

Concrete Connections is an annotated list of websites where information is available about concrete bridges. Links and other information are provided at www.aspirebridge.org.

IN THIS ISSUE

<http://www.aspirebridge.com/magazine/2017Fall/Project-RapidRiseFromTheAshes.pdf>

In 2017, when a massive fire erupted beneath the heavily traveled Interstate 85 through Atlanta, Ga., and several spans along the viaduct collapsed, the Georgia Department of Transportation immediately contacted C.W. Matthews Contracting Co. (CWM) for help. CWM is featured in the Focus article on page 6. This link accesses the Project article in the Fall 2017 issue of *ASPIRE*[®], which gives details of the six-week rebuilding project.

<https://www.nps.gov/gwmp/learn/management/amb-rehabilitation.htm>

The rehabilitation of the Arlington Memorial Bridge in Washington, D.C., is featured in a Concrete Bridge Preservation article on page 34. This link accesses a National Park Service webpage with photos, a time-lapse video, and history of the rehabilitation project.

<https://iowadot.gov/massenabridge>

To replace the Massena Bridge on State Route 92, the Iowa Department of Transportation used a lateral bridge slide, and the installation was completed during a nine-day closure period. This link accesses a website with photos, construction plans, lessons learned, and videos of the accelerated bridge construction project. Iowa is featured in the State article on page 54.

<https://www.youtube.com/watch?v=NA-nhOMEn8s>

This animated video produced by the Iowa Department of Transportation shows the steps of the 2013 Massena Bridge replacement project. Iowa is featured in the State article on page 54.

<https://www.asbi-assoc.org/index.cfm/resources/videos>

This American Segmental Bridge Institute (ASBI) webpage provides links to numerous videos on the construction, grouting, inspection, and maintenance of concrete segmental bridges. Segmental bridges are the focus of the Concrete Bridge Preservation article on page 28.

<https://www.asbi-assoc.org/index.cfm/events/MonthlyWebinars>

This is a link to the ASBI archive of their monthly webinar series on topics such as “Repair and Maintenance of Post-Tensioned Concrete Bridges.” Segmental bridges are the focus of the Concrete Bridge Preservation article on page 28.

<http://www.trb.org/Publications/Blurbs/181972.aspx>

Segmental bridges are the focus of the Concrete Bridge Preservation article on page 28. The recently published National Cooperative Highway Research Program Synthesis 562: *Repair and Maintenance of Post-Tensioned Concrete Bridges* includes a literature review, the results of a survey distributed to 50 state departments of transportation, current practices used by bridge owners to repair and maintain post-tensioned bridges, and lessons learned. The report can be downloaded via this link.

<http://www.aspirebridge.com/magazine/2021Summer/CCC-ThreadingANeedle.pdf>

The Project article on page 24 features a five-unit, 14-span, 1855-ft-long prestressed concrete girder bridge on Interstate 20 near Jackson, Miss. The structure includes a 170-ft span over a railroad with limited access. The contractor developed self-propelled modular transports (SPMTs) with a gantry system to erect the 200,000-lb girders. This link accesses a Creative Concrete Construction article describing SPMTs and the erection process from the Summer 2021 issue of *ASPIRE*.

<https://www.fhwa.dot.gov/bridge/loadrating/pubs/hif21043.pdf>

The FHWA article on page 58 is based on the Federal Highway Administration report *Truck Platooning Impacts on Bridges: Phase I—Structural Safety* (FHWA-HIF-21-043). The report can be downloaded via this link.

<http://www.aspirebridge.com/magazine/2019Summer/FHWA-TruckPlatoonsAndHighwayBridges.pdf>

The FHWA article on page 58 explores the effects of truck platooning on bridges. This link accesses an FHWA article in the Summer 2019 issue of *ASPIRE* that describes the truck-platooning concept.

<https://www.pci-foundation.org>

The Professor’s Perspective article on page 52 describes the precast concrete curriculum at Idaho State University. The studio concept for precast concrete education was developed by the PCI Foundation. This website showcases activities of various studios at universities across the country and gives access to educational aids for all instructors interested in precast concrete.

<https://cshub.mit.edu/buildings/lca>

The Perspective on page 10 discusses how life-cycle assessments can be an important tool in moving toward carbon neutrality for concrete structures. This is a link to the life-cycle assessment webpage on the Massachusetts Institute of Technology Concrete Sustainability Hub website. The page contains links to news, research, and webinars relating to life-cycle assessment.

<http://www.aspirebridge.com/magazine/2020Summer/GBT-UsingEmbeddedCorbels.pdf>

The Sargent Beach Bridge is featured in a Project article on page 18. The bridge used a spliced girder to span 300 ft, and the drop-in girder was temporarily supported by embedded steel corbels. This concept was also used on the Phoenix Sky Harbor Airport’s Sky Train bridge. Details of that project are described in a Concrete Bridge Technology article in the Summer 2020 issue of *ASPIRE*. This is a link to download the article.

<https://www.post-tensioning.org/Portals/13/Files/PDFs/Events/Conventions/TechnicalSessions/2016/042516Reese.pdf>

The Sargent Beach Bridge, which is featured in a Project article on page 18, uses spliced, precast concrete girders to span 300 ft. This is a link to slides from a 2016 PTI Convention presentation on the state-of-the-art of spliced, precast concrete girder bridges.