

BONITA BEACH NOURISHMENT DESIGN & PERMITTING

Client: Lee County, FL



Lee County successfully constructed initial beach restoration projects on both Bonita Beach and, in partnership with the State Park Service, on Lovers Key State Park in the 1990s. The first maintenance renourishment of Bonita Beach took place in 2004 using approximately 115,000 cubic yards of fill; shortly after, maintenance fill was also placed along critically eroded shoreline sections on Lovers Key.

Coastal Tech was selected by Lee County to provide the full range of professional services necessary to construct the second maintenance of both Project segments. The County desired to maintain both Project fill segments generally as previously designed and constructed. However, our work began with a full review of previous FDEP-required monitoring and Project performance, and included recommendations for design enhancement.

Sand for both 2004 fill segments was excavated by a hydraulic cutterhead dredge from the Big Carlos Pass ebb shoal. Because this shoal was a near-by compatible and economical source for the beach fill, our sand search focused on using additional portions of the ebb shoal deposit for the current project. Through our sub-consultants AVS and FAS we completed a full field investigation including obtaining seismic data, vibracores and performing a cultural resources assessment. Data and core samples were reviewed by our Professional Geologist and proposed borrow area limits and cuts were designed. A major FDEP concern is the potential effect additional shoal dredging might have on sections of adjacent shorelines and we have performed a multi-track evaluation to address that issue. The other services being performed by us include those tasks necessary to advance and complete the Project Area fill design, obtain FDEP and USACE permits for the Project and prepare Construction Documents for bidding by the County. Because the two Project segments have different owners/sponsors, they also have different cost sharing formulations, and part of our Project Management service is to separate and track fees for each area to the extent practicable.

Key Elements

- Borrow Area Investigation
- Beachfill Design
- JCP Permitting
- Cultural Resource Assessment
- Construction Plans & Specs

Date: 2011 - 2013

Fees: \$413,738.

Contact:

Steve Boutelle, Marine Operation Manager

Lee County

1500 Monroe Street, 3rd Floor

Ft. Myers, FL 33901

(239) 533-8128

boutelsj@leegov.com



Enhancing Coastal Life.