



**VORTEX MARINE CONSTRUCTION, INC.**  
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## Repairs to North Cargo Piers & Associated Bulkheads



**OWNER: Canaveral Port Authority**

**LOCATION: Port Canaveral, FL**

**CONTRACT VALUE: \$6,443,000**

**VORTEX ROLE: Prime Contractor**

**PROJECT SCHEDULE: August 2004 to November 2006.**

### Project Description

Vortex completed this large scale marine facility rehabilitation project, which included concrete replacement and galvanic protection of precast deck units, pile caps, and prestressed piles, for the Canaveral Port Authority at its North Cargo Piers 1-4.

The scope of work for the project included concrete restoration and underwater encapsulation of piles utilizing Galvanode jackets, a passive cathodic protection system for piles, on 4,700 linear feet of non-structural pile repair and 316 linear feet of structural pile repair.

Vortex also reconstructed approximately 6,000 linear feet of pile cap, installing two continuous rows of cast-in-place Galvanode anodes. 3,515 square feet of spall repairs were completed on piles, caps and underdeck, and XP anodes were installed at the individual repair locations to provide cathodic protection. Additionally, 1,995 linear feet of underwater and surface cracks were repaired through epoxy injection.

Finally, 57,585 square feet of the underside of precast deck units were repaired and cathodically protected using Galvanode activated zinc arc spray.

