

Estero Santa Barbara Development, Mexico

coastal engineering



Coastal Systems evaluated coastal processes in the vicinity of the proposed development project located in Baja California Sur, Mexico. A site visit was conducted to evaluate the topographic conditions along the small bay that extends inland from the Sea of Cortez. The topography was characterized by several ridgelines surrounding low lands that consisted of three types of beach systems and several mangrove estuaries.

Wind/wave statistics were generated that included historical storms and hurricane tracks. Winds for extreme coastal storm events were evaluated to provide data for wave hindcasting for 25, 50 and 100-year events that would impact the proposed development. The hindcasting data was utilized to evaluate pressure, wind and wave setup to estimate the storm surge and resulting flood elevations. The lowest habitable floor elevations for potential buildings were provided based on the results of the study. Flood maps were generated to provide the development team information for master planning the real estate and shoreline management.

A comprehensive coastal engineering report was prepared with the results of the analyses along with recommendations.



Vicinity Map



Site Conditions

Client:	BV Resorts, LLC.
Location:	Baja California Sur, Mexico
Date of Completion:	2008
Construction Cost:	N/A

