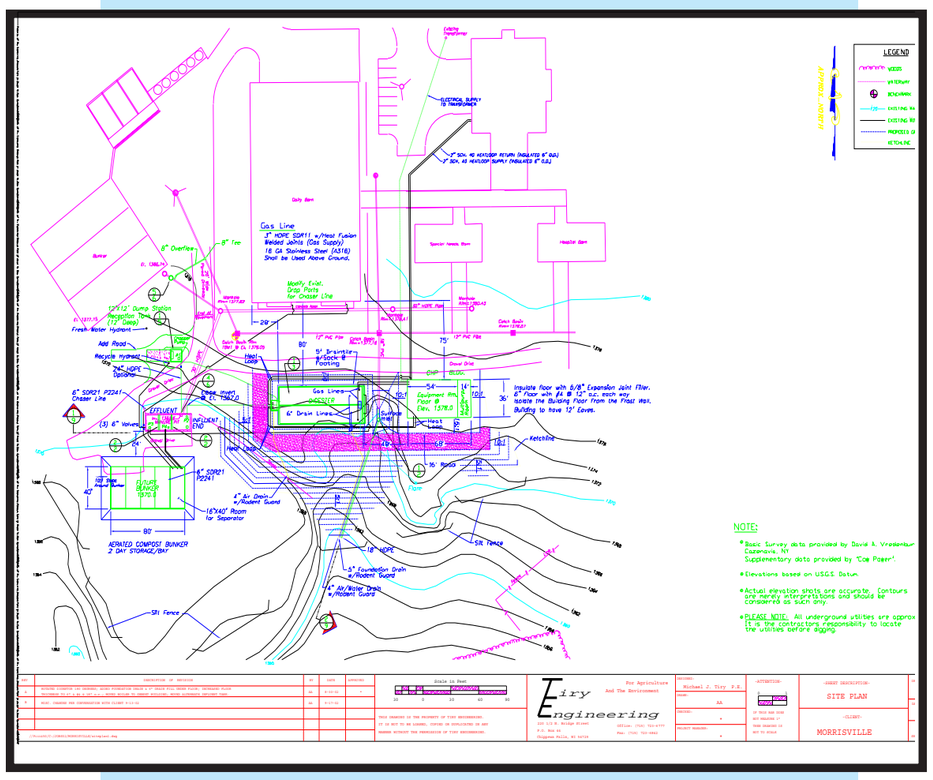

"We are learning more about tomorrow's technologies and sharing what we learn."

–James VanRiper
Dean

ANAEROBIC DIGESTION

Systems Approach to Studying and Demonstrating Anaerobic Digestion at Morrisville State College

Anaerobic digestion can minimize odors and allow more effective nutrient use by crops. To realize the potential energy, environmental, and cost-saving benefits of anaerobic digestion, farmers need information to evaluate the energy, labor, land, and equipment costs.

The methane-digester project at Morrisville State College (Madison County) involves the design and installation of a heated, hard-top plug-flow anaerobic digester. The digester will biologically treat manure and food waste generated on campus to produce a stable effluent with improved physical, chemical, and biological characteristics. In the system, methane is produced, captured, and combusted to produce heat and power using a 50kW engine-generator set. The methane digester system will treat manure from over 350 milking cows and generate about 300,000 kWh per year from the recovered biogas.

This NYSERDA project will generate data on the effectiveness of an internal combustion engine for converting biogas to energy; will track and evaluate project data, costs, and benefits; and will use the digester system in Morrisville College's Bachelor of Technology programs to transfer information to others considering anaerobic digestion systems.

The cost-shared project is being funded by NYSERDA with support from the New York State Department of Agriculture and Markets. Construction on the project is expected to start in the spring of 2004.

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