



Garney constructs first plant of its kind in Southwest Florida treating three water sources

AUGUST 2017 – Garney is at the helm of constructing an ionic water treatment plant that will purify water from three different aquifers with multiple different treatment systems. Using the latest in new technology, the Green Meadows Water Treatment Plant will be the first of its kind in Southwest Florida to process brackish and fresh water.

The \$75.4 million plant for Lee County Utilities will replace a 40-year-old facility and reduce treatment cost per thousand gallons by 60%. This marks the second most expensive project undertaken in Lee County history, just behind the \$78 million JetBlue Park – the spring training facility of the Boston Red Sox.

The plant, located near Fort Myers, will provide 14 million gallons per day to enhance reliability and address growing population needs. The County selected the latest in advanced technology to treat the water using multiple systems including:

Ion Exchange

With the ability to process 3.9 million gallons per day, five exchangers will remove organic compounds and color from the water. The system will treat the surficial water high in iron and hardness through large vessels, tanks, and a complex piping network.

Reverse Osmosis

Three reverse osmosis trains comprised of 672 cartridge pre-filters will be responsible for removing salt and hardness from the water. This process will be used to treat the brackish water from the Floridian aquifer.

Degasifier and Clearwell System

Primarily used to treat odor, the water will get degasified before flowing through a 55,000 gallon storage tank. Disinfection will follow through a concrete maze of three switchbacks and then be transported via several miles of distribution pipe.

“The design concept is unique in that water treatment facilities typically rely on one source, thus requiring one treatment process,” said Josh Petro, Project Manager at Garney Construction. “Not only are we constructing multiple treatment systems, but we’re using the latest technologies gaining momentum in the water industry. This is a hallmark project for Lee County Utilities and for Garney.”

Garney is serving as Construction Manager at Risk (CMAR), managing 17 subcontractors with a daily workforce of 120 field craft at peak hours.

“Approximately 75 percent of the subcontractors are local and we’ve produced an estimated 300 jobs for local residents,” said Petro.

“Unlike most of our projects, Garney is not allowed to self-perform work on the site, but it has truly been a win-win for the County and Garney. We have been able to exceed the County’s expectations by adhering to our goals and philosophies, keeping expectations high, and championing teamwork.”

Construction is ahead of schedule and anticipated to be complete by December 2017. Commissioning and transfer activities will follow with the plant scheduled to be fully operational by August 2018.