

North Inlet Jetty Construction

As we all remember in September 2004, Hurricane Frances and Jeanne both passed less than 70 miles north of the Boca Raton area causing significant damage throughout the city and to the north jetty at the Boca Raton Inlet. Hurricane Wilma in 2005 further damaged the structure, necessitating reconstruction. The seaward 40 feet and the landward 25 feet of the crib structure were damaged. The damage included the loss of the wooden beams on the seaward end of the structure and the tilting of the piles that had been connected by the wooden beams. The



City of Boca Raton had the damaged piles removed due to the danger they posed to the public. It was determined

that restoration of the north jetty was required to maintain the hydraulic character of the inlet, and to avoid infilling of the inlet, which could reduce the navigable depth through the inlet and cause downdrift shoreline recession.

The City of Boca Raton has been granted FEMA funding for the reconstruction of the Boca Raton Inlet north jetty. The city was issued a Department of Environmental Permit on August 15, 2007 and the U.S. Army Corps of Engineers permit was issued on September 10, 2007. The City of Boca Raton went out to bid in May 2008 and awarded the construction contract to The Vance Construction Company.

The reconstruction of the north jetty involves removing the crib structure and replacing it with a rubble-mound structure consisting of approximately 2,500 tons of boulders. The structure would be located slightly north of the existing crib structure to avoid stone moving into the inlet. A marine mattress foundation has been constructed to prevent scour and settlement of the structure. Construction commenced the week of July 14th and the anticipated date for completion is October 2008 – depending on what this hurricane season has in store for us.



Removing all pilings



Removing old boulders

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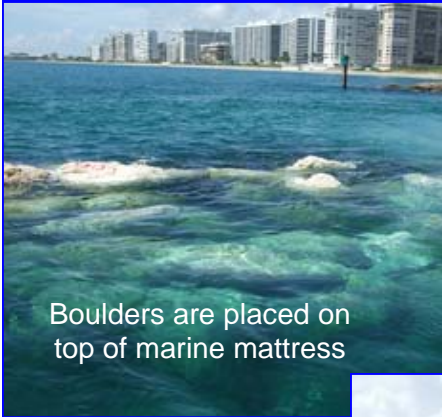
Large boulders waiting to be Drop Tested



Marine Mattress at storage site



Boulder "Drop Test"



Boulders are placed on top of marine mattress



Mattress being guided into position



New boulders in place rising from water surface