

# VENICE BEACH SHORE PROTECTION

Client: City of Venice



In early 1994, the City and the U.S. Army Corps of Engineers (USACE) were staged to proceed with construction of a Shore Protection Project entailing nourishment of 3.2 miles of beach within the City of Venice with 2.1 million cubic yards of fill from the Manasota Key borrow areas and Siesta Key borrow area. During the final review of the project, the Florida Department of Environmental Protection (DEP) determined that the sand within the Siesta Key borrow area was too fine and the Siesta Key borrow area was rejected; the project was split into two phases. Phase I construction proceeded with the Manasota Key borrow area. Phase II construction was delayed until identification of a suitable borrow area.

Coastal Tech was retained by the City to conduct reconnaissance and plans & specification level offshore geotechnical investigations to locate a borrow area sufficient to complete the project. Coastal Tech identified “target areas” and subsequently provided: reconnaissance level jet probes to identify sediment quality and thickness; vibracores and compatibility analysis of potential borrow area sediments; bathymetric, magnetometer, side scan surveys and archeological resources surveys in the proposed borrow area. The geotechnical investigations located a suitable Phase II borrow source with 1.9 million cubic yards of sand within 4 months of authorization. Coastal Tech conducted both (a) “reconnaissance level” and (b) “plans & specs level” geotechnical investigations.

In 2000-2003, Coastal Tech worked with the City to provide Stormwater Outfall consultation, a *Monitoring Report* based on USACE monitoring surveys, a *Feasibility Study Report* based on 2001 and 2003 hydrographic monitoring survey information, and a Joint Coastal Permit for obtaining regulatory approval and easements for a 2005 maintenance project. The project received the 2008 American Shore & Beach Preservation Association (ASBPA) Best Restored Beaches award.

In 2008, Coastal Tech also completed design, permitting and construction phase services for an Artificial Mitigation Reef for the federal beach project.

Coastal Tech serves as the Local Sponsor's representative (City of Venice) and Engineer of Record for permitting, biological monitoring and the required annual performance reports for the 2005 USACE Shore Protection Project.

## Key Elements

- ☉ Sand Search
- ☉ Inlet Management Plan
- ☉ Permitting & Coordination
- ☉ Pre- Post-Construction Survey
- ☉ Fill placement
- ☉ Mitigation Reef
- ☉ Environmental Monitoring

**Date:** 1994-Present

**Cost:** \$20,000,000

## Contact:

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**City of Venice**

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