# Marine Research Pier Replacement

# University of New Hampshire and National Oceanic and Atmospheric Administration







# Project Type

Design

Inspection

Studies/Analysis

Planning Study

Location

New Castle NH

### **Estimated Construction Cost**

\$6,288,999 USD

Date of Service

2001 - 2008

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## **Project Description**

The University of New Hampshire Marine Research Pier is a multi-use facility designed for use by the University of New Hampshire and NOAA.

The project involved evaluating the condition of the existing structure by conducting above and underwater condition assessments followed by structural analysis. Ultimately it was determined that the pier would require replacement to meet the users operational needs. The design considered site specific impacts including difficult shore side access, shallow bedrock, vessel generated waves, and high currents. During design the owner and users where routinely involved to ensure all project requirements were met.

Construction required demolition of the existing structure followed by installation of a new 430 foot long steel and concrete structure with attached wave screen and 400 linear feet of concrete floating dock. Precast concrete members were utilized to cut down onsite construction and increase quality control, saving the owner time and money. During construction project engineers were on site providing assistance to the owner to ensuring project design drawings and specifications were followed.

The Marine Research Pier provides an essential waterfront link to the University of New Hampshire's marine research program.

### Services Provided

- Inspection
- Structural Analysis
- Permitting
- Design
- Bid Document Preparation
- Wave Study
- Finite Element Modeling
- Cost Estimate
- Construction Administration