Stopping ocean erosion dead in its tracks

Following years of wind and water erosion courtesy of the Atlantic Ocean, the owners of a high rise condominium decided to halt the loss of soil from the 200-foot slope adjacent to their building.

The slope that overlooks the Sandy Hook Bay in Monmouth County, NJ, is on the highest coastal elevation point along the East Coast. One hundredfifty feet wide on a 1:1 gradient, the slope was protected by a management program that involved dressing the slope from the top, compacting fill areas, installing slope boards and Enkamat erosion control matting, and seeding and planting its entire length.



Enkamat pegged into Jersey Shore slows the Atlantic's erosion of the 200-ft. slope.

Preparation

The slope was so steep that workers had to be "tied off" with safety lines while installing the slope boards that were used to prevent surface shear. After rocks and exposed roots were removed, topsoil was added, raked and compacted with rollers attached to cables that were raised and lowered by draglines.

Next, the crew installed 18,900 square feet of Enkamat 7020 matting, a three-dimensional nylon monofilament structure that leaves 90 percent of its volume open for soil, gravel or other material. The matting was anchored using 1 x 3 x 24-inch rough-cut oak stakes placed on 3-foot centers. Stakes were placed every two feet on the Enkamat seams.

After installing the matting, which took 20 manhours and about 5,000 stakes, the crew planted a grass mixture and multiflora roses on the threefoot centers. Soon the entire slope was covered with vegetation and Mother Nature's handiwork effectively stopped.

