

## BEACHFILL NOURISHMENT PROJECT – NOVEMBER 29, 2016

The pumping of sand started the evening of November 24, 2016 and will operate 24/7 until completion January 18, 2017. The scope of the project is to replenish sand on Rehoboth Beach and Dewey Beach caused by storm damage, construct automotive and pedestrian dune crossings, install sand fence, plant dune grass and install two storm water outfall extensions, one at Virginia Avenue and one at Maryland Avenue. During the past eight years, wave action has caused damage to the outfalls and the City has been relying on temporary fixes. The new outfalls will have a more robust design to withstand storm damage with steel pipe added for strength and an enhanced support structure around the pipe. Although coastal storms – one in October 2015 and another in January 2016 – did significant damage to Delaware beaches, Rehoboth Beach and Dewey Beach were in line for routine, three-year maintenance work.

The project sponsor is the State of Delaware and the Department of Natural Resources and Environmental Control (DNREC). The U.S. Army Corps of Engineers is the design and construction agent, and the contractor is Great Lakes Dredge & Dock Company. The total cost of the project is \$11.2 million. The Corps will pay 65% of that cost, and DNREC will pay the remaining 35%. The City budgeted sufficient funds and will pay \$946,500 for the outfall repairs.

The base contract called for 424,000 cubic yards of sand to be pumped. Additional options accepted will increase this base amount of 653,000 cubic yards pumped with 384,000 for Rehoboth Beach and 269,000 for Dewey Beach. For the two outfall extensions the time slated for completion is June 15, 2017. The staging area for this work is on Deauville Beach, and pipe has already landed at Baltimore Avenue and Pennsylvania Avenue. The Corps will use a new borrow site located off the Delaware Seashore State Park where grain size of the sand matches the beaches of Rehoboth Beach and Dewey Beach. This choice is not only for aesthetics, but for stability, as matching grains are less prone to erosion. Dredges are the source where giant vacuums pull up sand and water. The intake travels through grating that filters out debris. The sand and water travel through an underwater pipeline to the beach. The material gushes out the end of the pipeline into a “basket” that serves as a second filter (with a finer screen) to eliminate any sort of debris. Any debris is hauled to dumpsters on the beach. Conventional earth-moving equipment then moves the sand to the optimal shape and slope of the beach.