



IHNC FLOODWALL HURRICANE PROTECTION PROGRAM

New Orleans & St. Bernard Parish's, Louisiana

Owner:

U.S. Army Corps of Engineers – New Orleans

Client:

Shaw Environmental & Infrastructure, Inc.

Year Complete: 2010

Scope of Work: Construction

Project Cost: \$300M (JV 27.5%)

> Traylor/Massman/Weeks Joint Venture

Project Description:

Construction of the North and South portion of the IHNC Hurricane Floodwall for a total of 7,600 LF to provide a solid sea barrier at the 100-year storm surge elevation to protect the city of New Orleans.

The primary structure of the floodwall is composed of 66" diameter concrete cylinder piles, 144' long, driven with 6" separation. Weeks Marine drove 844 of the 1271 total 66" concrete cylinder piles. When pile driving slowed due to hard sand layer, Weeks setup to pre-drill through the exact location of each pile that brought the driving time back to normal without lessening the final capacity of the pile. Production time improved so that the night shift could be eliminated.

Weeks Marine continued to mobilize equipment and personnel to set 86-ton precast units on top of piles, completely fill the cylinder and pipe piles with rebar cages and CIP concrete, make pile-to-cap connections, and place CIP concrete connecting the precast sections and the battered pipe piles.

Earlier in the year, Weeks completed the load test program that enabled the USACE to be assured of the final criteria for the completion of the floodwall construction. This project required running 150-600 ton load tests on 66" diameter by up to 136' long concrete cylinder pile and 1024-ton load tests on 36" diameter by up to 225' long steel piles.