The 2nd Bridge over the Panama Canal is located 20 km north of the Pacific entry to the Panama Canal. For the foundation of the pylon on the western side, 32 bored piles were sunk to a depth of up to 35 m. 22 bored piles with a drilling depth of 28 m support two west-side approach piers.

The bridge crosses the Panama Canal at the Gaillard Cut, which is internationally recognized for its unique geology. Various intersecting formations range from basalt to clay shale, due to terrestrial deposits of volcanic debris resulting from intense, explosive activity. The complex geological conditions demanded careful selection of the equipment to create a powerful but flexible setup.

All piles were excavated using a spherical grab specially designed and patented by Bilfinger Spezialtiefbau GmbH. The grab operates inside a temporary steel casing installed by a casing rotator Leffer RDM 2000. Three test piles were installed and tested using Osterberg Cell technology up to a test load of 5,000 kN. The load tests provided information and confirmation for the pile design.

Concrete integrity of all piles was assured by integrity measurements using ultrasonic signals.

**Quantities:**
- 54 Nos. Bored Piles (Diameter 2.00 m; Depth up to 35 m)
- 3 Nos. Osterberg Cell Testing (50 MN)