

Garfield Avenue Sanitary Sewer Project

project description | sanitary sewer

location

Milford, Ohio

client

City of Milford

completion date

2007

budget

\$1,500,000



CDP Engineers conducted a preliminary engineering study, prior to completing construction documents, for upgrades to major components of the City of Milford's sanitary sewer system. The existing Service Department Pump Station transports sanitary sewage from the older, downtown portion of the city to a gravity sewer that flows to the wastewater treatment plant. The receiving gravity sewer has insufficient capacity to transport wet weather flows, resulting in residential basement backups during large storm events. The purpose of this project is to upgrade the pump station and re-route the force main to reduce sanitary sewer overflows. The pump station and force main capacity is to be increased to provide capacity for new development and redevelopment within its service area. Minor water system improvements are also included in the project, to improve water pressures through new interconnections. CDP provided the following services:

- Review past studies, including the sanitary sewer master plan and combined sewer separation projects.
- Perform capacity studies on the existing pump station and force main, with a flow meter installed in the receiving manhole.
- Identify and evaluate alternatives related to pipe sizes and pipeline alignments. Special consideration was given to minimizing disruption to downtown merchants and traffic.
- Prepare cost estimates for feasible alternatives.
- Develop concepts for cost-shaving with local development.
- Evaluate funding options and assist with funding applications.

The recommended improvements included mechanical and electrical improvements for the pump station to increase its capacity from 300 to 730 gallons per minute, 4900 linear feet of 10-inch force main, 1100 linear feet of gravity sewers, and 1150 linear feet of 8-inch water mains. The current construction estimate is \$1,511,000 including contingency.