Butler Elevated Water Storage Tank
Prime consultant for the design and construction of a new 150,000 gallon composite concrete/steel type elevated water storage tank, underground packaged pressure-reducing station, and approximately 1,250 l.f. of 12-inch diameter waterline and 900 l.f. of 8-inch diameter waterline. The composite tank includes a concrete pedestal and glass-fused steel tank. Since repainting the tank is not required with this type of tank, future maintenance costs are kept to a minimum. Included in the base of the tower is an overhead door to allow the pedestal to be used as a garage/storage facility. Also included was an automated level control system and a package-type below ground pressure reducing station. The pressure reducing station was needed to control pressures within the low level service area of the Village.

Project Funding
- $500,000 - OPWC grant

Project Cost
- $1.09 million

Completed
- 2010

Reference
Eric McAuley, Water Superintendent • Village of Butler
33 West Elm Street • Butler, Ohio 44822 • 419.566.4279

Project Team
Principal-in-Charge ......................... Jack A. Jones, PE.
Project Manager/Engineer .................... Michael Atherine, PE.
Electrical/Controls Engineer .................... Dan Knott, PE.

CSX Elevated Water Tower
Northwestern Water and Sewer District
Prime consultant for the design and construction of a multi legged, 200,000 gallon torus bottom, elevated tank. Electrical, telemetering, and extensive site work were major parts of the project. The tank serves as fire protection and the domestic needs of the surrounding areas and the multimillion dollar CSX Intermodal facility in North Baltimore, Ohio.

Project Cost
- $750,000

Completed
- 2010

Reference
Jerry Greiner, Executive Director, Northwestern Water & Sewer District
• P.O. Box 348 • Bowling Green, Ohio 43402 • 419.354.9090

Project Team
Principal-in-Charge ......................... Michael Atherine, PE.
Electrical/Controls Engineer .................... Dan Knott, PE.

Bowling Green 1.5 Mg Elevated Water Storage Tank
The final phase of the Master Plan Improvements was the replacement of the existing 500,000 gallon elevated tank with a new 1.5 million gallon tank located in the City’s north side industrial and commercial corridor. The Master Plan identified this area as the optimal location for a new tank due to its proximity to the 20” and 36” transmission mains that are the main feeds from the City water treatment plant.

As a supplement to the original master plan, PDG performed water age analysis and the effects of the recommended improvements. This was done to optimize the system to enable the City to maintain current and future compliance with the Ohio EPA disinfection byproducts rules and regulations. This analysis allowed us to make changes that would help the City long term maintaining a healthy water supply to their customers.

Project Cost
- $3.4 million (estimated)

Completion
- 2014

Reference
Mr. Brian O’Connell • City of Bowling Green Director of Utilities
304 North Church Street • Bowling Green, Ohio 43402
419.354.6246

Project Team
Principal-in-Charge ......................... Michael Atherine, PE.
Project Manager/Engineer .................... Thomas Borck, PE.
Electrical/Controls Engineer .................... Dan Knott, PE.

Hicksville 400,000 Elevated Water Storage Tank Improvements
PDG assisted the Village with repairs/improvements to the Village’s 400,000 gallon elevated storage tank. Services included specifications, bidding documents, OPWC coordination, bid opening/award, construction administration and observation.

Project Cost
- $187,870

Completion
Hicksville 150,000 Elevated Water Storage Tank Improvements

PDG assisted the Village with repairs/improvements to the Village’s 150,000 gallon elevated storage tank.

**Project Cost**
- $252,500

**Completion**
- 11/1/2011

Reference
Mr. Kent Miller, Administrator, Village of Hicksville • 111-113 S. Main Street • Hicksville, OH 43526 • 419.542.8095

Leipsic IAM’s Elevated Water Storage Tank Repair/Repainting

The Village of Leipsic selected PDG as the prime consultant to prepare technical specifications for the repainting of the exterior of the 300,000 gallon elevated water storage tank. PDG prepared bidding documents and assisted the Village during the bidding phase. Critical Phase Construction Observation and Construction Administration was also provided by PDG.

**Project Cost**
- $79,000

**Completion**
- 4/20/2014

Reference
Mr. Kevin Lammon, Village of Leipsic Administrator, 419.943.2009

Columbus Grove Elevated Water Storage Tank Improvements

PDG completed inspections of the 250,000 gallon elevated tank and the WTP clearwell and provided a conditions report of each tank with recommendations for maintenance/repair work.

**Project Cost**
- $30,000

**Completion**
- 11/23/2010

Reference
Mr. Jeff Vance, Administrator, Village of Columbus Grove • 113 East Sycamore Street • Columbus Grove, OH 45830 • 419.659.2365

Put-In-Bay—Elevated Water Storage Tank

PDG was the prime consultant for several water treatment plant related improvements for the Village of Put-In-Bay. Over a 15-year time period, these improvements have totalled more than $3 million, not including associated water main extensions. The original master plan included phased expansion of the water treatment plant to accommodate capacity increases from tourism growth on South Bass Island and in the Village of Put-In-Bay. Four of five phases of these improvements have been completed, involving concepts for phasing improvements into South Bass Island Township, as well as upgrades to the water treatment system to address commercial growth within the Village. Phase 4 involved raising the existing 200,000-gallon elevated storage tank to increase pressure to remote areas of the island that have higher topography.

**Project Cost**
- Over $3 million

**Completion**
- Over 15 years

Reference
Mr. Doug Knauer • Village of Put-in-Bay Administrator 157 Concord Ave. • Put-in-Bay, OH 43456 • 419.285.8545

**Project Team**
Principal-in-Charge..............................Jack A. Jones, PE.  Project Manager ..............................Douglas Nusser
JRS Elevated Water Tower
Northwestern Water and Sewer District
Prime consultant for the design and construction of a 500,000 gallon composite, concrete/steel type elevated tank near Luckey, Ohio. The Composite tank is a concrete pedestal with a steel bowl for storage. The pedestal can be utilized for a garage or storage facility with an overhead door access. Scope of work included a detailed review of multiple tank designs, specifications and drawings for alternate bids including composite, multi legged, fluted column and single pedestal spheroidal tanks. Significant research was done on each alternative including economic analyses of each alternative factoring in life cycle costs of construction, painting and maintenance. Coordination with FAA, EPA, ODOD, ODOT and local authorities was part of this project.

Project Funding
- $2.6 Million Grant – Ohio Department of Development Job Ready Sites Program

Project Cost
- $1.82 million

Completed
- 2011

Reference
Jerry Greiner, Executive Director, Northwestern Water & Sewer District • P.O. Box 348 • Bowling Green, Ohio 43402 • 419.354.9090

Project Team
Principal-in-Charge: Michael Atherine, P.E.
Electrical/Controls Engineer: Dan Knott, P.E.

Weston Elevated Tank
Northwestern Water and Sewer District
The Northwestern Water and Sewer District selected PDG to provided professional engineering and bidding services for the demolition of their current elevated tank and design of a new 250,000-gallon Multi-Legged Toro Ellipse Tower which was installed at a new site from the existing tank. The new towers elevation was approximately 30 feet higher then the existing tower which required upgrades to the existing Booster station to include pumps that could overcome the increased head on the system. The booster station upgrades included 3 new pumps.

Project Cost
- $777,627

Completed
- 2010

Reference
Jerry Greiner, Executive Director, Northwestern Water & Sewer District • P.O. Box 348 • Bowling Green, Ohio 43402 • 419.354.9090

Project Team
Principal-in-Charge: Michael Atherine, P.E.
Environmental Engineer: Steven Wonderly P.E.
Electrical/Controls Engineer: Dan Knott, P.E.
Project Manager: Neal Materni

Jerry City Elevated Tank
Northwestern Water and Sewer District
Prime consultant for the design and construction of a 250,000 gallon elevated water storage tank for the waterline no. 318 area serving the Jerry City and Elmwood School area. Several tank styles were specified and bid as possible alternate types to enhance the owner’s options and to create better competition among tank manufacturers. A multi-legged ellipsoidal style tank was chosen for this site. The project also included the extension of over 20,000 lineal feet of 8” and 12” waterline. A chlorination unit was constructed at the elevated tank site and a booster pumping station fills the tank, which is sized to serve a significant portion of the Jerry City area.

Project Funding
- USDA Rural Development, CDBG, OPWC and local funds

Project Cost
- $3.5 million

Completed
- 2004

Reference
Jerry Greiner, Executive Director, Northwestern Water & Sewer District • P.O. Box 348 • Bowling Green, Ohio 43402 • 419.354.9090

Project Team
Principal-in-Charge: Michael Atherine, P.E.
Electrical/Controls Engineer: Dan Knott, P.E.
Germantown Elevated Water Storage Tank
The Municipality of Germantown has a water distribution system that has two (2) different pressure zones. The higher pressure zone was experiencing low flow and pressure problems. There was an existing 250,000 gallon elevated storage tank that was in poor condition, undersized to supply the required fire flow, and of inadequate height to provide the needed system pressure throughout the pressure zone. The higher pressure zone is also the area that is currently experiencing growth in the customer base. To correct these system deficiencies in the higher pressure zone the Municipality constructed a new 750,000 gallon elevated water storage tank. The Municipality selected a site that they owned and planned to construct a fire station at a later date. This site is near the existing elevated water tower site. This new elevated tower is approximately 15 feet taller than the existing tank to provide improved system pressures and is sized to provide better reserves for fire protection.

Estimated Cost
- $1.998 million

Project Cost
- $1.378 million (less than contract amount)

Project Bid
- April 2009

Completion
- October 2010

Project Team
Principal-in-Charge...............................Michael Atherine, P.E.
Project Manager ..................................Thomas Borck, P.E.
Electrical/Controls Engineer .......................Dan Knott, P.E.

Lexington Elevated Storage Tank
Prime consultant for the design and construction of a 150,000 gallon composite concrete/steel type elevated water storage tank. The composite tank includes a concrete pedestal and glass-fused steel tank. Since repainting of the tank is not required with this type of tank, future maintenance costs are kept to a minimum. Included in the base of the tower is an overhead door to allow the pedestal to be used as a garage/storage facility.

Project Funding
- $141,300–OPWC Issue II grant
- $141,300–OPWC Issue II low-interest loan

Project Cost
- $565,000

Completed
- 2000

Reference
Mr. Kevin Lammon, Village of Leipsic Administrator, 419.943.2009

Project Team
Principal-in-Charge...............................Jack A. Jones, P.E.
Project Manager ..................................Michael Atherine, P.E.
Funding Specialist ..................................Robert Jablonski

Leipsic Elevated Water Storage Tanks
The Village of Leipsic selected PDG as the prime consultant for the design and construction of a multi-phased water system improvement project. Improvements were made over a seven-year development period and cost more than $2.75 million. Phase 3 involved a new 300,000-gallon elevated water storage tank to assist with control of water treatment operations.

PDG was also the prime consultant for the design and construction of a 200,000 gallon elevated water storage tank, a high service pump station, and associated waterlines for the Village.

Project Cost
- $2.75 million over 7 years

Reference
Mr. Eugene Parkison, Mayor • 44 W. Main Street • Lexington, Ohio 44904 • 419.884.0765

Project Team
Project Manager ..................................Kenneth Maag, P.E.

Antwerp Elevated Water Storage Tank
Prime consultant for the design and construction of a 300,000 gallon elevated water tower on Stone Street and ~4500 L.F. of new 8” waterline on Waterworks Drive, Canal Street and Harrmann Road. Also, included as part of the project was the demolition and removal of the existing elevated water tanks.

Project Cost
- $1.1 million

Completed
- 2005

Reference
Sara Keeran, Village of Antwerp Administrator • 118 N. Main Street, PO Box 1046 • Antwerp, Ohio 45813 • 419.258.2371 antadmin@frontier.net
Campbell Soup Company–Elevated Water Storage Tank

PDG performed an analysis of a major food processing facility water system to enhance operation efficiencies and system redundancies. The result of the analysis determined that a new 1.5 million gallon elevated water storage tank was required for improved effectiveness. The analysis also determined optimal location of the new tank so as not to interfere with future facility expansions. PDG also performed the design and construction administration for associated water distribution piping, two new VFD driven high service pumps, electrical power and controls, electrical switchgear and standby UPS generator.

Reference
Mr. Dan Junge, Project Manager • 419.599.6715
Dan_junge@campbellsoup.com

Project Team
Principal-in-Charge.......................... Jack A. Jones, PE.
Structural Engineer.............................. Phillip Whaley, PE.
Survey................................................ Dana Parsell, PS.

Wellington Elevated Storage Tanks

Prime consultant for the design and construction of two (2) 250,000-gallon elevated water storage tanks to replace two (2) existing multi-legged tanks. The Village selected composite style elevated tanks constructed with cast in place concrete pedestals and glass-fused steel tank to minimize future maintenance costs. The glass fused steel tanks are made of panels bolted together which provide the option for future enlargement to the tanks by adding more rows of panels. Also, included was the installation of high service pumps and controls within the concrete pedestal base of one of the tanks. A Supervisory Control and Data Acquisition (SCADA) system was also included.

Reference
Mr. Mark Rosemark, Water & Wastewater Superintendent • 115 Willard Memorial Square • Wellington, Ohio 44090 • 440.647.3164

Project Team
Principal-in-Charge.......................... Jack A. Jones, PE.
Project Manager............................... Michael Atherine, PE.
Project Designer................................ Doug Nusser
Electrical/Controls Engineer............... Dan Knott, PE.

Arcadia Elevated Water Storage Tank

Design and construction administration for a regional water connection to service the Village of Arcadia with public water. PDG also initiated and assisted with intergovernmental negotiations between the City of Fostoria and the Village of Arcadia to construct almost 15 miles of 8" to 12" water mains to serve the Village and an extended area to Red Hawk Run Golf Course Development. The project consisted of a water booster station and a 100,000 gallon elevated tank.

Project Cost
• $906,000

Reference
Mr. Walt Sukey, Village Administrator • 355 South Center Street
P.O. Box 597 • LaGrange, Ohio 44050 • 440.355.5555

Project Team
Principal-in-Charge.......................... Jack A. Jones, PE.
Project Manager/Project Engineer........ Michael Atherine, PE.
Electrical/Controls Engineer............... Dan Knott, PE.

Genoa Elevated Water Storage Tank

Prime consultant for the design and construction of a 500,000 gallon fluted column-type elevated water storage tank and approximately 1,500 feet of 10-inch diameter water transmission main. Included with the project was an automated level control system. Also, included was an overhead door in the base of the tower to allow the tower to also be used as a garage/storage facility. This new tower replaced an existing multi-legged type water tower. The new tower was also constructed approximately 25 feet higher than the existing tower for the purpose of improving water pressure throughout the Village.

Project Cost
• $906,000

Reference
Jeff Hannah, Village of Arcadia Administrator • 104 Gibson Street
P.O. Box 235 • Arcadia, Ohio 44804-0235 • arcadiaadmin@tds.net
419.894.6009

LaGrange Elevated Storage Tank

Prime consultant for the design and construction of a new 500,000 gallon fluted column-type elevated water storage tank and approximately 1,500 feet of 10-inch diameter water transmission main. Included with the project was an automated level control system. Also, included was an overhead door in the base of the tower to allow the tower to also be used as a garage/storage facility. The new tower replaced an existing multi-legged type water tower. The new tower was also constructed approximately 25 feet higher than the existing tower for the purpose of improving water pressure throughout the Village.

Reference
Mr. Walt Sukey, Village Administrator • 355 South Center Street
P.O. Box 597 • LaGrange, Ohio 44050 • 440.355.5555

Project Team
Principal-in-Charge.......................... Jack A. Jones, PE.
Project Manager/Project Engineer........ Michael Atherine, PE.
Electrical/Controls Engineer............... Dan Knott, PE.
Project Cost
$520,000
Completed 2000
Reference
Mr. Kevin Gladden, Village Administrator • 201 E. Sixth Street
Genoa, Ohio 43430 • 419.855.7791

Project Team
Principal-in-Charge...............................................
Project Manager .............................................
Project Engineer ..........................................

Brush-Wellman Elevated Water Storage Tank
Ottawa County, Ohio
Prime consultant of a 500,000 gallon fluted column-type elevated water storage tank including an automated water level control system. Also, included were approximately five (5) miles of 12-inch diameter water transmission main needed to connect the new water tower to the County's water distribution system.

Project Funding
Ohio Public Works Commission (OPWC) Issue II and Economic Development Administration (EDA) funding

Project Cost
$2.5 million
Completed 1999
Reference
Mr. J. Kelley Frey, P.E., Ottawa County Sanitary Engineer
315 Madison Street • Port Clinton, Ohio 43452 • 419.734.6725

Project Team
Principal-in-Charge...............................................
Project Manager .............................................
Project Engineer ..........................................

Ottawa County Regional Water System
Prime consultant for the design and construction of a water transmission and distribution system consisting of approximately 152 miles of 3-inch through 24-inch diameter waterlines, 6 MGD water treatment facility, one (1) 500,000 gallon fluted column type water storage tank and two (2) 625,000 gallon concrete clearwells.

Project Cost
$69.7 million
Completed 1998
Reference
Mr. J. Kelley Frey, P.E., Ottawa County Sanitary Engineer
315 Madison Street • Port Clinton, Ohio 43452 • 419.734.6725

Project Team
Principal-in-Charge...............................................
Project Manager .............................................
Project Engineer ..........................................

Project Cost
$2.5 million
Completed 1999
Reference
Mr. J. Kelley Frey, P.E., Ottawa County Sanitary Engineer
315 Madison Street • Port Clinton, Ohio 43452 • 419.734.6725