

Miami-Dade Truck Haul Nourishment, Florida

coastal engineering



Coastal Systems provided engineering services for the Miami-Dade County Department of Environmental Resource Management (DERM) to design truck haul beach nourishment projects within the County. Beach profile survey data was obtained, and fill templates designed for the following areas in Miami Beach:

- 27th Street - 800 linear feet (lf) with 30,000 cubic yards (cy)
- 44th Street - 1,700 lf with 50,000 cy
- 55th Street - 2,000 lf with 30,000 cy

The projects were constructed in 2007. The Truck Haul projects provide the flexibility for the County to manage six “hot-spot” erosion areas in between the larger federal shore protection beach nourishment projects.

Coastal Systems also assisted DERM in the redesign of the 27th Street area to be modified from a truck haul project to a larger sand backpassing project. The backpassing project consisted of pumping sand approximately 8,000 feet updrift with a small hydraulic dredge from the accretional south beach area of Miami Beach north to the 27th Street erosional area. In 2007, approximately 70,000 cy of sand were backpassed to maintain sand within Miami Beach.

Additional beach management projects were requested by DERM, and Coastal Systems was retained in 2008 to design the following truck haul beach nourishment projects in Miami-Dade County:

- 67th Street - 1,400 lf of beach with 121,000 cy
- Village of Bal Harbour - 2,200 lf with 69,100 cy
- Sunny Isles - 4,900 lf with 114,500 cy

Coastal Systems also assisted with the environmental permitting through the U.S. Army Corps of Engineers and the Florida Department of Environmental Protection. The 67th Street and Bal Harbour projects were constructed in 2009 as part of the federal stimulus funding package.



Truck Haul Sand Placement



Sand Backpassing

Client: Miami-Dade County DERM

Location: Miami-Dade County, Florida

Date of Completion: TBD

Construction Cost: \$4M

