

Bob Sikes Water Reclamation Facility Expansion/Improvements Project Okaloosa County Water and Sewer Department



The Expanded 1 million gallon per day WRF will use state of the art Membrane Bioreactor Technology to treat the wastewater to meet the stringent federal and state regulations for public access reuse water irrigation.

Constantine Engineering worked with the County to obtain a \$2 million dollar grant from the Northwest Florida Water Management District for the design and construction of the expansion to the Bob Sikes WRF; based on the reuse capacity that the facility will provide.

Okaloosa County, Florida selected Constantine Engineering, Inc, to provide design engineering and services during construction for the Bob Sikes Water Reclamation Facility Expansion/Improvements Project. This project expands the treatment capacity of the existing Bob Sikes WRF from 0.3 million gallons per day (mgd) to 1.0 mgd; and converts the existing steel package plant treatment basins into new membrane bioreactor (MBR) treatment units. The expanded WRF is designed to treat the wastewater to meet the stringent federal and state regulations for public access reuse water irrigation.

The current facility is a small activated sludge facility, while the expanded WRF upgrade will provide an average design flow of 1.0 mgd and a peak hydraulic flow of 3.5 mgd. The upgraded Bob Sikes WRF will have the capability to convey treated effluent to surrounding developments and subdivisions for public access irrigation of common areas, residential lawns, flower gardens, and other landscaping and water features. As part of the development order process for new subdivisions, the County is

requiring developers to construct public access reuse water piping and distribution system facilities to accept and convey the treated effluent from the upgraded WRF. This requirement will maximize the distribution of reuse water in this portion of the County and minimize the withdrawal of valuable water from the sand and gravel aquifer.

Water reuse from highly treated effluents is a popular method of conserving water resources since it eliminates a point source discharge to a stream or lake that may already be struggling from pollution or nutrient overloading; and since the reuse water offsets water that would otherwise have to be withdrawn from limited potable sources.

This matter becomes extremely significant during dry weather and in areas where raw water sources are scarce for public water supplies.

**Constantine Engineering, Inc.
Corporate Office**

2004 Lewis Turner Boulevard,
Suite B
Fort Walton Beach, FL 32547
Telephone: 850.244.5800

Contact Person

James P. Kizer, Jr. P.E., President

