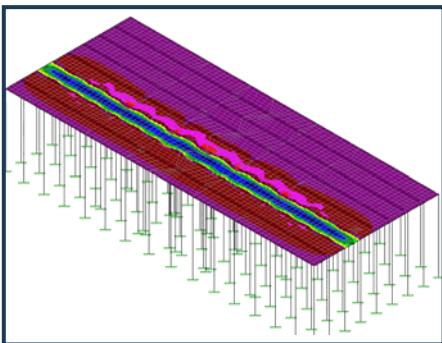
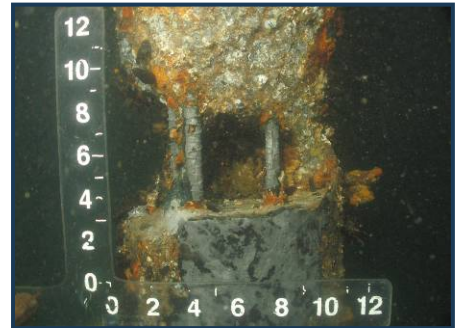


Pier 2 Weight Handling Operations Study

United States Navy



Project Description

Pier 2 at Naval Station Newport, located in Newport Rhode Island was constructed in 1958 and is used by the US Coast Guard and Naval Undersea Warfare Center. Previous inspections of Pier 2 by contractors and government dive inspection teams noted significant deterioration to support piles resulting in load restrictions.

This project provided a detailed underwater inspection of support piles, evaluation of weight handling operations, structural condition assessment, and recommendations.

The underwater inspection was completed by a team of in-house engineer divers who identified significant deterioration to the support piles just below low water during Level III detailed inspections using nondestructive ultrasonic thickness measurements. Meetings were held with users of the Pier to provide an understanding of typical and planned operations. The data collected was then analyzed to determine critical load scenarios by the same team of engineer divers who completed the inspection. To further evaluate the pier a finite element model was completed that allowed better understanding of load distribution.

A plan for safe operations was developed to allow continued use by the facilities tenants.

Project Type

Inspection
Studies/Analysis

Location

Newport, RI

Date of Service

2009



Phone: 603-766-1870
Email: nelwood@appledoremarine.com
www.appledoremarine.com

Services Provided

- Inspection
- Structural Analysis
- Finite Element Modeling
- Concept Development