Gordie Howe International Bridge

Detroit, USA / Windsor, CA

Project Description

The Gordie Howe International Bridge, soon to have the largest cable-stay span in North America (2,799 feet), connects Detroit and Windsor across the Detroit River. Including the approaches, the 6-lane structure will be 1.6 miles long upon completion. Two massive A-shaped pylons carry the cables, and the superstructure is built of structural steel edge girders and floor beams with a composite, precast panel deck.

Owner

Windsor-Detroit Bridge Authority (WDBA)

Contractor

Bridging North America (BNA)

Designer

AECOM

Our Role

McNary Bergeron provided construction engineering services to the design build team for the project. McNary Bergeron worked on tasks related to the superstructure erection including massive temporary jacking struts for geometry control and stability of the main pylons during construction. Additional tasks included design of access platforms, side span support towers, analysis of the superstructure for erection loads, and design of a jacking systems for permanent bearing replacement. McNary Bergeron also provided erection manuals, temporary shoring and lifting analysis for the staged construction of the Michigan Interchange (MI)-75 approach spans that tie into the Gordie Howe Bridge.

Total Contract Value

$6.4 Billion

Timeline

2019-2025

Construction Method and Specifications

The approach superstructure was built on a combination of nine temporary bents and three permanent bents (each side). After the pylons were completed, the main span is constructed one segment at a time, with the cables installed and main span tied back to the already completed approach span behind. Deck construction follows shortly behind the steel, and a crawler crane services both tasks from the deck.