U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Factsheet

Overview

The U.S. Army Corps of Engineers' (USACE) Philadelphia District received construction funding to move forward to repair the Bethany/South Bethany and Fenwick Island Coastal Storm Damage Reduction projects in Delaware. USACE awarded a contract to the Great Lakes Dredge & Dock Company of Oak Brook, IL. Great Lakes has completed beachfill contracts in Delaware in the past.

Dredging & Construction Process

Work involves dredging sand from approved offshore borrow areas. The sand is pumped through a series of pipes onto the beaches. The sand is then graded into a dune and berm template designed to reduce potential storm damages to infrastructure, businesses and homes.

Pipe and other construction equipment will be mobilized to staging areas prior to dredging and beachfill operations. The hopper dredges *Dodge Island and Padre Island*, owned and operated by Great Lakes, will be used to complete work. The dredges will work in tandem from a pipe landing (typically in the middle of a community and then first work north or south and then flip and work in the other direction). During construction, communities can expect construction crews to close no more than 1000 feet of beach as work progresses (closed sections are "rolling" and advance as the beachfill progresses).

Work also involves repairing and/or constructing dune crossovers/access points and planting dune grass. Dune crossover work takes place within 14 days of beachfill work completing in a given area. Dune grass will be planted in late 2018 after the first frost consistent with best practices.

Scheduling Information

Community	Estimated Start Date	Estimated Completion Date
Bethany	Mid May	Mid June
South Bethany	Mid June	Early July
Fenwick Island	Early July	Mid/Late July

Note: The schedule is an estimate and is subject to change based on weather; dredging productivity and mechanical issues associated with dredging equipment.

Background

The Bethany/South Bethany project was first constructed in 2008. The design template includes a 150 foot berm backed by a dune at elevation 16 feet (North American Vertical Datum). The current contract involves pumping 659,000 cubic yards of sand onto Bethany and 500,000 cubic yards of sand onto South Bethany.

The Fenwick Island project was first constructed in 2005. The design template includes a 200 foot berm backed by a dune at elevation 17.7 feet (North American Vertical Datum). The current contract involves pumping 278,000 cubic yards of sand onto Fenwick Island.

Cost

The total contract cost is $19,284,320.

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