



## *PRIMARY CLARIFIER SCUM COLLECTION MODIFICATIONS SEPTAGE AND DIGESTED SLUDGE TRANSFER STATION IMPROVEMENTS GREASE TRANSFER STATION IMPROVEMENTS PROJECT*

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Watts Engineers was retained to develop and investigate specific improvements to the infrastructure and operations at the BSA's Sewage Treatment Plant. Based on the recommendations of the preliminary engineering studies, Watts Engineers prepared the final contract documents and Engineer's Estimate for three distinct projects under one construction contract.

We designed repairs and renovations to the primary clarifier scum collection and pumping systems. The improvements included structural repairs to the concrete scum-collection sumps, and the installation of chopper pumps, mixers, piping, valves, wash-down systems, electrical wiring, alarms, controls and heat trace systems.

**Owner:**  
*Buffalo Sewer Authority*

**Location:**  
*Buffalo, Erie County*

**Completion Date:**  
*2004*

**Construction Cost:**  
*\$775,000*

**Services:**

- *Topographic Survey and Mapping*
- *Preliminary Engineering Studies*
- *Civil/Structural Engineering*
- *Mechanical Engineering*
- *Electrical Engineering*
- *Construction Inspection and Administration*

Watts Engineers also designed a transfer station to receive deliveries of septage and digested-sludge for disposal at the Sewage Treatment Plant. The improvements included a three-bay transfer area, gravity sewer, safety equipment shed, lift station structure, duplex grinder-pumps and associated piping, a pipe bridge and valve access platform, valves, electrical wiring and controls, site lighting and heat trace systems.

A similar-type transfer station was designed to receive deliveries of grease for disposal into any one of the four digesters. This work included a transfer area, structural modifications to an existing collection well, duplex pumps and associated piping, in-line macerators, a mixer, valves, electrical wiring, controls, alarms, and site lighting.

Watts Engineers oversaw the bidding of the project, and provided the construction administration and inspection services.