

Conversion of Two Gravity Concentration Tanks to Primary Sludge Fermenters Stickney Water Reclamation Plant

Project Number: 15-124-3P

Service Area: Stickney

Location: Stickney WRP

Engineering Consultant: In-house design

General Contractor: To be determined

Estimated Construction Cost: \$1,900,000.00

Contract Award Date: March 2017*

Substantial Completion Date: July 2018*



Project Description: This project will convert two of the new gravity concentration tanks (GCTs) into fermenters and install a pumping station to pump the fermentate directly into the West Side primary effluent conduit feeding the secondary aeration batteries. This project will also install a gas detection system for the new gravity concentration tank building.

Project Justification: The District is pursuing Enhanced Biological Phosphorus Removal at the Stickney WRP for the recovery of phosphorus and meeting a new regulatory limit for phosphorus in the effluent. The fermentation of primary solids will result in an additional production of volatile fatty acids which will be fed directly in secondary treatment. The additional volatile fatty acids will be utilized in the Enhanced Biological Phosphorus Removal process, resulting in a more stable and better performing process. Additionally, code requirements for an enclosed gravity concentration tank area require the installation of a combustible gas detection system.

Project Status: This project is being designed.

*Information shown is estimated.