

Tulane University engineers celebrate Causeway connections

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In the 19th century, after the founding of Mandeville, La., people traveled by steamboat from New Orleans to enjoy the tranquility of the North Shore. It wasn't until 1956 that the Lake Pontchartrain Causeway, the world's longest continuous bridge over water at nearly 24 miles, opened to traffic.



Tulanians (from left) Carlton Dufrechou, Miles Bingham and Robert Bruce were among those who played roles in the recognition of the Lake Pontchartrain Causeway as a National Civil Engineering Landmark this year. (Photo by Paula Burch-Celentano)

Earlier this year the American Society of Civil Engineers named the span a National Civil Engineering Landmark, joining the likes of Grand Central Station, the U.S. Capitol and the Golden Gate Bridge as engineering marvels.

That alone is cause for celebration. But Tulane University has its own reason to be proud. Much of the span's construction can be traced to Tulane's research of prestressed concrete, a technique that enhances the structural behavior of concrete beams, and if designed properly, prevents cracking.

“Tulane was the first university in the nation to undertake sponsored research in the

field of prestressed concrete,” says Tulane emeritus professor Robert Bruce.

Tulane's research was so groundbreaking that Maxwell Mayhew Upson, head of Raymond Concrete Pile Co., one of the firms involved in the bridge construction, recruited Tulane graduates and professors for the project.

“In hiring, Mr. Upson favored three schools ? Cornell, M.I.T. and Tulane,” Bruce says.

Bruce, then a Tulane engineering student, helped test pre-stressed concrete and went on to work for Raymond. The late Walter Blessey, then an associate professor in civil engineering at Tulane, was a consultant on the project. Henry LeMieux, a civil engineer who graduated from Tulane in 1946, was the company's district manager.

Even today, Tulane University connections to the bridge remain strong. Carlton Dufrechou, a Tulane engineering graduate, heads the agency that oversees the Causeway. And Tulane engineering graduate Miles Bingham wrote the package nominating the bridge for historic landmark status.

A dedication ceremony will be held on Oct. 18, with plaques noting its landmark designation placed at each end of the Causeway.