

# HARBOR BRANCH OCEANOGRAPHIC INSTITUTE

Client: Harbor Branch Campus of Florida Atlantic University



**Waterfront Facilities Inspection & Master Plan (1992):** The Harbor Branch Channel and dry storage facility is used to moor and maintain large research vessels. Coastal Tech performed above and below water inspections of over 6,000 feet of existing bulkheads and mooring structures at the Harbor Branch basin and entrance

channel. An inventory of the existing channel infrastructure was prepared and the objectives of Harbor Branch, with respect to future infrastructure needs, were identified. The infrastructure elements included: mooring/vessel maintenance, dredging, bulkheads, docks, drainage, and utilities. Coastal Tech provided conceptual design and cost estimates for repair/replacement alternatives.

## **Bulkheads (1994, 1998 & 2009):**

Subsequent to above and below water inspections, Coastal Tech designed a 3,958 foot long deep water replacement steel sheet pile bulkhead with concrete deadmen and soil anchors to front the south side of the Harbor Branch Channel.



In 1998, Coastal Tech prepared an emergency design to modify the tieback system for the existing steel sheet pile bulkhead to allow a barge to offload a donated 5 million dollar home. The innovative design modification allowed for the steel sheet pile wall to be cut, creating a ramp for the barge. Coastal Tech completed the design within 3 days of Harbor Branch's request.



In 2009, Coastal Tech again provided above and below water inspections of approximately 6,700 linear feet of bulkheads at Harbor Branch. We established stationing at various bulkhead locations, conducted ultrasonic thickness testing, and assessed the structural capacity of the bulkheads to meet services loads based on the field investigation results and the construction plans previously prepared by Coastal Tech in 1992. Coastal Tech prepared a report summarizing field observations, ultrasonic thickness test

results, corrosion rates, provided an Opinion of Probable Costs, and assessment results including prioritized recommendations for maintenance, repair, or replacement of the bulkheads.

## **Key Elements**

- Above & Below -water Inspections
- Bulkhead Design
- USACE / FDEP Permitting
- Bidding & Construction Phase Services

**Date:** 1987 – 1994, 1998, 2009

**Fees:** \$206,800

## **Contact:**

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