



Owner:

South Carolina Department of Transportation

Collaborator:

Freyssinet LLC

Bridge description:

The Ravenel Bridge is a cable-stayed bridge with a 1,546-foot long main span supported by 128 cables. Located over the Cooper River between Charleston and Mount Pleasant, South Carolina, it is the longest cable stayed bridge in North America. Since the bridge's completion in 2005, its 575-foot tall diamond shaped towers have become a signature of South Carolina.

Scope of work:

- Performed hands-on inspection of the high-density polyethylene (HDPE) stay cable ducts and steel formwork tubes in the pylons.
- Deliverables included a letter of report, stay cable inspection forms, and photographs of survey conditions.

Problem solved:

Designed and fabricated a rolling anchor system to access the entire length of the stay cables, the longest of which are 850 feet long. The cable angles range from 15° to 65° from vertical.

Photos by Kent Diebolt

