

## I-35W (St. Anthony Falls) Bridge

A HOCHTIEF Company

### Owner

Minnesota Department of Transportation

### Location

Minneapolis, MN

### Value

\$234,000,000

### Market

Design-Build – Bridges

### Start - Completion Dates

10/2007 – 9/2008

- Design-build
- 1,216-foot-long precast segmental bridge
- Highly accelerated schedule of just 14 months
- Project award based on “Best Value”
- 504-foot-long main span over the Mississippi River

## Project Description

Following the tragic collapse of the I-35W Bridge in Minneapolis in August of 2007, Flatiron formed a joint venture team to design and build the replacement bridge for the Minnesota Department of Transportation. After receiving the highest score on the proposal and subsequently winning the contract, the team mobilized quickly to begin work on the new structure. Prior to its collapse, this bridge carried more than 140,000 vehicles a day. The loss of this vital link increased commuter expenses, created a burden on surrounding roads and costs approximately \$400,000 per day in lost revenue.

The new St. Anthony Falls Bridge is a 1,216-foot-long, 10-lane concrete bridge with a 504-foot-long precast segmental main span. The bridge is supported by three land-based piers (four columns at each pier) standing 70 feet tall. Segments were cast on the south bank of the river on an existing closed section of I-35. There are 120 precast segments ranging in weight from 170 to 210 tons each. The bridge also includes a memorial for those that lost their lives when the old bridge collapsed.

The Flatiron team focused on building the best and safest bridge in all aspects of its proposal. Some of the highlights included the use of high performance concrete to provide superior durability, a state-of-the-art sensor and monitoring system built into the bridge that allows for easier and more comprehensive monitoring and a comprehensive safety program that was implemented throughout all aspects of the design and construction process. The bridge was completed and opened to traffic three months ahead of schedule.

### Company Role

Flatiron was the managing partner of this joint venture team.

### Awards

- Federal Highway Administration - Award of Excellence, 2010
- Portland Cement Association - Bridge Design Award of Excellence, 2010
- American Association of State Highway and Transportation Officials - America's Transportation Awards, Grand Prize, 2009
- Associated General Contractors of America/Aon - Grand Award, 2009
- Associated General Contractors of America/Aon - Build America Award, 2009
- American Segmental Bridge Institute - Bridge of Excellence Award, 2009



- American Public Works Association - Project of the Year, 2009
- Deep Foundations Institute - Special Recognition Award, 2009
- Design-Build Institute of America - National Design-Build Institute of America Award, 2009
- Design-Build Institute of America - Best Overall Award, 2009
- Engineering Society of Western Pennsylvania - Project of the Year, 2009
- FIATECH - Celebration of Engineering and Technology Innovation Award, 2009
- International Bridge Conference - George S. Richardson Medal, 2009
- National Council of Structural Engineers Associations - Excellence in Structural Engineering Award, 2009
- Northwestern University's Infrastructure Technology Institute - David Schultz Award, 2009
- American Society of Civil Engineers - Outstanding Civil Engineering Achievement (OCEA) Award of Merit, 2009
- American Society of Civil Engineers - Outstanding Projects and Leaders (OPAL) Award (Finalist), 2009
- American Council of Engineering Companies (Colorado) - Honor Award, Bridge Hydraulic Analysis, 2009
- American Council of Engineering Companies - Merit Award for Calming the Waters, 2009
- American Road & Transportation Builders Association - Globe Award for Environmental Protection and Mitigation, 2009
- American Road & Transportation Builders Association - Pride Award for Public-Media Relations/Education, 2009
- American Road & Transportation Builders Association - Pride Award for Community Relations, 2008
- Aggregate and Ready Mix Association of Minnesota - Project of the Year, Community Municipal category, 2008
- American Council of Engineering Companies (Minnesota) - Grand Award for Engineering, 2008
- *Roads and Bridges* - Top 10 Bridges, Ranked #1, 2008