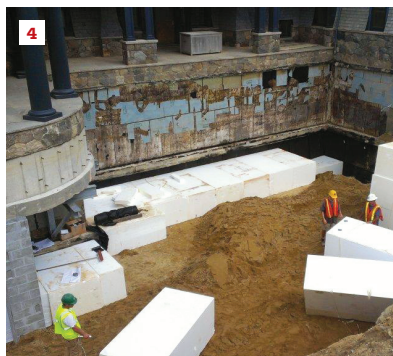


BY JON VARA

1. Much of the 14-acre site was excavated to create staging areas and working room around four structures.

2. The main house was lifted onto dollies using hundreds of 20-ton bottle jacks while shoring up the slab and footing with thousands of 6x6 oak cribbing timbers. Once free of the ground, the structure was slowly rolled northward on a temporary roadway hardened with 8x12-foot plates of ½-inch steel.



3. At its new site, the main house was positioned over a reinforced slab. Block walls were built up around the steel lifting beams. The gap between the new block sub-basement and the original footing was filled with non-shrinking grout.

4. To reduce lateral soil pressure on the block sub-basement, 4x4x8-foot blocks of EPS were fitted around the perimeter before being fixed in position by backfilled soil.

Time & Tide

When beach erosion threatened to tumble a 9-year-old luxury home into the ocean south of Chappaquiddick Island last spring, the property owner called in a team of experts—Buffalo-based International Chimney Corp. (ICC) and Expert House Movers, of Virginia Beach—that had previously joined forces to move other massive structures, including several historic lighthouses.

ICC project manager Tyler Finkle notes that the job involved moving four structures: the main house, a two-story garage, a guest house, and a house on an abutting parcel that had to be moved to make space for the first three. Because the basement of the main house was finished—amenities included a movie theater and a bowling alley—the decision was made to move foundation and house together. Doing so involved excavating much of the 14-acre site and trundling the structure along a prepared 275-foot move route on the flat bottom of the hole.

Given the island setting, there were also some daunting logistical challenges. “The changing tides, ferry capacity, and ferry schedule meant we could only bring in concrete 3 yards at a time,” Finkle says. To work around that bottleneck, most masonry work was designed to use concrete block produced on nearby Martha’s Vineyard, which could be ferried over in batches and stockpiled to cure on site.

Time was tight, too. By the time the project got under way, the guest house was less than 35 feet from the rapidly crumbling edge of the bluff. But in the end, all of the at-risk structures were moved to safety in time. As of April 2014, the ocean had reached a point within about 15 feet of the old main-house driveway—well inland of the original site of the guest house.

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Photos: 1, Mike Creafo, Classic Aviators; 2-4, Emily Hunsaker