



CLIENT:

Town of Waterford Utility Commission & Public Works Department

15 Rope Ferry Road, Waterford CT 06385

Reference:

Neftali Soto, P.E., Chief Engineer

860. 444.5886

nsoto@waterfordct.org

PROJECT HIGHLIGHTS:

Status: Completed 2014

Project Cost: \$2,200,000

Services: Planning, Survey, Permitting, Design, Construction Administration

KEY FEATURES:

- Pipe hacking under the New England Central Railroad
- Directional Drill under Route 32
- State Highway work
- 8,000 linear feet of gravity sewer installation
- 2,000 linear feet of 6" force main with duplex 50 horsepower pump station
- Separate low pressure sewer system
- 400 linear feet of water main extension

KEY CHALLENGES:

- Local government permitting
- Coordinate with DOT for highway work
- Coordination with New England Central Railroad for utility crossing

Harrison's Landing Sewer & Roadway Improvements and Maple Court Water & Sewer Extension

Waterford, Connecticut

PROJECT DESCRIPTION:

The Harrison's Landing Sewer & Roadway Improvement and Maple Court Water & Sewer Extension project in the Quaker Hill section of Waterford CT was designed to service a residential neighborhood known as Harrison's Landing as well as residences along Benham Avenue that have experienced failing septic systems. Harrison's Landing is located on a flat gravel peninsula along the west bank of the Thames River and includes small closely spaced residences with rapidly drained soils that were polluting the river. The residences along Benham Avenue are located on steep slopes with extremely rocky and moderate to poorly drained soils that were creating issues with the septic systems. Additionally, a group of 8 residences at the end of Maple Court with aging septic systems and well had never been connected to the Municipal sewer or water system located roughly 500 feet away.

CLA Engineers performed base mapping and provided conceptual gravity sewer and force main routings with potential pump station locations for the Harrison's Landing area for meetings and consultation with the Town prior to design. CLA Engineers designed a gravity sewer system for the Harrison's Landing neighborhood with a duplex pump station and force main to convey the wastewater to an existing sewer system. A pipe jacking was required under the New England Central Railroad to connect the neighborhood gravity system to the new pump station. Vinyl siding and other architectural features were included on the pump house to better match the aesthetics of the adjacent residential neighborhood. In addition to the gravity sewer system, a low pressure sewer system for the residences along Benham Avenue was designed. Crossing Route 32, a 6 lane, high volume State road was required for both force mains. A horizontal directional drill under Route 32 was designed to minimize any impacts to traffic.

The project was funded by the Town of Waterford.