

# Turner Underground Installations

*As part of a website development project for Turner Underground Installations, a regional horizontal directional drilling contractor in Upstate, New York, I was hired to write all content for the website as well as several featured project write-ups.*

*Below is one of my original project write-ups. Visit [www.TurnerUnderground.com](http://www.TurnerUnderground.com) to review all my copy writing for the project.*

## **Project: Erie Canal Lock 10 (Mohawk River) Gas Main Replacement Project**

Many water channels in Western New York State up through greater New England experienced damage in the fury and torrential rains that were Hurricane Irene. Lock 10 of the Erie Canal System on the Mohawk River near Amsterdam, New York, sustained heavy damage as did the surrounding river banks.

Turner Underground contracted with The DDS Companies' Utility Division, for National Grid, to replace two gas mains which became damaged at a bend in the river just above Lock 10 where hurricane swollen waters and undercurrent had eaten away the river banking. We bored over 1200 linear-feet for a new 8-inch steel gas main, 500 feet of which we installed under the Mohawk River. We also installed a 700 linear-foot section of 6-inch steel gas main under a busy section of railroad tracks which run along the north side of the river.

We made the two installations between January and March of a record breaking, bitter cold winter with limited daylight hours forcing shorter work days. Plotting and steering of the drill bits needed to be accomplished manually due to electro magnetic fields emitted from nearby high-voltage power lines which interfered with our wireline guidance system. The challenging ground conditions of glacial till mixed with boulders in addition to protocols for working in protected wetland areas were further complicated by a deep ground freeze and heavy ice. The sub-zero temperatures also mandated that advanced mitigation measures be employed to ensure against freezing of the slurry and fluids involved in the drilling process.

Despite challenges, we completed the two drills within schedule and without any hitches. The Lock 10 Gas Main Replacement Project went down in the books as another successful, high-profile HDD installation and has been added to the company's growing list of major river crossings.