



The Busan-Geoje crossing in South Korea features two cable-stayed bridges spanning 4.5 km of the Pacific Ocean.

Mastering water

Bypassing, harnessing or resisting the world's rivers and seas represents a unique challenge.

Steve Skinner reports on the needs and solutions behind some of the world's largest and most spectacular construction projects.

(...)

In Florida, US, the Department of Transport has now finalised designs for the replacement of the Max Brewer bridge over the Indian River. Construction started in May and the 977 m long fixed span replacement is scheduled for completion in the spring of 2011.

The US\$ 45 million design-build contract was awarded to Lane Construction and DRMP who in turn selected Pile Splices for the foundations and piling work. The fixed span bridge requires 64 large square concrete piles up to 55 m in length, each measuring 0.9 m x 0.9 m in cross-section, to support the main span.

The company is using an APE D-125 diesel hammer to drive the long spliced concrete piles following the results of test piles driven earlier this year by GRL Engineers. GRL performed dynamic load testing across the location and developed the driving criteria for the production piles.

The company is also conducting dynamic load tests on every production pile to verify the load bearing capacity and confirm the structural integrity of the driven pile and splice.

(...)



GRL Engineers is carrying out dynamic load testing on the piles for the replacement Max Brewer Bridge crossing the Indian River in Florida, US.