

CONCRETE CONNECTIONS

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://leavcom.com/2000n/law_112600.htm

This is a link to a news release about the use of 18 inch square prestressed concrete piles on the Conway Bypass, which is mentioned in the article featuring Traylor Bros. on page 6.

<http://www.cityofgroveok.gov/community/page/sailboat-bridge-album>

This is a link to a website showcasing photos of Sailboat Bridge after completion. Sailboat Bridge was constructed by Traylor Bros, the contractor featured in the article on page 6.

https://www.fhwa.dot.gov/goshrp2/Solutions/All/R04/Innovative_Bridge_Designs_for_Rapid_Renewal

This is a link to a second Strategic Highway Research Program (SHRP2) webpage that contains additional links to webinars, videos, and the toolkit mentioned in the Concrete Bridge Technology article on page 24.

<http://shrp2.transportation.org/Pages/Bridge-Designs-for-Rapid-Renewal.aspx>

This is a link to an American Association of State Highway and Transportation Officials (AASHTO) webpage that has detailed information on SHRP2 and links to slides of the one-day training course, standard drawings and specifications, states' accelerated bridge construction (ABC) reports, and other resources for information on ABC. SHRP2 is the subject of the Concrete Bridge Technology article on page 24.

<http://www.mapaprecast.org/index.cfm/precaster-bridge/PCEF-Docs>

This is a link to precast concrete economic fabrication (PCEF) standards and bulb-tee drawings on the Mid-Atlantic Precast Association website. PCEF is mentioned in the article for the featured state, Maryland, on page 22.

<http://www.aspirebridge.com/additionalresources/index.shtml>

This is a link to a page on the *ASPIRE*[®] website that has a crosswalk between the 7th and 8th editions for Section 5 of the *AASHTO LRFD Bridge Design Specifications*. The contents of Section 5.9 in the recently published 8th edition are the subject of the LRFD article on page 48.

https://bookstore.transportation.org/item_details.aspx?id=3731

This is a link to the AASHTO webpage that has a free, downloadable crosswalk between the 7th and 8th editions for Section 5 of the *AASHTO LRFD Bridge Design Specifications*. The crosswalk is labeled as Appendix E5. The contents of Section 5.9 in the recently published 8th edition are the subject of the LRFD article on page 48.

https://www.pci.org/PCI/Education/Student_Education/Student_Compitions/PCI/Education/Student_Compitions.aspx?hkey=6de3c1e2-4fb8-4d16-a4af-bf2032614c2d

This is a link to the rules for this year's PCI Big Beam Competition as well as videos and reports from previous winners. The contest is mentioned in the Professor's Perspective article on page 36.

http://g92018.eos-intl.net/eLibSQL14_G92018_Documents/11-34.pdf

This is a direct link to the 2015 Georgia Department of Transportation research report "Corrosion-Free Precast Prestressed Concrete Piles Made with Stainless Steel Reinforcement: Construction, Test and Evaluation." Aspects of prestressed concrete design and pile production using stainless steel strand are discussed in articles on pages 20 and 21.

<http://www.concretebridgeviews.com/i74/Article3.php>

This is a direct link to "Stainless Steel Prestressing Strand for Durable Bridge Piles," an article in *Concrete Bridge Views Newsletter* that summarizes research on properties of stainless steel strand and the testing of prestressed concrete piles. Aspects of prestressed concrete design and pile production using stainless steel strand are discussed in articles on pages 20 and 30.

https://www.pci.org/PCI_Docs/Publications/PCI%20Journal/2017/May-June/Transfer%20and%20development%20length%20of%20high-strength%20duplex%20stainless%20steel%20strand.pdf

This is a link to "Transfer and Development Length of High-Strength Duplex Stainless Steel Strand in Prestressed Concrete Piles," an article that appeared in the May–June 2017 issue of *PCI Journal*. The designing of structures using stainless steel strand is the topic of an article on page 30.

<http://www.state.nj.us/transportation/commuter/roads/rte72manahawkinbaybridges/photos18.shtm>

This is a link to the New Jersey Department of Transportation's website with photos of the construction and rehabilitation of the twin structures of the Manahawkin Bay Bridge. The bridge is the focus of a Project article on page 16.

http://onlinepubs.trb.org/onlinepubs/nchrp/docs/nchrp12-69_fr_guidelines.pdf

This is a link to the *Guidelines for Design and Construction of Decked Precast, Prestressed Concrete Girder Bridges*, which is the final report for NCHRP Project 12-69 discussed in the article on page 26.

OTHER INFORMATION

<http://elearning.pci.org>

This is a link to the PCI eLearning Center website, which provides access to online courses that satisfy the continuing education requirements of engineers in all 50 states. The topics are varied and include not only design and manufacture of precast concrete structures and components but also high-performance materials, resiliency, and case studies.

<https://www.fhwa.dot.gov/bridge/concrete/hif15016.pdf>

This is a direct link to the FHWA publication *Post-Tensioned Box Girder Design Manual*.