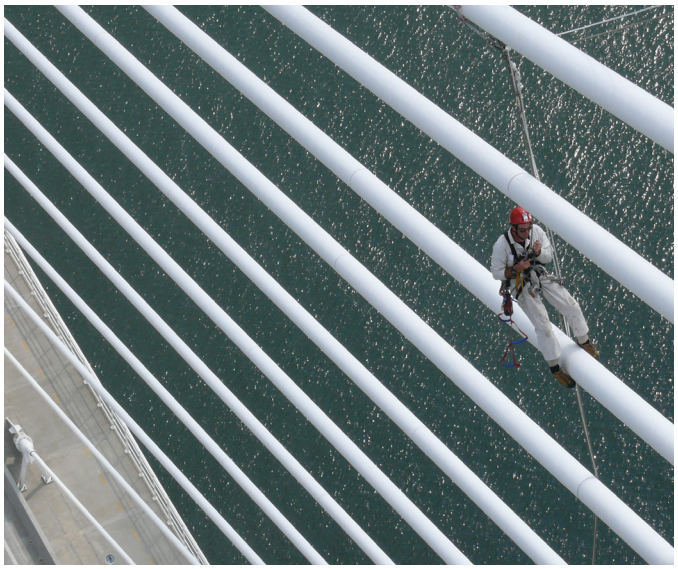
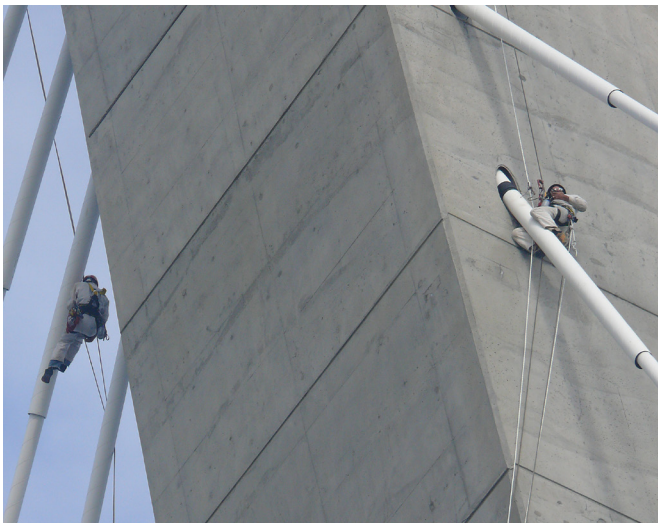
PROJECT PROFILE

Arthur Ravenel Jr. Bridge
Charleston, SC

VERTICAL access





Project scope

Vertical Access has performed several regularly-scheduled warranty inspections of the high-density polyethylene (HDPE) stay cable ducts and steel formwork tubes in the pylons of the Arthur Ravenel Jr. Bridge. Deliverables for each inspection include a letter of report, stay cable inspection forms, and photographs of survey conditions.

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.

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.

Bridge owner

South Carolina Department of Transportation

In collaboration with

- Freyssinet LLC
- Infrastructure Corporation of America

Photos by Vertical Access