CITY OF STRONGSVILLE

STRONGSVILLE, OH | ENERGY CONSERVATION PROJECT

Brewer-Garrett

SIZE

343,000 sq. ft.

Across 8 Buildings

COST

$7,657,573

GUARANTEED ENERGY SAVINGS

$11,370,952

GUARANTEE PERIOD

20 Years

DURATION

18 Months

SCOPE

- Lighting upgrades
- RTU installation
- Boiler replacement
- Pool heater replacement
- Pool dehumidification unit replacement
- Building envelope
- Controls upgrade
- Flooring replacement
- Retro-commissioning



The City of Strongsville (City) is a suburb of Cleveland, OH, nicknamed the Crossroads of the Nation for its location at the center of various historic railroad interstates. Brewer-Garrett (**BG**) was selected to perform work at eight buildings across the city including the recreation center, communication building, police station, service center, and three fire stations. The City established the project with the goal of generating energy savings and improving occupant comfort across various public buildings. Prior to taking on this larger project, BG had maintained several service contracts with the City to perform preventative maintenance at several fire stations and water treatment plants across Strongsville.

BG replaced the pool heaters at the recreation center in the spa, lap, and activity pools. The existing heaters were out of date and in need of replacement. Replacement of these heaters also required new plumbing, gas piping, flue system, and controls, which BG performed. In addition, BG replaced the existing UV systems in all three (3) pools with a new Hydroxyl-based Advanced Oxidation Process (AOP) system that delivers the best water quality with minimal need for toxic chemicals.

BG performed lighting retrofits and upgrades on City-owned streetlights and at all above mentioned buildings to convert older fixtures to LED, saving energy and operating costs. BG audited the lighting at each facility to identify which fixtures were already using LED technology.

BG removed the existing hot deck/cold deck system in the service center's mechanical room and replaced it with a multiple zone, variable air volume (VAV), rooftop unit (RTU), and five (5) VAVs. The new RTU utilizes natural gas heat and DX cooling, while new, hot water piping was installed and routed to the hot water coil on each VAV. Additionally, utilizing the existing outside air intake for the new supply air ductwork enabled a creative solution to maximize existing infrastructure. To integrate the equipment, BG installed a new open BACnet system to provide monitoring and integration into the City's web-enabled controls system.

