

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

## IN THIS ISSUE

<https://www.asbi-assoc.org/cfcs/cmsIT/baseComponents/fileManagerProxy.cfc?method=GetFile&fileID=E2F39410-0485-4BC0-84D3AD9157EA9ED1>

The Selmon West Extension in Tampa, Fla., is the focus of the Project article on page 12 and the Concrete Bridge Technology article on page 44. The segmental concrete structure is creative in its style and used a progressive span-by-span erection technique. This link provides access to a presentation on the project given at the American Segmental Bridge Institute's (ASBI's) Fall 2021 Convention. The video presentation includes an animation of the erection of the precast concrete box segments using specialized equipment.

<https://twitter.com/CaltransDist3/status/1403937276044877824>

The Project article on page 22 features the replacement of the superstructure of the California State Route 99 over 21st Avenue Bridge in Sacramento County. The bridge could only be closed for a short period due to heavy commuter and industrial traffic, so the demolition and removal of the superstructure was completed in 18 hours. This is a link to a video of the removal of the last girder. The new bridge was reconstructed with 35 precast, prestressed concrete box girders.

<https://www.slagcement.org/casestudies/id/102/lake-tillery-bridge.aspx#prettyPhoto>

Slag cement was a key component in the rehabilitation of the Lake Tillery Bridge, a historic arch bridge in North Carolina featured in both a Project article (page 18) and a Creative Concrete Construction article (page 53). This is a link to a web page with details of the slag cement mixture and the rehabilitation, as well as additional photos.

<https://www.fhwa.dot.gov/bridge/pubs/hif21031.pdf>

The FHWA article on page 68 discusses the use and standardization of building information modeling in the transportation industry. This is a link to download the publication *Demonstration of Bridge Project Delivery Using BIM* (FHWA-HIF-21-031), the basis of the article.

<https://www.youtube.com/c/TylerLey>

In the Professor's Perspective article on page 60, Dr. Tyler Ley of Oklahoma State University shares his vision for educating the future workforce through YouTube. This is a link to his YouTube channel, which offers numerous videos on concrete materials and design.

<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 "An Introduction to Today's Concrete Segmental Bridge Technology." The Selmon West Extension is a concrete segmental bridge and is featured in both a Project article on page 12 and a Concrete Bridge Technology article on page 44.

<http://www.aspirebridge.com/magazine/2022Winter/ProfessorsPerspective-MakePrecastConcretePartOfTheCoreCurriculum.pdf>

The precast concrete bridge studio program at California State University, Sacramento, is showcased in the Editorial on page 2. A similar program at Idaho State University was the subject of the Professor's Perspective in the Winter 2022 issue of *ASPIRE*®. This is a link to a pdf of that article.

[https://content.aia.org/sites/default/files/2021-01/Preparing-to-Thrive\\_Resilience-Building-Coalition\\_5-year.pdf](https://content.aia.org/sites/default/files/2021-01/Preparing-to-Thrive_Resilience-Building-Coalition_5-year.pdf)

The Perspective on page 11 discusses functional recovery and resilience. This is a link to Preparing to Thrive: Resilience Building Coalition 5-year Progress Report, which includes the industry statement on resilience mentioned in the article.

## OTHER INFORMATION

<https://www.fhwa.dot.gov/publications/ltpbnews/21063.cfm>

This is a link to the newsletter for the Federal Highway Administration's Long-Term Bridge Performance Program. The newsletter program, which contains brief updates on the program's progress and activities, including data collection, releases, and analysis, as well as new products and publications.

<https://store.transportation.org/Item/CollectionDetail?ID=226&Asp>

The American Association of State Highway and Transportation Officials (AASHTO) has released a *Guide Specifications for Bridges Subject to Tsunami Effects*. With these guide specifications, designers now have a means to quantify forces associated with a tsunami event. This is a link to the AASHTO online store, which provides the publication's table of contents and introduction in addition to purchasing information.

<https://www.nap.edu/catalog/25913/proposed-aashto-guidelines-for-performance-based-seismic-bridge-design>

This is a link to National Cooperative Highway Research Program Report 949, *Proposed AASHTO Guidelines for Performance-Based Seismic Bridge Design*. The report presents a methodology for analyzing and determining the seismic capacity requirements of bridge elements in terms of service and damage levels. Ground motion maps and detailed design examples illustrate the application of the proposed guidelines.

[https://www.nap.edu/login.php?record\\_id=26495](https://www.nap.edu/login.php?record_id=26495)

The report for the National Cooperative Highway Research Program Synthesis 571 Load Rating of Bridges and Culverts with Missing or Incomplete As-Built Information is available at this link. The report presents the current state of practice and techniques (such as nondestructive evaluation, load testing, and engineering judgment) used by state departments of transportation for load rating of bridges and culverts with missing or incomplete as-built information.