



Project:

Anchorage Marina Floating Dock Replacement

Client:

Anchorage Marina, Baltimore, MD

PROJECT SCOPE:

Anchorage Marina is one of the largest marinas on Chesapeake Bay boasting 526 single-loaded slips spread over nine floating docks. Slips were 35, 40, and 45' long. Dissen & Juhn Company replaced three of the largest docks, Docks D, E, and F, totaling over 45,000 SF. There was over 1,900 LF of main dock alone and 205 finger docks. This was Anchorage's first major renovation project. The existing docks were original and installed 30 years ago, and were exhibiting advanced stages of deterioration, which required frequent maintenance.

Dissen & Juhn Company was retained to:

- Replace 206 of the marina's 571 slips (36%).
- Install customer-furnished, wood-framed floating docks.
- Demolish and dispose of existing structures.
- Furnish and install electrical, water, and fire standpipe systems.

The wood-framed docks were manufactured by Bellingham Marine and featured mechanically laminated walers, heavy, solid sawn framing members with galvanized steel connectors, plastic floats, Ipe (exotic hardwood) decking, and finished with vinyl fendering and galvanized cleats. Dedicated raceways distributed the electrical, water, and standpipe lines throughout the docks.

Dissen & Juhn's scope included upgrading the entire electrical system servicing the new docks. The new electrical system featured components manufactured by Eaton Power & Lighting including substations, panel boards, and "Lighthouse" power pedestals with 30 and 50 amp service.

CHALLENGES AND SOLUTIONS:

In the months leading up to the dock replacement project, the existing steel pipe piles securing the docks were "re-sleeved". In this process, an 8' long steel "sleeve" was welded onto the outside of the pile at the water line where they were severely corroded due to electrolysis. Although the pile repair was not



part of Dissen & Juhn's scope of work, incorporating the piles into the new dock installation created several challenges for both the dock manufacturer and the contractor.

First, the docks had to be manufactured to very tight tolerances. A small deviation over the length of a 600' main dock can adversely affect the location of dozens of finger docks. Secondly, some of the triangular gussets connecting the fingers to the main dock had to be modified to accommodate the existing piles. These had to be installed over the top of the piles instead of driving the piles through the gussets like in a conventional design.

Another challenge faced by the contractor was getting construction materials to and from the job site. Hemmed in by residential properties, there was no way to access the site with tractor trailers. Instead, the contractor barged the materials to and from a project-specific yard 1.5 miles across Baltimore Harbor, a tow made several times each day. This subjected the operation to increased weather exposure and difficulty navigating the barges through a still, dock-filled boat basin.

Despite the project's many challenges, Dissen & Juhn Company crews completed the job in time for the 2019 boating season, much to the delight of its client, and its customers.

