

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

<https://www.erikssonsoftware.com/sync>

The Focus article on page 8 is about Eriksson Technologies and discusses the use of Eriksson Software's Sync technology for the Teterboro Airport air traffic control tower project. This is a link to an overview of Eriksson Sync—an innovative technology that provides a critical two-way interface between engineering design software and building information modeling models.

<https://www.gcrtoledo.com/build>

https://www.dot.state.oh.us/OTEC/Documents/2024OT ECPresentations/48_QuagliataWagner.pdf

The first link leads to a website that provides information about the Glass City Riverwalk project to revitalize a section of riverfront in Toledo, Ohio. The second link leads to a presentation about the project from the 2024 Ohio Transportation Engineering Conference. The Project article on page 16 is about the new Bend Bridge, an integral part of the project that provides pedestrian access from the Glass City Riverwalk to the Martin Luther King Jr. Bridge, linking both sides of the Maumee River.

<https://www.southernblvdbridge.com>

The Florida Department of Transportation website for the Southern Boulevard Bridge can be found at this link. The Project article on page 20 discusses the design and construction of the continuous, cast-in-place, longitudinally and transversely post-tensioned slabs that form the approach spans for this bridge replacement project connecting West Palm Beach, Fla., across Lake Worth Lagoon and the Atlantic Intracoastal Waterway, to the barrier island town of Palm Beach.

<https://www.youtube.com/watch?v=1k6JdbGju3U>

The project to replace the Interstate 5 bridge over SW 26th Avenue in Portland, Ore., used an innovative structure type and construction method to minimize disruptions to the traveling public and enhance safety. The Project article on page 26 describes how the value-engineering concept for the bridge incorporated a new, single-span, buried structure under the in-service, existing bridge, without shifting the alignment and without affecting interstate traffic. This is a link to a time-lapse video of the weekend closure that brought the replacement structure in service.

https://ctr.utexas.edu/wp-content/uploads/pubs/0_5253_1.pdf

<https://library.ctr.utexas.edu/ctr-publications/0-6416-1.pdf>

The Concrete Bridge Technology article on page 35 discusses shear cracking and presents tools for informed decision-making regarding the capacity of concrete bent caps. These two links lead to reports about the underlying research. The reports also include the tools described in the article for estimating component capacity based on crack width and reinforcement ratios.

<https://www.epoxyinterestgroup.org/quality-certification>

This is a link to the Epoxy Interest Group's (EIG's) webpage about the Concrete Reinforcing Steel Institute's Epoxy-Coating Plant Certification and the Certification for Fabrication of Epoxy-Coated Reinforcement. The NCBC

Member Spotlight article on page 44 highlights these programs in relation to EIG's commitment to improve the quality and performance of epoxy-coated reinforcement.


https://www.fhwa.dot.gov/resourcecenter/teams/structures-geotechnical-hydraulics/Structural_Design_UHPC_Workshop_Manual.pdf

A concrete bridge technology guidance document on the selective uses of ultra-high-performance concrete (UHPC) to enhance durability and extend the service lives of concrete bridges can be found at the link above. The Federal Highway Administration's *Structural Design with UHPC Workshop Manual* is available at this link.


<https://doi.org/10.17226/27029>

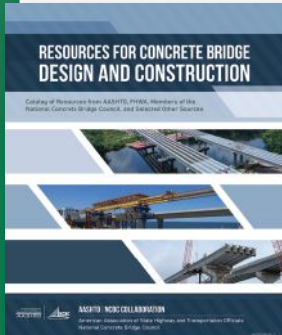
<https://onlinepubs.trb.org/onlinepubs/webinars/230920.pdf>

The Concrete Bridge Technology article on page 32 summarizes the key findings and recommendations from National Cooperative Highway Research Program (NCHRP) Research Report 1026, *Guidelines for Adjacent Precast Concrete Box Beam Bridge Systems*, which can be downloaded using the first link. The report discusses shear key solutions for adjacent prestressed concrete box-beam bridges that can enhance the durability and service life of these structures. The slides from a webinar on the same topic are available at the second link.



Announcement





Resources for Concrete Bridge Design and Construction

The highly anticipated *Resources for Concrete Bridge Design and Construction* is available for free download!

We've collaborated to create a comprehensive resource hub for all your concrete bridge needs. Developed from the AASHTO/NCBC Collaboration Agreement, this document compiles essential resources from AASHTO, FHWA, and NCBC members. This vital catalog will aid concrete bridge practitioners in their design and construction endeavors.

Download today for free at the AASHTO store at <https://store.transportation.org/Item/PublicationDetail?ID=5250>