

Corpus Christi Marina Finishes Ninth Renovation in 40 Years

by Anna Townshend

This summer Corpus Christi Municipal Marina in Texas completed a renovation of 100 aging slips. The latest project takes the total grant funding received for marina projects by Marina Superintendent Peter Davidson to \$10.5 million, over his 17-year career in Corpus Christi. The marina has gone through many renovation projects over the last 40 years, and the latest project at Pier R replaced the docks with 118 slips, bringing the total at the marina to 667.

The continued updates at the marina match growth and booming business in the area, driven by the economic impacts of the expanding oil and natural gas industries. The port of Corpus Christi ranks fifth among U.S. ports.

At the marina, Davidson has made a career of procuring funds and executing projects. He came to Corpus Christi in 1977 for a visit and moved there. For 20 years, he worked as a sail maker and rigger and marine surveyor in the area, before taking over operation of the marina in 1998.

The latest renovation project makes use of Boating Infrastructure Grant (BIG) funds from the U.S. Fish and Wildlife Service, and Clean Vessel Act funds from the Texas General Land Office, totaling more than \$750,000.

Marina Enterprise

Davidson operates the marina for the city of Corpus Christi, as an enterprise fund, meaning it doesn't get money from the city for operations or renovations. To complete the latest more than \$3 million project, the marina borrowed \$2.6 million.

"We have to match all these grants, and we've been successful in making that happen. That's why I've been here this long. We keep getting all this money, and I have all these ideas and projects," Davidson said.

When Davidson first arrived, the marina was funded from the

PRICE BENCHMARK STUDY

When a new city manager came into Corpus Christi, he asked the marina to perform a benchmark study, comparing the marina with other facilities around the country, in terms of amenities and slip costs. The study looked at 12 marinas from across the country – Texas, Florida, California, New York and Michigan, saltwater and freshwater marinas. Corpus Christi Municipal Marina had the lowest monthly cost per foot for floating slips – \$5.10 per foot for boats 23 feet or less; and \$6.75 per foot for larger vessels. Other cost per foot averages in the study ranged from \$4.22 per foot for fixed docks to up to \$15.67 per foot at the highest. "Of all the marinas, we were offering the most amenities at the least expensive price," Davidson said. Because the facility is a city marina, it also does not have to charge sales tax, like other private facilities.



Corpus Christi Municipal Marina in Texas completed a renovation of wooden fixed dock with 100 slips, building 118 new floating slips.

NEW AMENITIES AND GRANT FUNDING

Corpus Christi Municipal Marina has utilized many different types of grant funding to help fund renovation projects at the marina.

- All dock gates at entrances including the restroom/boaters facility use electronic proximity card readers – Homeland Security grant funding
- The Marina Patrol Rescue Boat including equipment – Homeland Security grant funding
- All security cameras in and around marina complex - Homeland Security grant funding
- Electronic monitoring computer software - Homeland Security grant funding
- Dredging of marina/Beach nourishment – Texas General Land office funding
- A modern four lane state of the art Public Boat Ramp including parking – Boating Access grant funding
- Commercial ash tray containers throughout marina complex – Beautify America/Boat US Foundation
- Restrooms/shower/laundry Boaters Facility - Boating Infrastructure Grant (BIG) funds
- 75 Transient visiting boat slips - Boating Infrastructure Grant (BIG) funds
- All boat slips docks since 2006, and each pier has pumpout access for every four vessels - Clean Vessel Acts funding
- LED dock lighting, and new LED lighting - Energy Department Initiatives for Clean Energy Technologies
- Contaminated Boat Bilge Water including oil recycling equipment and center with storage tanks - Texas General Land office funding
- Fuel Oil Spill kit equipment including booms - Texas General Land office funding



Instead of traditional wood decking, the marina installed three-foot concrete pavers that don't use galvanized screws, which corrode in the saltwater environment.

city general fund, at the bottom of the funding food chain, after city departments like the police and fire department, which got funded first. In 1992, Davidson was successful in changing the marina operation to an enterprise fund – maintained and expanded with its own profits. The marina also rents space to third party vendors and receives rental incomes to supplement revenues, which totals \$2 million a year. The marina is also open 24 hours a day, 365 days of the year, and operates the



Corpus Christi Municipal Marina performed many renovations over the last 40 years, with the help of grant funding.

marine patrol department for the city.

In Corpus Christi Bay, the marina is protected from the Gulf of Mexico by sandy barrier islands off the Texas coast. Though protected, hurricanes can still damage the bay. In 1915 and 1919, two major storms hit Corpus Christi, killing 2,500 people. In the mid-1920s, the five local counties got together the money to build a large rock breakwater that surrounds the shoreline of Corpus Christi and further protects the marina.

Long Lasting Docks

Corpus Christi's newest docks cater to some transient boaters, along the 612-foot access walkway where boats can side-tie. The three main new docks offer long-term slips for 30- to 45-foot boats. The new docks will also accommodate wider beams. The majority of Corpus Christi customers are sailboaters. The marina hosts many regattas and is known for its windy conditions.

The new docks were built and installed by MEECO SULLIVAN, built at the McAlester, Oklahoma, plant and trucked on more than 30 semi trucks to Corpus Christi.

"We've done docks at Corpus Christi since the late 80s," said Steve Shoup of Meeco Sullivan. "The docks look good, and they've been through some tough storms. The last docks we put in there were the latest adaptation of the Atlantic system and probably one of the strongest docks we've built before."

We supply efficient boathandling equipment with proven quality and 35 years experience. Increase your profit: talk to Kleeco!

Kleeco Marine & Industrial Equipment

10110 S. M43 Hwy, Delton, MI 49046 USA, tel: +1 (269) 623-2900
fax: +1 (269) 623-8028, info@kleeco.com, www.kleeco.com

Harbor Hoist 25 35 50 65 80 100 up to 1000tons

CORPUS CHRISTI MUNICIPAL MARINA: AT A GLANCE

- 667 slips, floating and fixed docks
- 55 dry storage spaces
- boatyard, including 15-ton travelift
- 1st Texas Clean Marina
- operates underwater search and rescue missions
- in-slip pumpout system from Edson
- fuel dock, ethanol free
- HyPower dock pedestals



The new docks, built by MEECO SULLIVAN, are floating wooden docks with 18-inch diameter concrete piling.

The Meeco Sullivan crew installed the docks on-site, as a sub contractor, under general contractor Jacob White Construction, which handled the removal of the old piling and docks.

Meeco Sullivan began production on the docks at the end of February 2015. The company started delivering docks in April and continued production through mid-June, and it finished the last of the docks on-site by the end of July.

Davidson had been planning this project much longer, nearly seven years in planning and procuring funds. During other renovation projects, the city hired an engineering firm, but this time around, Davidson and his harbor master took charge of the design, saving the project \$500,000 in engineering fees.

With a rudimentary design/build plan, the marina accepted bids. The offers had to meet a certain budget and companies had to meet a certain experience qualification – 30 years in saltwater dock construction. The marina requested RFPs from the top three companies, which also participated in a 30-minute presentation and 30-minute interview period.

With years of renovation experience, Davidson had learned a few things along the way – saltwater sits on galvanized steel and eats away at it, and solid beams (used to build docks in the 80s) warp under the waterfront conditions. To remedy those problems, the new docks are built with glue laminated beams and three-foot concrete pavers as decking.

Shoup said the laminated beams can span greater distances, and combined with a ¾-inch marine grade plywood, it can span 40-foot distances between piles, requiring less overall piling for the project.

The project required removing 305 old wooden piling, and replacing them with 140 18-inch, 58-foot long concrete piling that were driven into the underground clay 30 feet. With water depths of eight feet at the docks, that leaves 18 feet of piling out

of the water for storm protection against tidal surges.

Davidson said the plywood underneath also protects the utilities from saltwater damage. The decking also does not have galvanized screws to hold together traditional wooden decking. Instead, the walkway is made of three-foot concrete pavers that weigh 85 pounds each. The docks have a minimum lifespan of 50 years, and the piling will last 100 years.

“The benefits of the wood system is it is flexible,” Shoup said, “and the concrete makes it feel like walking on a sidewalk.”

The marina also learned from experience and brownouts that the docks need a lot of power. The new electrical system brings in 480 volts directly to the head of each main dock, and then, a transformer steps that down to 120-volt and 30- or 50-amp at the slips. High-density polyethylene conduit protects the utility lines, which can be accessed by lifting the concrete pavers.

The docks serve boats from 30 to 45 feet. Pier R was originally a fixed dock, built in 1982, with treated pine piling and decking and galvanized fasteners. Pier R was shut down one year prior to the new construction; extensive wood rot had become a concern for safety, especially during storm events. Seventy boats were moved from those docks to other locations, and a few boats went to other marinas.

Future Plans

The new docks are awaiting final approvals before taking tenants this fall. Davidson already has his eye on the next project – boater facilities for the new docks, including public restrooms, marine library, free Satellite TV, computers and laundry facilities. Other docks at the marina have similar facilities. The 1,800-square-foot buildings costs around \$550,000 to build, Davidson said. He would also like to eventually rebuild the boatyard, from a metal, somewhat corroding, building, into a new facility with space for an engine shop, brokerage firms and coffee shop, in addition to boat repair and maintenance. ⚓

40 YEARS OF RENOVATIONS

- 1975: M-Pier, 30 fixed boat slips constructed for boat sizes 14' – 30'
- 1982: R-Pier, fixed constructed for 100 boat slips size 30' – 60'
- 1986: MORF Pier (Midget Ocean Racing Fleet), floating docks with concrete piling containing 60 boat slips for boats 19' – 23'
- 1989: L-Pier, 60 fixed boat slips constructed for boats 24' – 50'
- 1993: Piers A; B; C; & D, floating boat slips, 40 boat slips per each dock total 160
- 1993: LST Stem, 38 fixed boat slips constructed for boat sizes 50' – 60'
- 2006: Piers E; F; G & H, floating boat slips with concrete piling, total 163 for boat sizes 50' – 150'
- 2015: R-Pier replacement, floating boat slips with concrete piling, total 118 for boat sizes 30' – 45'