



September 22, 2017

Re: Summary Report,
Diver Inspection of Clearwater Marina Fishing Pier floating dock and piles.

Mr. Perez,

Orion Marine Construction divers performed diving inspection of the damaged floating dock and piling at the Clearwater Marina Fishing Pier on September 21st, 2017. The purpose of the inspection was to determine and document the extent of underwater damage to the piling and floating concrete dock incurred recently by Hurricane Irma.

A three man surface supplied dive team and underwater camera were used for the inspection. All diving operations were performed using surface supplied air diving equipment and techniques.

Piling:

A total of four 24 inch diameter concrete piles running west to east held the dock in place before it broke loose. For inspection purposes the piles were numbered 1 thru 4 from west to east. Piles #1 and #2 are both leaning towards the south and are approximately 10 inches out of plumb. The diver cleaned the marine growth around the bottoms of these piles and excavated the surrounding sand for a depth of approximately 6 inches. A visual and video inspection were conducted and no cracking or evidence of damage around the pile bottoms was found.

All four piles exhibit some minor to moderate spalling on the corners near the water line. This appears to be damage from the pile guides, which ripped away from the dock and are resting on or near the bottom around the piles. (The pile guide for pile #1 is still attached to the dock). The spalling is new damage, as evidenced by the lack of marine growth on the concrete. The most severe spalling noted is on the northwest corner of the easternmost pile (#4). This spall extends from the waterline down the corner of the pile approximately 8ft. The maximum spall depth is 1.5 inches. This appears to have been caused by the floating dock before breaking loose, as there is concrete debris on bottom which matches the location of damage on the dock as it was originally orientated.

Floating Dock:

A visual inspection was performed around the perimeter and underside of the concrete floating dock. Severe structural damage was found on the side of the dock directly underneath where the pile guide for pile # 4 was attached. The damage appears to be caused by contact with pile #4. As the dock is normally orientated this would be the southeast corner of the dock, (closest to the

gangway from the pier). The damage extends 5.5 feet from the end of the dock, and 6 inches below the water line to the bottom of the dock to include broken, loose, and missing concrete, as well as exposed reinforcing bars, and welded wire fabric. There are two areas where the concrete is missing, and the diver could see through the side of the dock. Pictures and Video were taken to document this damage.

Some minor concrete spalling on the topside of the dock was also observed and photographed.

Broken Water Supply Line:

During the inspection, the diver found a severed 2 ½ inch HDPE water supply line to the floating dock with water actively flowing out. The assembly was brought up on deck and tied off to the gangway rail. The hose was then kinked and clamped off to prevent further waster loss.

Let me know if you have any questions about this or any of the underwater pictures.

Thank You,

Jason C Baldwin

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