the Bridge Advisory Committee, helped alleviate concerns about construction impacts to the towns. Because of this coordination, the public influenced a vital piece of infrastructure in their community which will serve as a sustainable community connector for the lifespan of the bridge.