

# Water Resource Engineering



## PIER and BOARDWALK PROJECT MBNA New England Rockland Operation Center Rockland, ME

Coffin Engineering and Kleinschmidt were the site work team for the project and were responsible for site work and the marine structures for the new office development on the shore of Rockland Harbor. Coffin provided surveying, site and civil design. Kleinschmidt designed the seawall and boardwalk, rehabilitation of an existing granite breakwater and a new pier and slips for the new site facility. The project was completed in 2001, and provides a public boardwalk connecting the City of Rockland adjacent parks, and protected docking for vessels of upwards of 100 feet.

The project included application for changes in flood zone mapping and site law permits. Kleinschmidt completed a coastal flood plain analysis in support of a Letter of Map Revision (LOMR) for MBNA's redevelopment of coastal shoreline. A site-specific wave run-up analysis was conducted to define the flood and wave height elevation in the project area, in accordance with the methodology provided by the Federal Emergency Management Agency (FEMA) and the Army Corps of Engineers Shore Protection Manual to assess the impact of the proposed sea wall design and configuration. Three transects were developed along the proposed waterfront development site, one for each type of land/sea interface. Results supported a change in the FEMA zone designation, which was approved by FEMA. Construction of a seawall reduced the flood zone designation from its rating in the community Flood Insurance Rate Map (FIRM), and ultimately allowed continuance of the project.



**Kleinschmidt**

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