



TOP 10 BRIDGES

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# Top-down approach

Construction methods satisfy environmental sensitivities

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**PROJECT:**  
I-75 Caloosahatchee River Bridge Widening

**LOCATION:** Ft. Myers, Fla.

**OWNER:**  
Florida Department of Transportation

**DESIGNER:** Stantec

**CONTRACTOR:**  
de Moya/Leware joint venture

**COST:** \$72 million

**LENGTH:** 3,904 ft

**COMPLETION DATE:** Nov. 5, 2015

The I-75 Caloosahatchee River Bridge Widening project is the last piece of a 10-year puzzle for the Florida Department of Transportation (FDOT). Completed and opened to traffic in the week of November 2015, the bridge is one of eight bridges improved along I-75 in Collier County, Fla.

The \$72 million bridge-widening project spanning over the Caloosahatchee River is part of a larger road project, which is to reconstruct and widen I-75 from the existing four-lane structure to eight lanes and adding an auxiliary lane in each direction.

The Caloosahatchee River Bridge is the main bridge, opposite to other ones which are pre-located bridges which aren't as complicated as the other bridges. FDOT's Vik Bapna told *ROADS & BRIDGES*.

The bridge is a simple span bridge on driven pile foundation and column with Type II, III and IV AASHTO girders on the approach of the span and concrete reinforced steel plate girders in the main channel span.

What made the project more complicated than the previous reconstruction of the bridge along I-75 is the environmental sensitivity of the project.

The Caloosahatchee River is home to the second-largest population of manatees in the state of Florida. FDOT's reconstruction plan required extensive coordination with eight different permitting

agencies that had to be involved in the design, permitting and construction phases of the project.

FDOT, along with numerous government agencies including the Florida Fish and Wildlife Commission, U.S. Army Corps of Engineers, U.S. Coast Guard, South Florida Water Management District and the Florida Department of Environmental Protection, identified 25 protected animals and 17 protected plant species potentially located within the bridge project.

In addition, the Caloosahatchee Wildlife Refuge is located directly beneath the I-75 Caloosahatchee River Bridge, making wildlife protection a top priority. Permitting conditions required a manatee to be present while work was taking place. If a manatee was spotted, construction work halted until the endangered species left the area.

Despite environmental concerns surrounding the project, FDOT created a stop-do construction protocol to complete the bridge expansion. The process involved building prefabricated sections of the bridge near the Caloosahatchee River banks using cranes on temporary beams controlled by GPS.

Constructing the bridge using temporary mobile construction and the use of cradles minimized traffic disruption and environmental impact to the endangered land species. **R&B**