

*Concrete Connections* is an annotated list of websites where information is available about concrete bridges. Links and other information are provided at [www.aspirebridge.com](http://www.aspirebridge.com).

## IN THIS ISSUE

### <https://www.asbi-assoc.org/index.cfm/2022-Student-Competition>

The Perspective on page 14 discusses the importance of mentoring and uses the American Segmental Bridge Institute's (ASBI's) student competition as an example of industry outreach. This web page provides more information about the competition, as well as two ASBI videos: "An Introduction to Today's Concrete Segmental Bridge Technology" and "Overview of Segmental Bridge Construction."

### [https://www.concreteconstruction.net/projects/infrastructure/historic-franklin-avenue-bridge-rehabilitation\\_o](https://www.concreteconstruction.net/projects/infrastructure/historic-franklin-avenue-bridge-rehabilitation_o)

As presented in the Focus article on page 6, Kraemer North America rehabilitated the historic Franklin Avenue Bridge over the Mississippi River in Hennepin County, Minn., using precast concrete elements and ultra-high-performance concrete to meet the demands of an accelerated schedule and provide a durable, long-term solution. This web page provides additional information about the project and a video with highlights of the reconstruction.

### <https://www.cbsnews.com/pittsburgh/video/final-beams-for-fern-hollow-bridge-start-arriving-at-construction-site/#x>

The video at this link shows multiple views of the beam delivery for the new Fern Hollow Bridge in Pittsburgh, Pa. As described in the Project article on page 16, the beam delivery required the truck to be driven backward for a mile and attracted attention from neighborhood residents and the media. The new bridge was opened to traffic in December 2023, less than 11 months after the previous bridge collapsed.

### <https://www.transitchicago.com/rpm/rpb>

The Project article on page 32 discusses precast, prestressed concrete I-beams for the Chicago Transit Authority's Red-Purple Modernization

program. This multiphase improvement program includes the Red-Purple Bypass Project. The web page at this link shows "before and after" images that showcase the key role that concrete is playing in the improvements.

### <https://www.hntb.com/projects/sixth-street-viaduct-replacement>

The new Sixth Street Viaduct in Los Angeles, Calif., is featured in the Project article on page 38. Ten concrete tied-arch spans are combined with two prestressed concrete box girder approach spans to carry traffic over the Los Angeles River, two railroad corridors, U.S. Route 101, city streets, and the site of a 12-acre park that will be constructed beneath the viaduct. This is a link to the project website, which features additional information about the project and many photos.

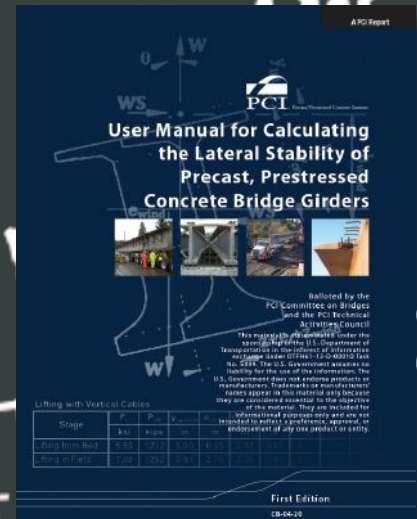
### <https://www.pgh-sea.com/index.php?path=i5-ucp>

The Concrete Bridge Technology article on page 48 describes the Interstate 579 Urban Open Space Cap project in Pittsburgh, Pa. This project includes a bridge structure using prestressed concrete box beams to support a park that features performance and green spaces, integrated local art, and an amphitheater. Follow this link to learn more about this project that reestablishes the connection between the Lower Hill neighborhood and downtown Pittsburgh.

### [https://www.fhwa.dot.gov/bridge/concrete/hif19067\\_Nov2021.pdf](https://www.fhwa.dot.gov/bridge/concrete/hif19067_Nov2021.pdf)

This is a link to the *Lightweight Concrete Bridge Design Primer*, which is the topic of the FHWA article on page 59. In addition to outlining the benefits of lightweight concrete, the primer discusses design considerations, specifications, and example projects.

## The First Edition of



### *User Manual for Calculating the Lateral Stability of Precast, Prestressed Concrete Bridge Girders* FREE PDF (CB-04-20)

This document, *User Manual for Calculating the Lateral Stability of Precast, Prestressed Concrete Bridge Girders*, PCI Publication CB-04-20, provides context and instructions for the use of the 2019 version of the Microsoft Excel workbook to analyze lateral stability of precast, prestressed concrete bridge products. The free distribution of this publication includes a simple method to record contact information for the persons who receive the workbook program so that they can be notified of updates or revisions when necessary. There is no cost for downloading the program.

This product works directly with the PCI document entitled *Recommended Practice for Lateral Stability of Precast, Prestressed Concrete Bridge Girders*, PCI publication CB-02-16, which is referenced in the *AASHTO LRFD Bridge Design Specifications*. To promote broader use of the example template, PCI developed a concatenated Microsoft Excel spreadsheet program where users may customize inputs for specific girder products.

[www.pci.org/cb-04-20](http://www.pci.org/cb-04-20)