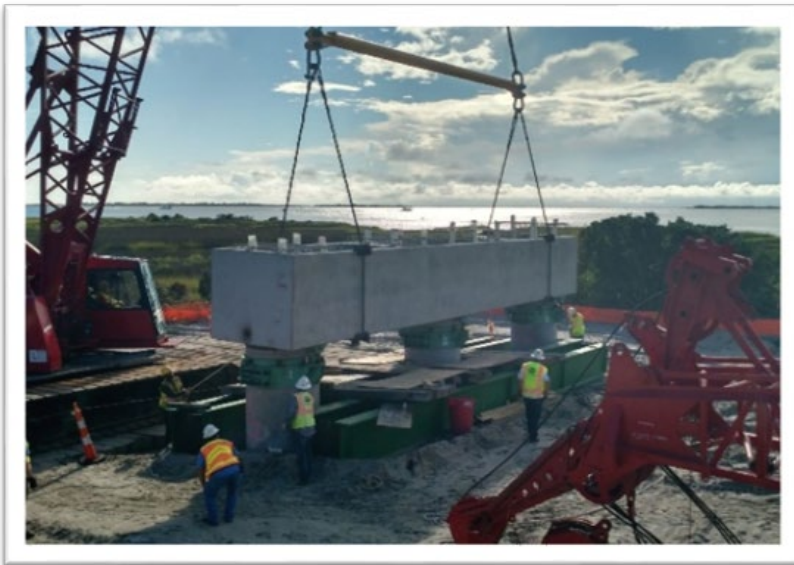




Bonner Bridge Replacement in the Outer Banks of North Carolina

Since the Bonner Bridge was constructed in 1965, numerous hurricanes have struck the Atlantic coast wreaking havoc on the Outer Banks of North Carolina. As a result, GRL Engineers were called in to help aid in the replacement of this nearly three-mile long bridge across the Oregon Inlet from Bodie Island to Hatteras Island. GRL provided both static and dynamic pile testing for the preconstruction load test program, as well dynamic testing for the production piles. Numerous challenges were encountered during both the preconstruction test pile program and the production pile driving. The most prominent challenge was to achieve pile capacity for the design scour elevations which extend as deep as EL. -85. GRL's results have been used extensively for pile capacity assessment and acceptance during the production pile testing in these difficult soil conditions.



Project Details

Client: PCL Civil Constructors

Location: Outer Banks, North Carolina

GRL Office: North Carolina

GRL Services

- Static Load Testing (SLT)
- One compression test (36" PSC Fully instrumented w/ strains)
- One lateral test (36" PSC)
- PDA Testing (2 ea. 36" PSC)
- PDA Testing (1 ea. 54" Cyl Pile)
- PDA Testing of Production Piles
- PDA Testing of Temporary Trestle Piles

To learn more about GRL Engineers, visit www.grlengineers.com or email us at info@grlengineers.com.