

Industrial-Municipal Design-Build Collaboration

Brown and Caldwell worked concurrently with a major beverage manufacturer and a municipal wastewater treatment facility, providing design-build services and operator training to both. We upgraded the treatment plant for handling the added load and helped bring the beverage plant on-line ahead of schedule.



**B R O W N A N D
C A L D W E L L**

Background

The Economic Development Committee of Fulton County, Georgia, was pleased when a major beverage manufacturer wanted to build a 465,000-square-foot production plant in the community. But, the company required fast-track plant construction, and county officials were concerned about the impact of the added load of wastewater on the municipal treatment plant. Effluent from the beverage plant was projected to be high in biological oxygen demand (BOD).

To move the project forward, the manufacturer needed an effective pretreatment facility, and the county required upgraded biological treatment capabilities.

Solutions

Brown and Caldwell headed a design-build team that worked closely with the manufacturer and the Fulton County Economic Development Committee to establish pretreatment require-

CONTINUED ON BACK

ments for the new plant. Under an extremely tight schedule, new facilities were built simultaneously at both the beverage plant and the treatment plant. This allowed the manufacturer to successfully pretreat its wastewater and the municipal facility to handle the anticipated increase in BOD. Consequently, full production at the beverage plant began shortly after completion of the project.

Here are the specific measures taken by Brown and Caldwell to accelerate planning and implementation:

- Guided the manufacturer and Fulton County through the process of establishing pretreatment requirements.
- Negotiated a contract by which the manufacturer agreed to build neutralization and equalization facilities, and the county agreed to build a biological treatment system.
- Provided turnkey design-build services that included preliminary planning, permit negotiations, design, construction, startup, and operator training simultaneously at both facilities.
- Completed the design-build process for the manufacturer's pH neutralization and equalization systems, which included a pump station, equalization tanks, and pretreatment tanks.
- Completed the design-build process for a new biological treatment system for high-BOD wastewater at the municipal treatment plant. This included converting two existing tanks from sludge thickening to aerobic biological pretreatment by modifying an existing blower system and adding an influent screen, in-basin aeration headers, and a new centrifuge with increased capacity for solids handling.
- Used a fast-track design-build process that allowed simultaneous design and construction as well as prepurchase of most equipment – including pumps, tanks, centrifuge, and all aeration equipment – prior to construction.
- Implemented a 7-day construction week and reduced a potential 12-month schedule to only 4 months.