



# City of Shelbyville WWTP GSC

Phosphorus Removal Improvements

Project Size: \$2,097,190  
October 2019 - September 2020



Resourceful.



Responsive.



Results.



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Bowen, in collaboration with BF&S, was contracted to construct an access road and underground utilities for a phosphorus storage and pumping barn for the City of Shelbyville. Additional scope was added, including a Dystor Digester Membrane provided by Evoqua, a Fats, Oils and Grease (FOG) station, and associated digester gas piping modifications.

## Project Challenges:

- Sludge removal from the digester was difficult because it had accumulated for many years and it was hard packed grit.
- Installing the new Dystor Membrane required the right site and wind conditions to allow the membrane to be hoisted into place. Coordination of manpower, equipment and material was all dependent on the wind.

## Bowen Resourceful

- Experienced foreman from Bowen's Northwest IN office assisted with the removal and installation of the membrane.

## Bowen Responsive

- The original contract was for a phosphorus removal scope of work but additional work was added to allow the Owner to accept an emerging new waste stream and revenue source.

## Bowen Results

- Previously the Owner was unable to fully utilize the digester because of the deteriorating membrane and structure. Upon startup the digester was producing valuable gas for plant usage.

## PROJECT SCOPE

- Site Work
- Civil / Concrete Work
- Underground Piping
- Equipment Setting
  - Dystor Digester Membrane Cover
- Mechanical / Piping

## PROJECT ATTRIBUTES

- 973 cy of backfill
- 268 cy of concrete
- 1,800 sf of formwork
- 150,000 gallons of sludge removal
- Zero Injury
- Zero Incident

## PROJECT TEAM

- Bowen PM: Dan Bernath
- Client Contact: Kevin Kredit  
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[kkredit@cityofshelbyvillein.com](mailto:kkredit@cityofshelbyvillein.com)
- Engineering: BF&S
- Technology: Evoqua, BBC Pump